

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Form 20-F

- ☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
or  
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016  
or  
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
or  
☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report.....

Commission file number 1-15242

**Deutsche Bank Aktiengesellschaft**

(Exact name of Registrant as specified in its charter)

**Deutsche Bank Corporation**

(Translation of Registrant's name into English)

**Federal Republic of Germany**

(Jurisdiction of incorporation or organization)

**Taunusanlage 12, 60325 Frankfurt am Main, Germany**

(Address of principal executive offices)

**Peter Burrill, +49-69-910-31781, peter.burrill@db.com, Taunusanlage 12, 60325 Frankfurt am Main, Germany**

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act

See following page

Securities registered or to be registered pursuant to Section 12(g) of the Act.

NONE

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

NONE

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

Ordinary Shares, no par value

1,379,069,689

(as of December 31, 2016)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☒

No ☐

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐

No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒

No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☐

No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards ☒

Other ☐

as issued by the International Accounting Standards Board

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow

Item 17 ☐

Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐

No ☒

Securities registered or to be registered pursuant to Section 12(b) of the Act (as of February 28, 2017)

Title of each class	Name of each exchange on which registered
Ordinary shares, no par value	New York Stock Exchange
6.55 % Trust Preferred Securities of Deutsche Bank Contingent Capital Trust II	New York Stock Exchange
6.55 % Company Preferred Securities of Deutsche Bank Contingent Capital LLC II* Subordinated Guarantees of Deutsche Bank AG in connection with Capital Securities*	
7.60 % Trust Preferred Securities of Deutsche Bank Contingent Capital Trust III	New York Stock Exchange
7.60 % Company Preferred Securities of Deutsche Bank Contingent Capital LLC III* Subordinated Guarantees of Deutsche Bank AG in connection with Capital Securities*	
8.05 % Trust Preferred Securities of Deutsche Bank Contingent Capital Trust V	New York Stock Exchange
8.05 % Company Preferred Securities of Deutsche Bank Contingent Capital LLC V* Subordinated Guarantees of Deutsche Bank AG in connection with Capital Securities*	
Fixed to Fixed Reset Rate Subordinated Tier 2 Notes Due 2028	New York Stock Exchange
4.50 % Fixed Rate Subordinated Tier 2 Notes Due 2025	New York Stock Exchange
DB Agriculture Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Double Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Double Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Base Metals Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Base Metals Double Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Base Metals Double Long Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Commodity Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Commodity Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Commodity Double Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Commodity Double Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Crude Oil Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Crude Oil Long Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Crude Oil Double Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Gold Double Long Exchange Traded notes due February 15, 2038	NYSE Arca
DB Gold Double Short Exchange Traded notes due February 15, 2038	NYSE Arca
DB Gold Short Exchange Traded notes due February 15, 2038	NYSE Arca
ELEMENTS "Dogs of the Dow" Linked to the Dow Jones High Yield Select 10 Total Return Index due November 14, 2022	NYSE Arca
ELEMENTS Linked to the Morningstar® Wide Moat Focus(SM) Total Return Index due October 24, 2022	NYSE Arca
FI Enhanced Global High Yield Exchange Traded Notes Linked to the MSCI World High Dividend Yield USD Gross Total Return Index due October 12, 2023	NYSE Arca

\* For listing purpose only, not for trading

# Table of Contents

Table of Contents – 3

PART I – 9

Item 1: Identity of Directors, Senior Management and Advisers – 9

Item 2: Offer Statistics and Expected Timetable – 9

Item 3: Key Information – 9

Selected Financial Data – 9

Dividends – 11

Exchange Rate and Currency Information – 12

Capitalization and Indebtedness – 13

Reasons for the Offer and Use of Proceeds – 13

Risk Factors – 14

Item 4: Information on the Company – 48

History and Development of the Company – 48

Business Overview – 48

Our Corporate Divisions – 56

The Competitive Environment – 56

Regulation and Supervision – 63

Organizational Structure – 84

Property and Equipment – 85

Information Required by Industry Guide 3 – 85

Item 4A: Unresolved Staff Comments – 86

Item 5: Operating and Financial Review and Prospects – 86

Overview – 86

Significant Accounting Policies and Critical Accounting Estimates – 86

Recently Adopted Accounting Pronouncements and New Accounting Pronouncements – 87

Operating Results – 87

**Results of Operations – 88**

Financial Position – 89

Liquidity and Capital Resources – 89

Post-Employment Benefit Plans – 89

Off-Balance Sheet Arrangements – 89

Tabular Disclosure of Contractual Obligations – 89

Research and Development, Patents and Licenses – 89

Item 6: Directors, Senior Management and Employees – 90

Directors and Senior Management – 90

Board Practices of the Management Board – 93

Compensation – 94

Employees – 94

Share Ownership – 94

Item 7: Major Shareholders and Related Party Transactions – 94

Major Shareholders – 94

Related Party Transactions – 95

Interests of Experts and Counsel – 96

Item 8: Financial Information – 97

Consolidated Statements and Other Financial Information – 97

Significant Changes – 101

Item 9: The Offer and Listing – 101

Offer and Listing Details and Markets – 101

Plan of Distribution – 102

Selling Shareholders – 102

Dilution – 103

Expenses of the Issue – 103

**Item 10: Additional Information – 103**

Share Capital – 103

Memorandum and Articles of Association – 103

Notification Requirements – 107

Material Contracts – 110

Exchange Controls – 110

Taxation – 111

Dividends and Paying Agents – 114

Statement by Experts – 114

Documents on Display – 115

Subsidiary Information – 115

**Item 11: Quantitative and Qualitative Disclosures about Credit, Market and Other Risk – 115**

**Item 12: Description of Securities other than Equity Securities – 115**

**PART II – 116**

**Item 13: Defaults, Dividend Arrearages and Delinquencies – 116**

**Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds – 116**

**Item 15: Controls and Procedures – 116**

Disclosure Controls and Procedures – 116

Management's Annual Report on Internal Control over Financial Reporting – 116

Report of Independent Registered Public Accounting Firm – 117

Change in Internal Control over Financial Reporting – 118

**Item 16A: Audit Committee Financial Expert – 118**

**Item 16B: Code of Ethics – 118**

**Item 16C: Principal Accountant Fees and Services – 119**

**Item 16D: Exemptions from the Listing Standards for Audit Committees – 119**

**Item 16E: Purchases of Equity Securities by the Issuer and Affiliated Purchasers – 119**

**Item 16F: Change in Registrant's Certifying Accountant – 120**

**Item 16G: Corporate Governance – 120**

**Item 16H: Mine Safety Disclosure – 123**

**Disclosures Under Iran Threat Reduction and Syria Human Rights Act of 2012 – 124**

**PART III – 127**

**Item 17: Financial Statements – 127**

**Item 18: Financial Statements – 127**

**Item 19: Exhibits – 127**

**Signatures – 128**

**Annual Report – 129**

**Supplemental Financial Information (Unaudited) – S-1**

Deutsche Bank Aktiengesellschaft, which we also call Deutsche Bank AG, is a stock corporation organized under the laws of the Federal Republic of Germany. Unless otherwise specified or required by the context, in this document, references to “we”, “us”, “our”, “the Group”, “Deutsche Bank” and “Deutsche Bank Group” are to Deutsche Bank Aktiengesellschaft and its consolidated subsidiaries.

Due to rounding, numbers presented throughout this document may not add up precisely to the totals we provide and percentages may not precisely reflect the absolute figures.

Our registered address is Taunusanlage 12, 60325 Frankfurt am Main, Germany, and our telephone number is +49-69-910-00.

## Inclusion of Our Annual Report

We have included as an integral part of this Annual Report on Form 20-F our Annual Report 2016, to which we refer for the responses to certain items hereof. Certain portions of the Annual Report 2016 have been omitted, as indicated therein. The included Annual Report 2016 contains our consolidated financial statements, which we also incorporate by reference into this report, in response to Items 8.A and 18. Such consolidated financial statements differ from those contained in the Annual Report 2016 used for other purposes in that, for Notes 45 and 46 thereto, notes addressing non-U.S. requirements have been replaced with notes addressing U.S. requirements, and Note 47 thereto has been omitted. Such consolidated financial statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their “Report of Independent Registered Public Accounting Firm” included on page 417 of the Annual Report 2016, which report is included only in the version of the Annual Report 2016 included in this Annual Report on Form 20-F.

## Cautionary Statement Regarding Forward-Looking Statements

We make certain forward-looking statements in this document with respect to our financial condition and results of operations. In this document, forward-looking statements include, among others, statements relating to:

- the potential development and impact on us of economic and business conditions and the legal and regulatory environment to which we are subject;
- the implementation of our strategic initiatives and other responses thereto;
- the development of aspects of our results of operations;
- our expectations of the impact of risks that affect our business, including the risks of losses on our trading processes and credit exposures; and
- other statements relating to our future business development and economic performance.

In addition, we may from time to time make forward-looking statements in our periodic reports to the United States Securities and Exchange Commission on Form 6-K, annual and interim reports, invitations to Annual General Meetings and other information sent to shareholders, offering circulars and prospectuses, press releases and other written materials. Our Management Board, Supervisory Board, officers and employees may also make oral forward-looking statements to third parties, including financial analysts.

Forward-looking statements are statements that are not historical facts, including statements about our beliefs and expectations. We use words such as “believe”, “anticipate”, “expect”, “intend”, “seek”, “estimate”, “project”, “should”, “potential”, “reasonably possible”, “plan”, “aim” and similar expressions to identify forward-looking statements.

By their very nature, forward-looking statements involve risks and uncertainties, both general and specific. We base these statements on our current plans, estimates, projections and expectations. You should therefore not place too much reliance on them. Our forward-looking statements speak only as of the date we make them, and we undertake no obligation to update any of them in light of new information or future events.

We caution you that a number of important factors could cause our actual results to differ materially from those we describe in any forward-looking statement. These factors include, among others, the following:

- the potential development and impact on us of economic and business conditions;
- other changes in general economic and business conditions;
- changes and volatility in currency exchange rates, interest rates and asset prices;
- changes in governmental policy and regulation, including measures taken in response to economic, business, political and social conditions;
- the potential development and impact on us of legal and regulatory proceedings to which we are or may become subject;
- changes in our competitive environment;
- the success of our acquisitions, divestitures, mergers and strategic alliances;
- our success in implementing our strategic initiatives and other responses to economic and business conditions and the legal and regulatory environment and realizing the benefits anticipated therefrom; and
- other factors, including those we refer to in “Item 3: Key Information – Risk Factors” and elsewhere in this document and others to which we do not refer.

## Use of Non-GAAP Financial Measures

This document and other documents we have published or may publish contain non-GAAP financial measures. Non-GAAP financial measures are measures of our historical or future performance, financial position or cash flows that contain adjustments that exclude or include amounts that are included or excluded, as the case may be, from the most directly comparable measure calculated and presented in accordance with IFRS in our financial statements. Examples of our non-GAAP financial measures, and the most directly comparable IFRS financial measures, are as follows:

Non-GAAP Financial Measure	Most Directly Comparable IFRS Financial Measure
Net income attributable to Deutsche Bank shareholders	Net income
Adjusted costs	Noninterest expenses
Tangible shareholders' equity, Tangible book value	Total shareholders' equity (book value)
Post-tax return on average shareholders' equity (based on Net income attributable to Deutsche bank shareholders)	Post-tax return on average shareholders' equity
Post-tax return on average tangible shareholders' equity	Post-tax return on average shareholders' equity
Tangible book value per share outstanding	Total shareholders' equity (book value) per share outstanding

For descriptions of these non-GAAP financial measures and the adjustments made to the most directly comparable financial measures under IFRS, please refer to “Supplementary Information: Non-GAAP Financial Measures” on pages 467 through 472, which is incorporated by reference herein.

When used with respect to future periods, our non-GAAP financial measures are also forward-looking statements. We cannot predict or quantify the levels of the most directly comparable financial measures under IFRS that would correspond to these measures for future periods. This is because neither the magnitude of such IFRS financial measures, nor the magnitude of the adjustments to be used to calculate the related non-GAAP financial measures from such IFRS financial measures, can be predicted. Such adjustments, if any, will relate to specific, currently unknown, events and in most cases can be positive or negative, so that it is not possible to predict whether, for a future period, the non-GAAP financial measure will be greater than or less than the related IFRS financial measure.

## CRR/CRD 4 Solvency Measures

Our regulatory assets, exposures, risk-weighted assets, capital and ratios thereof are calculated for regulatory purposes as of December 31, 2016, December 31, 2015 and December 31, 2014 and set forth throughout this document under the regulation on prudential requirements for credit institutions and investment firms ("CRR") and the Capital Requirements Directive 4 ("CRD 4") implementing Basel 3, which were published on June 27, 2013 and which apply on and after January 1, 2014. CRR/CRD 4 provides for "transitional" (or "phase-in") rules, under which capital instruments that are no longer eligible under the new rules are permitted to be phased out as the new rules on regulatory adjustments are phased in, as well as regarding the risk weighting of certain categories of assets. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. The transitional rules relate, e.g., to the risk weighting of certain categories of assets. Unless otherwise noted, our CRR/CRD 4 solvency measures as of December 31, 2016, December 31, 2015 and December 31, 2014 set forth in this document reflect these transitional rules.

We also set forth in this document such CRR/CRD 4 measures on a "fully loaded" basis, reflecting full application of the final CRR/CRD 4 framework without consideration of the transitional provisions under CRR/CRD 4, except as described below. Measures calculated pursuant to our fully loaded methodology are non-GAAP financial measures.

The transitional rules include rules permitting the grandfathering of equity investments at a risk-weight of 100 % instead of a risk weight between 190 % and 370 % determined based on Article 155 CRR that would apply under the CRR/CRD 4 fully loaded rules. Despite the grandfathering rule for equity investments not applying under the full application of the final CRR/CRD 4 framework, we continue to apply it in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions, based on our intention to mitigate the impact of the expiration of the grandfathering rule through sales of the underlying assets or other measures prior to its expiration at end of 2017. We are closely monitoring the market and potential impacts from illiquid markets or other similar difficulties which could make it unfeasible to exit these positions.

As the final implementation of CRR/CRD 4 may differ from our expectations, and our competitors' assumptions and estimates regarding such implementation may vary, our fully loaded CRR/CRD 4 measures may not be comparable with similarly labeled measures used by our competitors.

We believe that these fully loaded CRR/CRD 4 calculations provide useful information to investors as they reflect our progress against the new regulatory capital standards and as many of our competitors have been describing CRR/CRD 4 calculations on a "fully loaded" basis.

For descriptions of these fully loaded CRR/CRD 4 measures and the differences from the most directly comparable measures under the CRR/CRD 4 transitional rules, please refer to “Management Report: Risk Report: Risk and Capital Performance: Capital and Leverage Ratio” on pages 136 through 152 of the Annual Report 2016, in particular the subsections thereof entitled “Development of Regulatory Capital”, “Development of Risk-Weighted Assets” and “Leverage Ratio”, and, with respect to the effect of the grandfathering rule on our fully loaded CRR/CRD 4 measures, to “Supplementary Information: Non-GAAP Financial Measures: Fully loaded CRR/CRD 4 Measures” on pages 471 through 472 of the Annual Report 2016, each of which are incorporated by reference herein.

When used with respect to future periods, our fully loaded CRR/CRD 4 measures are also forward-looking statements. We cannot predict or quantify the levels of the most directly comparable transitional CRR/CRD 4 measures that would correspond to these fully loaded CRR/CRD 4 measures for future periods. In managing our business with the aim of achieving targets based on fully loaded CRR/CRD 4 measures, the relation between the fully loaded and transitional measures will depend upon, among other things, management action taken in light of future business, economic and other conditions.

## Use of Internet Addresses

This document contains inactive textual addresses of Internet websites operated by us and third parties. Reference to such websites is made for informational purposes only, and information found at such websites is not incorporated by reference into this document.



## PART I

### Item 1: Identity of Directors, Senior Management and Advisers

Not required because this document is filed as an annual report.

### Item 2: Offer Statistics and Expected Timetable

Not required because this document is filed as an annual report.

### Item 3: Key Information

#### Selected Financial Data

We have derived the data we present in the tables below from our audited consolidated financial statements for the years presented. You should read all of the data in the tables below together with the consolidated financial statements and notes included in “Item 18: Financial Statements” and the information we provide in “Item 5: Operating and Financial Review and Prospects.” Except where we have indicated otherwise, we have prepared all of the consolidated financial information in this document in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) and as endorsed by the European Union (“EU”). Our corporate division and segment data comes from our management reporting systems and is not in all cases prepared in accordance with IFRS. For a discussion of the major differences between our management reporting systems and our consolidated financial statements under IFRS, see Note 4 “Business Segments and Related Information” to the consolidated financial statements.

## Income Statement Data

	2016	2015	2014	2013	2012
	in € m.	in € m.	in € m.	in € m.	in € m.
<b>Net interest income</b>	<b>14,707</b>	<b>15,881</b>	<b>14,272</b>	<b>14,834</b>	<b>15,975</b>
Provision for credit losses	1,383	956	1,134	2,065	1,721
<b>Net interest income after provision for credit losses</b>	<b>13,324</b>	<b>14,925</b>	<b>13,138</b>	<b>12,769</b>	<b>14,254</b>
Commissions and fee income	11,744	12,765	12,409	12,308	11,809
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	1,401	3,842	4,299	3,817	5,608
Other noninterest income (loss)	2,162	1,037	969	956	344
<b>Total net revenues</b>	<b>30,014</b>	<b>33,525</b>	<b>31,949</b>	<b>31,915</b>	<b>33,736</b>
Compensation and benefits	11,874	13,293	12,512	12,329	13,490
General and administrative expenses	15,454	18,632	14,654	15,126	15,017
Policyholder benefits and claims	374	256	289	460	414
Impairment of goodwill and other intangible assets	1,256	5,776	111	79	1,886
Restructuring activities	484	710	133	399	394
<b>Total noninterest expenses</b>	<b>29,442</b>	<b>38,667</b>	<b>27,699</b>	<b>28,394</b>	<b>31,201</b>
<b>Income (loss) before income taxes</b>	<b>(810)</b>	<b>(6,097)</b>	<b>3,116</b>	<b>1,457</b>	<b>814</b>
Income tax expense	546	675	1,425	775	498
<b>Net income (loss)</b>	<b>(1,356)</b>	<b>(6,772)</b>	<b>1,691</b>	<b>681</b>	<b>316</b>
Net income attributable to noncontrolling interests	45	21	28	15	53
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	(1,402)	(6,794)	1,663	666	263
	in €	in €	in €	in €	in €
Basic earnings per share <sup>1,2</sup>	(1.21)	(5.06)	1.34	0.64	0.27
Diluted earnings per share <sup>1,3</sup>	(1.21)	(5.06)	1.31	0.62	0.26
Dividends paid per share <sup>4</sup>	0.00	0.75	0.75	0.75	0.75

<sup>1</sup> The number of average basic and diluted shares outstanding has been adjusted for all periods before June 2014 in order to reflect the effect of the bonus component of subscription rights issued in June 2014 in connection with the capital increase.

<sup>2</sup> We calculate basic earnings per share for each period by dividing our net income attributable to Deutsche Bank shareholders by the average number of common shares outstanding. Earnings were adjusted by €276 million and €228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2016 and April 2015, respectively.

<sup>3</sup> We calculate diluted earnings per share for each period by dividing our net income attributable to Deutsche Bank shareholders by the average number of common shares outstanding, both after assumed conversions. Earnings were adjusted by €276 million and €228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2016 and April 2015, respectively. For 2016 and 2015, there is no dilutive effect as the Group reported a net loss.

<sup>4</sup> Dividends we declared and paid in the year.

## Balance Sheet Data

	2016	2015	2014	2013	2012
	in € m.	in € m.	in € m.	in € m.	in € m.
<b>Total assets</b>	<b>1,590,546</b>	<b>1,629,130</b>	<b>1,708,703</b>	<b>1,611,400</b>	<b>2,022,275</b>
Loans	408,909	427,749	405,612	376,582	397,377
Deposits	550,204	566,974	532,931	527,750	577,210
Long-term debt	172,316	160,016	144,837	133,082	157,325
Common shares	3,531	3,531	3,531	2,610	2,380
Total shareholders' equity	59,833	62,678	68,351	54,719	54,001
Common Equity Tier 1 capital (CRR/CRD 4) <sup>1</sup>	47,782	52,429	60,103	38,534	37,957
Common Equity Tier 1 capital (CRR/CRD 4 fully loaded) <sup>1</sup>	42,279	44,101	46,076	38,534	37,957
Tier 1 capital (CRR/CRD 4) <sup>1</sup>	55,486	58,222	63,898	50,717	50,483
Tier 1 capital (CRR/CRD 4 fully loaded) <sup>1</sup>	46,829	48,651	50,695	50,717	50,483
Total regulatory capital (CRR/CRD 4) <sup>1</sup>	62,158	64,522	68,293	55,464	57,015
Total regulatory capital (CRR/CRD 4 fully loaded) <sup>1</sup>	59,502	60,976	63,072	55,464	57,015

<sup>1</sup> Figures presented for 2016, 2015 and 2014 are based on the transitional rules ("CRR/CRD 4") and the full application ("CRR/CRD 4 fully loaded") of the CRR/CRD 4 framework. Figures presented for 2013 and 2012 are based on "Basel 2.5". The capital ratios relate the respective capital to risk-weighted assets. Until 2013 transitional items pursuant to the former Section 64h (3) of the German Banking Act are excluded.

## Certain Key Ratios and Figures

	2016	2015	2014	2013	2012
Share price at period-end <sup>1</sup>	€ 17.25	€ 22.53	€ 24.99	€ 33.07	€ 31.43
Share price high <sup>1</sup>	€ 22.10	€ 33.42	€ 38.15	€ 36.94	€ 37.68
Share price low <sup>1</sup>	€ 9.90	€ 20.69	€ 22.66	€ 28.05	€ 21.09
Book value per basic share outstanding <sup>2, 4</sup>	€ 42.74	€ 45.16	€ 49.32	€ 50.80	€ 54.74
Tangible book value per basic share outstanding <sup>3, 4</sup>	€ 36.33	€ 37.90	€ 38.53	€ 37.87	€ 40.32
Post-tax return on average shareholders' equity <sup>5</sup>	(2.3) %	(9.8) %	2.7 %	1.2 %	0.5 %
Post-tax return on average tangible shareholders' equity <sup>6</sup>	(2.7) %	(12.3) %	3.5 %	1.6 %	0.7 %
Cost/income ratio <sup>7</sup>	98.1 %	115.3 %	86.7 %	89.0 %	92.5 %
Compensation ratio <sup>8</sup>	39.6 %	39.7 %	39.2 %	38.6 %	40.0 %
Noncompensation ratio <sup>9</sup>	58.5 %	75.7 %	47.5 %	50.3 %	52.5 %
Common Equity Tier 1 capital ratio (CRR/CRD 4) <sup>10</sup>	13.4 %	13.2 %	15.2 %	12.8 %	11.4 %
Common Equity Tier 1 capital ratio (CRR/CRD 4 fully loaded) <sup>10</sup>	11.8 %	11.1 %	11.7 %	12.8 %	11.4 %
Tier 1 capital ratio (CRR/CRD 4) <sup>10</sup>	15.6 %	14.7 %	16.1 %	16.9 %	15.1 %
Tier 1 capital ratio (CRR/CRD 4 fully loaded) <sup>10</sup>	13.1 %	12.3 %	12.9 %	16.9 %	15.1 %
Employees at period-end (full-time equivalent):					
In Germany	44,600	45,757	45,392	46,377	46,308
Outside Germany	55,144	55,347	52,746	51,877	51,911
Branches at period-end:					
In Germany	1,776	1,827	1,845	1,924	1,944
Outside Germany	880	963	969	983	1,040

<sup>1</sup> Historical share prices have been adjusted on June 5, 2014 with retroactive effect to reflect the capital increase by multiplying a correcting factor of 0.9538.

<sup>2</sup> Shareholders' equity divided by the number of basic shares outstanding (both at period-end).

<sup>3</sup> Shareholders' equity less goodwill and other intangible assets, divided by the number of basic shares outstanding (both at period-end).

<sup>4</sup> The number of average basic shares outstanding has been adjusted for all periods before June 2014 in order to reflect the effect of the bonus element of the subscription rights issue in connection with the capital increase in June 2014.

<sup>5</sup> Net income attributable to our shareholders as a percentage of average shareholders' equity.

<sup>6</sup> Net income attributable to our shareholders as a percentage of average tangible shareholders' equity.

<sup>7</sup> Total noninterest expenses as a percentage of net interest income before provision for credit losses, plus noninterest income.

<sup>8</sup> Compensation and benefits as a percentage of total net interest income before provision for credit losses, plus noninterest income.

<sup>9</sup> Noncompensation noninterest expenses, which is defined as total noninterest expenses less compensation and benefits, as a percentage of total net interest income before provision for credit losses, plus noninterest income.

<sup>10</sup> Figures presented for 2016, 2015 and 2014 are based on the transitional rules ("CRR/CRD 4") and the full application ("CRR/CRD 4 fully loaded") of the CRR/CRD 4 framework. Figures presented for 2013 and 2012 are based on "Basel 2.5". The capital ratios relate the respective capital to risk-weighted assets. Until 2013 transitional items pursuant to the former Section 64h (3) of the German Banking Act are excluded.

## Dividends

The following table shows the dividend per share in euro and in U.S. dollars for the years ended December 31, 2016, 2015, 2014, 2013, and 2012. We declare our dividends at our Annual General Meeting following each year. For 2016, the Management Board will propose to the Annual General Meeting to pay a dividend of € 0.19 per share taking into consideration the expected shares to be issued before the Annual General Meeting in May 2017 as part of our announced capital raise. The dividend to be paid out of Deutsche Bank AG's distributable profit for 2016 determined under German accounting rules for its stand-alone financial statements contains a component reflecting the distributable profit carried forward from 2015 of approximately € 165 million and a dividend of € 0.11 per share out of the remaining distributable profit for 2016. Overall we expect to pay out a total dividend of approximately € 400 million in 2017. Our dividends are based on the non-consolidated results of Deutsche Bank AG as prepared in accordance with German accounting principles. Because we declare our dividends in euro, the amount an investor actually receives in any other currency depends on the exchange rate between euro and that currency at the time the euros are converted into that currency.

The German withholding tax applicable to dividends is 26.375 % (consisting of a 25 % withholding tax and an effective 1.375 % surcharge). For individual German tax residents the withholding tax paid represents for private dividends, generally, the full and final income tax applicable to the dividends. Dividend recipients who are tax residents of countries that have entered into a convention for avoiding double taxation may be eligible to receive a refund from the German tax authorities for a portion of the amount withheld and in addition may be entitled to receive a tax credit for the German withholding tax not refunded in accordance with their local tax law.

U.S. residents will be entitled to receive a refund equal to 11.375 % of the dividends received. For U.S. federal income tax purposes, the dividends we pay are not eligible for the dividends received deduction generally allowed for dividends received by U.S. corporations from other U.S. corporations.

Dividends in the table below are presented before German withholding tax.

See "Item 10: Additional Information – Taxation" for more information on the tax treatment of our dividends.

	Dividends per share <sup>1</sup>	Dividends per share	Payout ratio <sup>2,3</sup>	
			Basic earnings per share	Diluted earnings per share
2016 (proposed) <sup>4</sup>	\$ 0.20	€ 0.19	N/M	N/M
2015	\$ 0.00	€ 0.00	N/M	N/M
2014	\$ 0.91	€ 0.75	56 %	57 %
2013	\$ 1.03	€ 0.75	117 %	121 %
2012	\$ 0.99	€ 0.75	0 %	0 %

N/M – Not meaningful

<sup>1</sup> For your convenience, we present dividends in U.S. dollars for each year by translating the euro amounts at the period end rate for the last business day at each year end as described below under "Exchange Rate and Currency Information".

<sup>2</sup> We define our payout ratio as the dividends we paid per share in respect of each year as a percentage of our basic and diluted earnings per share for that year.

<sup>3</sup> The number of average basic and diluted shares outstanding has been adjusted in order to reflect the effect of the bonus element of the subscription rights issue in connection with the capital increase in June 2014. For 2016 and 2015, there is no dilutive effect as the Group reported a net loss.

<sup>4</sup> Taking into account expected shares to be issued before the Annual General Meeting in May 2017, the dividend per share of € 0.19 paid out of the distributable profit for 2016 contains the pay out of the distributable profit carried forward from 2015 of approximately € 165 million and a dividend of € 0.11 per share from the remaining distributable profit for 2016. Overall we expect to pay out a total dividend of approximately € 400 million in 2017.

## Exchange Rate and Currency Information

Germany's currency is the euro. For your convenience, we have translated some amounts denominated in euro appearing in this document into U.S. dollars. Unless otherwise stated, we have made these translations at U.S.\$ 1.0541 per euro, the euro foreign exchange reference rate for U.S. dollars published by the European Central Bank (ECB) for December 31, 2016. ECB euro foreign exchange reference rates are based on a regular daily concertation procedure between central banks across Europe and worldwide, which normally takes place at 2.15 p.m. CET. You should not construe any translations as a representation that the amounts could have been exchanged at the rate used on December 31, 2016 or any other date.

The ECB euro foreign exchange reference rate for U.S. dollars for December 31, 2016 may differ from the actual rates we used in the preparation of the financial information in this document. Accordingly, U.S. dollar amounts appearing in this document may differ from the actual U.S. dollar amounts that we originally translated into euros in the preparation of our financial statements.

Fluctuations in the exchange rate between the euro and the U.S. dollar will affect the U.S. dollar equivalent of the euro price of our shares quoted on the German stock exchanges and, as a result, are likely to affect the market price of our shares on the New York Stock Exchange. These fluctuations will also affect the U.S. dollar value of cash dividends we may pay on our shares in euros. Past fluctuations in foreign exchange rates may not be predictive of future fluctuations.

## Euro foreign exchange reference rates for U.S. dollars as published by the ECB

in U.S.\$ per €	Period-end <sup>1</sup>	Average <sup>2</sup>	High	Low
2017				
February	1.0597	0.0000	1.0808	1.0513
January	1.0755	0.0000	1.0755	1.0385
2016				
December	1.0541	0.0000	1.0762	1.0364
November	1.0635	0.0000	1.1095	1.0548
October	1.0946	0.0000	1.1236	1.0872
September	1.1161	0.0000	1.1296	1.1146
2015	1.0887	1.1046	1.2043	1.0552
2014	1.2141	1.3211	1.3953	1.2141
2013	1.3791	1.3308	1.3814	1.2768
2012	1.3194	1.2932	1.3454	1.2089

<sup>1</sup> Period-end rate is the rate announced for the last business day of the period.

<sup>2</sup> We calculated the average rates for each year using the average of exchange rates on the last business day of each month during the year. We did not calculate average exchange rates within months.

## Capitalization and Indebtedness

## Consolidated capitalization in accordance with IFRS as of December 31, 2016

	in € m.
<b>Debt:</b> <sup>1,2</sup>	
Long-term debt	172,316
Trust preferred securities	6,373
Long-term debt at fair value through profit or loss	6,473
<b>Total debt</b>	<b>185,162</b>
<b>Shareholders' equity:</b>	
Common shares (no par value)	3,531
Additional paid-in capital	33,765
Retained earnings	18,987
Common shares in treasury, at cost	0
Accumulated other comprehensive income, net of tax	
Unrealized net gains (losses) on financial assets available for sale, net of applicable tax and other	912
Unrealized net gains (losses) on derivatives hedging variability of cash flows, net of tax	143
Unrealized net gains (losses) on assets classified as held for sale, net of tax	0
Foreign currency translation, net of tax	2,418
Unrealized net gains (losses) from equity method investments	77
<b>Total shareholders' equity</b>	<b>59,833</b>
Equity component of financial instruments	4,669
Noncontrolling interests	316
<b>Total equity</b>	<b>64,819</b>
<b>Total capitalization</b>	<b>249,981</b>

<sup>1</sup> €820 million (0.4 %) of our debt was guaranteed as of December 31, 2016. This consists of debt of a subsidiary which is guaranteed by the German government.

<sup>2</sup> €60,594 million (33 %) of our debt was secured as of December 31, 2016.

## Reasons for the Offer and Use of Proceeds

Not required because this document is filed as an annual report.

## Risk Factors

An investment in our securities involves a number of risks. You should carefully consider the following information about the risks we face, together with other information in this document, when you make investment decisions involving our securities. If one or more of these risks were to materialize, it could have a material adverse effect on our financial condition, results of operations, cash flows or prices of our securities.

Recent tepid economic growth, and uncertainties about prospects for growth going forward, especially in our home market of Europe, have affected and continue to negatively affect our results of operations and financial condition in some of our businesses and our strategic plans, while a continuing low interest environment and competition in the financial services industry have compressed margins in many of our businesses. If these conditions persist or worsen, our business, results of operations or strategic plans could continue to be adversely affected.

Although economic data appear to have stabilized or improved somewhat during the course of 2016 in many of the countries in which we operate, our business, financial results and strategic plans continue to be negatively impacted by the low interest rate environment, uneven and tepid economic growth, especially in our home markets in Europe, and elevated political uncertainty. Recent and upcoming political events, including the UK referendum on European Union ("EU") membership, the recent U.S. presidential election, the Italian referendum on constitutional reform and upcoming national elections in France, Germany and the Netherlands, have contributed to considerable uncertainty concerning the current and future economic environment. Global economic growth also continues to be reliant on the supportive monetary policy stance of the major central banks. While somewhat improving economic conditions in the U.S. and the potential for fiscal stimulus have prompted the Federal Reserve to embark on a course of raising interest rates, the European Central Bank ("ECB") has continued its policy of negative interest rates on deposits and its program of monthly asset purchases, although it plans to do so at a somewhat reduced volume starting in April 2017.

The European economy remains subject to a number of potential obstacles to future economic growth beyond the political events summarized above, including renewed doubts about the future of the eurozone, a discussion about the appropriate monetary policy stance of the ECB, possible weakening exports growth should the euro strengthen again or if protectionist trade policies are adopted, a delay in implementing structural reforms and a renewed increase of the refugee inflow. In particular, sentiment towards the Italian banking sector deteriorated in 2016 driven by concerns around capitalization, nonperforming loans and the impact of the EU-wide stress tests. In contrast, global financial markets have reacted relatively positively to the beginning of the normalization of U.S. monetary policy and the potential growth-enhancing measures of the new U.S. presidential administration. Markets could, however, react more negatively to these actions as policy plans begin to take shape, for example if they do not quickly result in anticipated increased economic growth or if protectionist measures dampen global growth. In the emerging markets, growth remained relatively weak in 2016 and could be a source of global economic shocks going forward. A stronger than forecast increase of interest rates in the United States could result in strong capital outflows from the emerging markets, further dampening their outlook. In China, in particular, economic growth continued to slow in 2016, and the economic outlook remains subdued, even as the People's Bank of China may take actions to loosen its monetary supply. Should a severe economic contraction or a protracted period of stagnation occur, monetary policymakers, particularly in Europe and the United States but also in the emerging markets, have few tools left in their toolboxes to combat these developments.

Against this background, our results continue to be adversely impacted in particular by the protracted low interest environment and the macro-economic and political uncertainties. The simultaneous easing of monetary policy in the eurozone and the tightening of it in the United States may continue to have disruptive effects on many of our businesses. A further tightening of monetary policy by the Federal Reserve or any decision by central banks more generally to tighten their monetary policy if economies continue to improve could have a material adverse effect on perceptions of liquidity in the financial system and on the global economy more generally, and may adversely affect our business and

financial position. We may face further uncertainty if, as it currently appears, the net effect of monetary and fiscal policies in the U.S. and the eurozone is to continue to weaken the euro against the U.S. dollar. A stronger U.S. dollar can have a beneficial effect on our revenues, as a significant portion of our revenues is generated in the United States while our results are reported in euro. A stronger U.S. dollar will, however, also increase the euro values of our U.S. dollar-denominated costs and liabilities, including those incurred in respect of U.S. litigation and enforcement matters, and will also tend to significantly increase our risk weighted assets and leverage exposures that are denominated in U.S. dollars. If not fully hedged, this can lead to material declines in our capital ratios, as our capital is preponderantly denominated in euro.

Our results of operation and financial condition, in particular those of our Global Markets corporate division, continue to be negatively impacted by the challenging market environment, unfavorable macro-economic and geopolitical conditions, lower client activities, increased competition and regulation, and the immediate impacts resulting from our strategic decisions as we make progress on the implementation of our strategy. If we are unable to improve our profitability as we continue to face these headwinds as well as persistently high litigation costs, we may be unable to meet many of our strategic aspirations, and may have difficulty maintaining capital, liquidity and leverage ratios at levels expected by market participants and our regulators.

In 2016, our revenues declined in several of our corporate divisions, reflecting the negative impact of the challenging low interest rate market environment, sluggish economic conditions, especially in our home market of Europe, and lower client activities. The implementation of some of the strategic measures as part of our targets originally announced in October 2015 also continues to negatively impact our revenues in the short term. Even as the ultra-low interest rate environment, especially in the eurozone, has put pressure on our margins in our traditional banking business, our trading and markets businesses, in particular our fixed income securities franchise, have not matched the results of many of our international peers as differences in regional economic performance as well as the challenges specific to us have impacted our results.

We have experienced and may continue to experience mark-to-market losses on positions as we seek to manage long positions in our inventory that experience mark-to-market losses in times of high market volatility. These losses can more than offset volatility-driven increases in client activity. This factor, for example, negatively impacted some of the businesses in our Global Markets corporate division early in 2016.

In addition, changes in our business mix towards lower-margin, lower-risk products can limit our opportunities to profit from volatility. Regulators have generally encouraged the banking sector to focus more on the facilitation of client flow and less on risk taking. This has been effected in part by increasing capital requirements for higher-risk activities. In addition, some of our regulators have encouraged or welcomed changes to our business perimeter, consistent with their emphasis on lower-risk activities for banks. Our strategy provides for us to reduce our exposures in a number of businesses that focused on riskier but more capital-intensive products (but that in earlier periods also had the potential to be more highly profitable than those dependent on low-risk, low-margin flow in a very low interest rate environment). Further pressure on our revenues and profitability has resulted from long-term structural trends driven by regulation (especially increased regulatory capital and leverage requirements and increased compliance costs) and competition that have further compressed our margins in many of our businesses. Our strategic decisions on these businesses led in part to impairments we recognized in 2015 in our Corporate Banking & Securities business division (in 2016 part of our Global Markets and Corporate & Investment Banking corporate divisions) and reflect a new view on the medium-term profit potential of these activities. Should a combination of these factors continue to lead to reduced margins and subdued activity levels in our trading and markets business over the longer term, this could reflect structural challenges that may lead us to consider even further-reaching changes to aspects of our business mix than those contained in our targets originally announced in October 2015.

Against this backdrop, we expect the costs to us arising from the resolution of litigation, enforcement and similar matters pending against us to continue to be significant in the near to medium term and to adversely affect our business, financial condition and results of operations. In particular, these costs could substantially exceed the level of provisions



that we established for our litigation, enforcement and similar matters, which can contribute to negative market perceptions about our financial health, costing us business. This, combined with the actual costs of litigation, enforcement and other matters, could in turn adversely affect our ability to maintain capital, liquidity and leverage ratios at levels expected by market participants and our regulators. In particular, we suffered, at the end of the third quarter and beginning of the fourth quarter of 2016, some reduction in business volumes and asset outflows, particularly in some parts of our Global Markets business and of our Wealth Management business, as a result of speculation about the potential magnitude of a settlement of civil claims then being negotiated with the U.S. Department of Justice in connection with our issuance and underwriting of residential mortgage-backed securities. Although these negative effects on our business have abated since then and in some cases have reversed, future market speculation about potential settlement demands with respect to litigation and enforcement matters could have persistent adverse effects on our revenue levels. These factors have placed pressure on the markets for our securities, along with concerns regarding our ability to overcome the numerous headwinds facing us. As a result of the substantial uncertainties with respect to the potential outflows in respect of litigation and enforcement matters as well as the broader prospects for our business, we may find it necessary or desirable to raise additional capital in the future to maintain our capital, leverage and liquidity ratios at levels required by our regulators or viewed by market participants as necessary for our businesses in comparison with our international peers.

**Continued elevated levels of political uncertainty could have unpredictable consequences for the financial system and the greater economy, and could contribute to an unwinding of aspects of European integration, potentially leading to declines in business levels, write-downs of assets and losses across our businesses. Our ability to protect ourselves against these risks is limited.**

The last several years have been characterized by increased political uncertainty as Europe in particular has been impacted by the European sovereign debt crisis, the outcomes of the referenda in the UK on EU membership and in Italy on constitutional reform, the refugee crisis and the increasing attractiveness to voters of populist and anti-austerity movements. Although the severity of the European debt crisis appeared to have abated somewhat over recent years as the actions by the ECB, the rescue packages and the economic recovery appeared to have stabilized the situation in Europe, political uncertainty has nevertheless continued to be at an elevated level in recent periods and could trigger the unwinding of aspects of European integration that have benefitted our businesses. Against this backdrop, the prospects for national structural reform and further integration among EU member states, both viewed as important tools to reduce the eurozone's vulnerabilities to future crises, appear to have worsened. These trends may ultimately result in material reductions in our business levels as our customers rein in activity levels in light of decreased economic output and increased uncertainty, which would materially adversely affect our operating results and financial condition.

An escalation of political risks could have unpredictable consequences both for the financial system and the greater economy as a whole, potentially leading to declines in business levels, write-downs of assets and losses across our businesses. In particular, the UK voted on June 23, 2016 in a non-binding national referendum to withdraw from the EU ("Brexit"). On January 24, 2017, the UK Supreme Court ruled that the UK is not authorized to formally give notice to the European Council without an act of Parliament. Nonetheless, the UK appears to be on course to formally give notice to the European Council in March, at which time potentially tense and highly uncertain negotiations regarding the UK's exit from the EU would commence. Given these and other uncertainties in connection with the UK's withdrawal from the EU, it is difficult to determine the exact impact on us over the long term. We are also unable to determine with any precision the impact of Brexit on our current UK structure or business model in the short term, as there remains no clarity into the details or timing of the changes. However, the UK's economy and those of the eurozone countries are very tightly linked as a result of EU integration projects other than the euro, and the scale of our businesses in the UK – especially those dependent on activity levels in the City of London, to which we are heavily exposed and which may deteriorate as a result of Brexit – means that even modest effects in percentage terms can have a very substantial adverse effect on our businesses. In addition, a number of EU member states face national elections in 2017, including France, Germany and the Netherlands (and likely Italy), and political parties disfavoring current levels of European



integration, or espousing the unwinding of European integration to varying extents, are performing relatively well in pre-election polling. The Brexit vote has also given a voice to some of these political parties to challenge European integration. The resulting uncertainty could have significant effects on the value of the euro and on prospects for member states' financial stability, which in turn could potentially lead to a significant deterioration of the sovereign debt market, especially if Brexit or any other member country's exit did not result in the catastrophic effects on the exiting country that many have predicted. If one or more members of the eurozone defaults on their debt obligations or decides to leave the common currency, this would result in the reintroduction of one or more national currencies. Should a eurozone country conclude it must exit the common currency, the resulting need to reintroduce a national currency and restate existing contractual obligations could have unpredictable financial, legal, political and social consequences, leading not only to significant losses on sovereign debt but also on private debt in that country. Given the highly interconnected nature of the financial system within the eurozone, and the high levels of exposure we have to public and private counterparties around Europe, our ability to plan for such a contingency in a manner that would reduce our exposure to non-material levels is likely to be limited. If the overall economic climate deteriorates as a result of one or more departures from the eurozone, our businesses could be adversely affected, and, if overall business levels decline or we are forced to write down significant exposures among our various businesses, we could incur substantial losses.

**We may be required to take impairments on our exposures to the sovereign debt of European or other countries if the European sovereign debt crisis reignites. The credit default swaps into which we have entered to manage sovereign credit risk may not be available to offset these losses.**

The effects of the sovereign debt crisis have been especially evident in the financial sector, as a large portion of the sovereign debt of eurozone countries is held by European financial institutions, including us. As of December 31, 2016, we had a direct sovereign credit risk exposure of €2.7 billion to Italy, €1.3 billion to Spain, €61 million to Portugal, €569 million to Ireland and €89 million to Greece. Despite the apparent abatement of the crisis in recent years, it remains uncertain whether, in light of the current political environment, Greece or other eurozone sovereigns, such as Spain, Italy, Portugal and Cyprus, will be able to manage their debt levels in the future and whether Greece will attempt to renegotiate its past international debt restructuring. The rise of anti-austerity parties and populist sentiment in many of these countries poses a threat to the medium- to long-term measures recommended for these countries to alleviate the tensions in the eurozone caused by drastically differing economic situations among the eurozone states. In the future, negotiations or exchanges similar to the Greek debt restructuring in 2012 could take place with respect to the sovereign debt of these or other affected countries. The outcome of any negotiations regarding changed terms (including reduced principal amounts or extended maturities) of sovereign debt may result in additional impairments of assets on our balance sheet. Any negotiations are highly likely to be subject to political and economic pressures that we cannot control, and we are unable to predict their effects on the financial markets, on the greater economy or on ourselves.

In addition, any restructuring of outstanding sovereign debt may result in potential losses for us and other market participants that are not covered by payouts on hedging instruments that we have entered into to protect against the risk of default. These instruments largely consist of credit default swaps, generally referred to as CDSs, pursuant to which one party agrees to make a payment to another party if a credit event (such as a default) occurs on the identified underlying debt obligation. A sovereign restructuring that avoids a credit event through voluntary write-downs of value may not trigger the provisions in CDSs we have entered into, meaning that our exposures in the event of a write-down could exceed the exposures we previously viewed as our net exposure after hedging. Additionally, even if the CDS provisions are triggered, the amounts ultimately paid under the CDSs may not correspond to the full amount of any loss we incur. We also face the risk that our hedging counterparties have not effectively hedged their own exposures and may be unable to provide the necessary liquidity if payments under the instruments they have written are triggered. This may result in systemic risk for the European banking sector as a whole and may negatively affect our business and financial position.

Our liquidity, business activities and profitability may be adversely affected by an inability to access the debt capital markets or to sell assets during periods of market-wide or firm-specific liquidity constraints. Credit rating downgrades have contributed to an increase in our funding costs, and any future downgrade could materially adversely affect our funding costs, the willingness of counterparties to continue to do business with us and significant aspects of our business model.

We have a continuous demand for liquidity to fund our business activities. Our liquidity may be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from our subsidiaries or otherwise allocate liquidity optimally across our businesses, an inability to sell assets or redeem our investments, or unforeseen outflows of cash or collateral. This situation may arise due to circumstances unrelated to our businesses and outside our control, such as disruptions in the financial markets, or circumstances specific to us, such as reluctance of our counterparties or the market to finance our operations due to perceptions about potential outflows resulting from litigation, regulatory and similar matters, actual or perceived weaknesses in our businesses, our business model or our strategy, as well as in our resilience to counter negative economic and market conditions. For example, we have over the last year, as well as in the past, experienced steep declines in the price of our shares and increases in the spread versus government bonds at which our debt trades in the secondary markets. Reflecting these conditions, our internal estimates of our available liquidity over the duration of a stressed scenario has at times been negatively impacted in recent periods. Such effects were particularly acute in the autumn of 2016 in response to market speculation about the potential magnitude of a settlement of civil claims then being negotiated with the U.S. Department of Justice in connection with our issuance and underwriting of residential mortgage-backed securities. In addition, negative developments concerning other financial institutions perceived to be comparable to us and negative views about the financial services industry in general have also affected us in recent years. These perceptions have affected the prices at which we have accessed the capital markets to obtain the necessary funding to support our business activities; should these perceptions worsen, our ability to obtain this financing on acceptable terms may be adversely affected. Among other things, an inability to refinance assets on our balance sheet or maintain appropriate levels of capital to protect against deteriorations in their value could force us to liquidate assets we hold at depressed prices or on unfavorable terms, and could also force us to curtail business, such as the extension of new credit. This could have an adverse effect on our business, financial condition and results of operations.

In addition, we have benefited in recent years from a number of incremental measures by the ECB and other central banks to provide additional liquidity to financial institutions and the financial markets, particularly in the eurozone. To the extent these actions are curtailed or halted, our funding costs could increase, or our funding supply could decrease, which could in turn result in a reduction in our business activities. In particular, any decision by the ECB to discontinue or reduce quantitative easing or further steps by the Federal Reserve to tighten its monetary policy or actions by central banks more generally to tighten their monetary policy will likely cause long-term interest rates to increase and accordingly impact the costs of our funding.

Since the start of the global financial crisis, the major credit rating agencies have lowered our credit ratings or placed them on review or negative watch on multiple occasions. These credit rating downgrades have contributed to an increase in our funding costs, and any future downgrade could materially affect our funding costs, although we are unable to predict whether this would be the case or the extent of any such effect. The effect would depend on a number of factors including whether a downgrade affects financial institutions across the industry or on a regional basis, or is intended to reflect circumstances specific to us, such as our potential settlement of regulatory, litigation and similar matters; any actions our senior management may take in advance of or in response to the downgrade; the willingness of counterparties to continue to do business with us; any impact of other market events and the state of the macroeconomic environment more generally. In particular, should any of the major credit rating agencies lower our credit rating to a level considered sub-investment grade, significant aspects of our business model would be materially and adversely affected.

Additionally, under many of the contracts governing derivative instruments to which we are a party, a downgrade could require us to post additional collateral, lead to terminations of contracts with accompanying payment obligations for us or give counterparties additional remedies. We take these effects into account in our liquidity stress testing analysis, as further described in “Management Report: Risk Report: Liquidity Risk: Stress Testing and Scenario Analysis” on pages 129 through 130 of the Annual Report 2016.

Regulatory reforms enacted and proposed in response to weaknesses in the financial sector, together with increased regulatory scrutiny more generally, have created significant uncertainty for us and may adversely affect our business and ability to execute our strategic plans, and competent regulators may prohibit us from making dividend payments or payments on our regulatory capital instruments or take other actions if we fail to comply with regulatory requirements.

In response to the global financial crisis and the European sovereign debt crisis, governments, regulatory authorities and others have made and continue to make proposals to reform the regulatory framework for the financial services industry to enhance its resilience against future crises. Legislation has been enacted and regulations have been issued in response to many of these proposals, while others continue to be developed. The regulatory framework for financial institutions is likely to undergo further significant change. This creates significant uncertainty for us and the financial industry in general. The wide range of new laws and regulations or current proposals includes, among other things:

- provisions for more stringent regulatory capital, leverage and liquidity standards,
- restrictions on compensation practices,
- restrictions on proprietary trading and other investment activities,
- special bank levies and financial transaction taxes,
- recovery and resolution powers to intervene in a crisis including “bail-in” of creditors,
- large exposure limits,
- the creation of a single supervisory authority and a single resolution authority within the eurozone and any other participating member states,
- separation of certain businesses from deposit taking,
- stress testing and capital planning regimes,
- heightened reporting requirements, and
- reforms of derivatives, other financial instruments, investment products and market infrastructures.

In addition, regulatory scrutiny under existing laws and regulations has become more intense. The specific effects of a number of new laws and regulations remain uncertain because the drafting and implementation of these laws and regulations are still on-going. For example, in 2016 the Basel Committee on Banking Supervision published its final revised standards for market risk following the “Fundamental Review of the Trading Book”, or “FRTB”, and consultative documents on revising the standardized approach for credit risk, operational risk, constraining the use of internal models for credit risk, capital floors, and revisions to the leverage ratio. Also in 2016, the Basel Committee published, among other things, changes to the calculation of interest rate risk in the banking book, or “IRRBB”. The changes contemplated by the FRTB and IRRBB as well as the proposals to implement the standardized approach for credit risk, among other things, are part of the EC proposals published on November 23, 2016 to change the CRR/CRD 4 legislative package. Furthermore, European Union and U.S. regulators have implemented or are expected to propose rules implementing the further revisions to credit risk, operational risk and capital floors in 2018. Full compliance with the European Union rules could be required at some point between 2020 and 2025. The proposed changes could lead to a significant increase of our risk-weighted assets and, as a result, a higher capital demand, changes in our deductions from our regulatory capital and the imposition of additional capital charges to cover credit, market and operational risk. These requirements may be in addition to regulatory capital buffers that may also be increased or be in addition to those already imposed on us and could themselves materially increase our capital requirements.

Regulatory authorities have substantial discretion in how to regulate banks, and this discretion, and the means available to the regulators, have been steadily increasing during recent years. Regulation may be imposed on an ad hoc basis by governments and regulators in response to ongoing or future crises, and may especially affect financial institutions such as us that are deemed to be systemically important.

In particular, the regulators with jurisdiction over us, including the ECB under the Single Supervisory Mechanism (also referred to as the “SSM”), may, in connection with the supervisory review and evaluation process (“SREP”) or otherwise, conduct stress tests and have discretion to impose capital surcharges on financial institutions for risks, including for litigation, regulatory and similar matters, that are not otherwise recognized in risk-weighted assets or other surcharges depending on the individual situation of the bank and take or require other measures, such as restrictions on or changes to our business. In this context, the ECB may impose on us individual capital requirements resulting from the SREP which are referred to as “Pillar 2” requirements. “Pillar 2” requirements must be fulfilled with Common Equity Tier 1 capital in addition to the statutory minimum capital and buffer requirements and any non-compliance may have immediate legal consequences such as restrictions on dividend payments. Also following the SREP, the ECB may communicate to individual banks an expectation to hold a further “Pillar 2” Common Equity Tier 1 capital add-on, the so-called “Pillar 2” guidance. Although the “Pillar 2” guidance is not legally binding and failure to meet the “Pillar 2” guidance does not automatically trigger legal action, the ECB has stated that it expects banks to meet the “Pillar 2” guidance. Also, more generally, competent regulators may, if we fail to comply with regulatory requirements, in particular with statutory minimum capital requirements, “Pillar 2” requirements or buffer requirements, or if there are shortcomings in our governance and risk management processes, prohibit us from making dividend payments to shareholders or distributions to holders of our other regulatory capital instruments. This could occur, for example, if we fail to make sufficient profits due to declining revenues, or substantial outflows due to litigation, regulatory and similar matters. Generally, a failure to comply with the new quantitative and qualitative regulatory requirements could have a material adverse effect on our business, financial condition and results of operations, including our ability to pay out dividends to shareholders or distributions on our other regulatory capital instruments or, in certain circumstances, conduct business which we currently conduct or plan to conduct in the future.

European and German legislation regarding the recovery and resolution of banks and investment firms could, if steps were taken to ensure our resolvability or resolution measures were imposed on us, significantly affect our business operations, and lead to losses for our shareholders and creditors.

Germany participates in the Single Resolution Mechanism (referred to as the “SRM”), which centralizes at a European level the key competences and resources for managing the failure of any bank in member states of the European Union participating in the banking union. The SRM is based on the SRM Regulation and the Bank Recovery and Resolution Directive (or “BRRD”), which was implemented in Germany through the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, “SAG”). In addition, the German Resolution Mechanism Act (Abwicklungsmechanismusgesetz) adapted German bank resolution laws to the SRM.

The SRM Regulation and the German Recovery and Resolution Act require the preparation of recovery and resolution plans for banks and grant broad powers to public authorities to intervene in a bank which is failing or likely to fail. For a bank directly supervised by the ECB, such as us, the Single Resolution Board (referred to as the “SRB”) assesses its resolvability and may require legal and operational changes to the bank’s structure to ensure its resolvability. In the event that such bank is failing or likely to fail and certain other conditions are met, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (in Germany: the Federal Agency for Financial Market Stabilization, “FMSA”) in line with the national laws implementing the BRRD. Resolution measures that could be imposed upon a failing bank may include a range of measures including the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders of a failing bank or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank’s outstanding debt instruments, for example by way of a deferral of payments or a reduction of the applicable interest rate. Furthermore, certain eligible unsecured liabilities, in particular certain senior unsecured debt instruments specified by the German Banking Act, as amended by the German Resolution Mechanism Act, may be written down, including to zero, or converted into equity (commonly referred to as “bail-in”).

In order to facilitate the authorities' bail-in powers, which became effective in Germany on January 1, 2015, banks are required to include in their eligible liabilities issued under non-EU law conditions to the effect that the respective counterparties recognize the regulatory powers to write down or convert such liabilities as well as other resolution powers. The SRM Regulation, the BRRD and the Recovery and Resolution Act are intended to eliminate, or reduce, the need for public support of troubled banks. Therefore, financial public support for such banks, if any, would be used only as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution powers, including a bail-in. The taking of actions to ensure our resolvability or the exercise of resolution powers by the competent resolution authority could materially affect our business operations and lead to a significant dilution of our shareholders or even the total loss of our shareholders' or creditors' investment.

Regulatory and legislative changes require us to maintain increased capital, in some cases (including in the United States) applying liquidity, risk management and capital adequacy rules to our local operations on a standalone basis. These requirements may significantly affect our business model, financial condition and results of operations as well as the competitive environment generally. Any perceptions in the market that we may be unable to meet our capital or liquidity requirements with an adequate buffer, or that we should maintain capital in excess of these requirements, could intensify the effect of these factors on our business and results.

In December 2010, the Basel Committee on Banking Supervision published a set of comprehensive changes to the capital adequacy framework, known as Basel 3, which have been implemented into European Union law by a legislative package referred to as "CRR/CRD 4". The CRR/CRD 4 legislative package includes a European Union regulation (which is referred to as the Capital Requirements Regulation or "CRR") which is directly enforceable as law in every member state of the European Union, and a European Union directive (which is referred to as the Capital Requirements Directive or "CRD 4"), which has been implemented into national (in our case German) law. CRR/CRD 4 became effective on January 1, 2014, with some of the regulatory adjustments being gradually phased in through January 1, 2019. CRR/CRD 4 contains, among other things, detailed rules on regulatory banking capital, increased capital requirements and the introduction of additional capital buffers (which will increase from year to year) as well as new and tightened liquidity standards and the introduction of a leverage ratio not based upon risk-weightings. We are subject to additional capital buffers, including as a result of being designated a global systemically important bank, or "G-SIB". In July 2013, U.S. federal bank regulators issued final rules implementing many elements of the Basel 3 capital adequacy framework in the United States. The impact and implementation of the Basel 3 capital adequacy framework is being assessed and monitored by regulators on a regular basis. Further revisions, such as stricter rules on the measurement of risks proposed by the Basel Committee on Banking Supervision, could further increase risk-weighted assets and the corresponding capital demand for banks.

Furthermore, under the SRM Regulation, the BRRD and the German Recovery and Resolution Act, banks in the European Union are required to meet at all times a robust minimum requirement for own funds and eligible liabilities ("MREL") which is determined on a case-by-case basis by the competent resolution authority. In addition, on November 9, 2015, the Financial Stability Board ("FSB") published a new standard applicable to all G-SIBs (and not only European G-SIBs), such as us, that will require, when transposed as law, G-SIBs, such as us, to meet a new firm-specific minimum requirement for total loss-absorbing capacity ("TLAC") starting on January 1, 2019. Also in order to facilitate the meeting of TLAC requirements by German banks, obligations of banks under certain, specifically defined senior unsecured debt instruments issued by them (such as bonds that are not structured products) rank, as from 2017, junior to all other outstanding unsecured unsubordinated obligations of such bank (such as certain structured products), without technically constituting subordinated debt, but continue to rank in priority to contractually or otherwise subordinated debt instruments. Both the TLAC and MREL requirements are specifically designed to require banks to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers' money. On November 23, 2016, the European Commission published a proposal to implement the FSB's TLAC standard in the European Union and align it with MREL and also harmonize national rules on the priority of claims of banks' creditors in the European Union. This review comes as part of a broader review of the CRR/CRD 4 rules incorporating changes to the market risk framework, liquidity framework and leverage ratio calculation, amongst others. These rules are now subject to the EU co-decision process and will likely be subject to change over the coming months. Furthermore, on December 15, 2016, the Federal Reserve Board adopted final rules that implement the FSB's TLAC standard in the United States. The final rules, which apply beginning in 2019, require, among other things, the U.S. intermediate holding companies ("IHCs") of non-U.S. G-SIBs, in-



cluding our IHC, DB USA Corporation, to maintain a minimum amount of TLAC, and separately require them to maintain a minimum amount of long-term debt. While the final impact of the MREL and TLAC requirements will depend on their final implementation, the need to comply with such requirements, and the change in ranking of certain debt instruments issued by us, may affect our business, financial condition and results of operation and in particular may increase our financing costs.

We may not have sufficient capital or other loss-absorbing liabilities to meet these increasing regulatory requirements. This could occur due to regulatory changes and other factors, such as the gradual phase out of our hybrid capital instruments qualifying as Additional Tier 1 (or AT1) capital or our inability to issue new securities which are recognized as regulatory capital or loss-absorbing liabilities under the new standards, due to an increase of risk-weighted assets based on more stringent rules for the measurement of risks or as a result of a continued decline in the value of the euro as compared to other currencies, due to stricter requirements for the compliance with the non-risk based leverage ratio, due to any substantial losses we may incur, which would reduce our retained earnings, a component of Common Equity Tier 1 capital, or due to a combination of these or other factors.

If we are unable to maintain sufficient capital to meet the statutory minimum capital requirements, the buffer requirements or any specific "Pillar 2" capital requirements imposed on us by the ECB or capital ratios expected by the market, we may become subject to enforcement actions and/or restrictions on the pay-out of dividends, share buybacks, payments on our other regulatory capital instruments, and discretionary compensation payments. In addition, any requirement to increase risk-based capital ratios or the leverage ratio could lead us to adopt a strategy focusing on capital preservation and creation over revenue generation and profit growth, including the reduction of higher margin risk-weighted assets. If we are unable to increase our capital ratios to the regulatory minimum in such a case or by raising new capital through the capital markets, through the reduction of risk-weighted assets or through other means, we may be required to activate our group recovery plan. If these actions or other private or supervisory actions do not restore capital ratios to the levels required under the CRR/CRD 4 legislative package, and we are failing or likely to fail, competent authorities may apply resolution powers under the SRM Regulation, the German Recovery and Resolution Act and other applicable rules and regulations, which could lead to a significant dilution of our shareholders' or even the total loss of our shareholders' or creditors' investment.

Moreover, we are required to hold and calculate capital and to comply with rules on liquidity and risk management separately for our local operations in different jurisdictions. In the United States, the Federal Reserve Board has adopted rules that impose enhanced prudential standards on our U.S. operations. In February 2014, the Federal Reserve Board adopted U.S. prudential reforms (the "FBO Rules") applicable to foreign banking organizations ("FBOs"). FBOs with U.S.\$ 50 billion or more in U.S. non-branch assets, such as us, were required to establish or designate a separately capitalized top-tier U.S. IHC to hold substantially all of the FBO's ownership interests in U.S. subsidiaries by July 1, 2016. On July 1, 2016, we designated DB USA Corporation as our IHC and, as of that date, DB USA Corporation became subject, on a consolidated basis, to the capital requirements under the U.S. Basel 3 capital framework, capital planning and stress testing requirements (on a phased-in basis), U.S. liquidity buffer requirements and other enhanced prudential standards comparable to those applicable to top-tier U.S. bank holding companies of a similar size. Certain of these requirements also apply to our New York branch. The Federal Reserve Board has the authority to examine DB USA Corporation and any of its subsidiaries, as well as our New York branch. U.S. leverage ratio and supplementary leverage ratio requirements applicable to the IHC will take effect beginning in January 2018.

In September 2014, the Federal Reserve Board and other U.S. regulators approved a final rule implementing liquidity coverage ratio ("LCR") requirements for large U.S. banking holding companies and certain of their subsidiary depository institutions that are generally consistent with the Basel Committee's revised Basel 3 liquidity standards. Deutsche Bank Trust Corporation became subject to a modified, less stringent version of the LCR beginning in January 2016, and DB USA Corporation and Deutsche Bank Trust Company Americas will become subject to the full LCR on April 1, 2017. Once DB USA Corporation becomes subject to the full LCR, Deutsche Bank Trust Corporation will no longer be subject to a standalone LCR requirement.

On June 1, 2016, the Federal Reserve and other U.S. regulators proposed rules implementing the second element of the Basel 3 liquidity framework, the net stable funding ratio (“NSFR”), which measures whether an institution maintains sufficiently stable amounts of longer-term funding. Under the proposed rules DB USA Corporation and Deutsche Bank Trust Company Americas would be subject to the full NSFR on January 1, 2018.

Our combined U.S. operations, including our New York branch, are expected to become subject to additional quantitative requirements related to liquidity and risk management.

Deutsche Bank Trust Corporation is subject to risk-based and leverage capital requirements, liquidity requirements, and other enhanced prudential standards applicable to large U.S. bank holding companies. Deutsche Bank Trust Corporation also became subject to capital planning and stress testing requirements on June 30, 2014. On June 29, 2016, the Federal Reserve Board publicly indicated that it had objected to Deutsche Bank Trust Corporation’s 2016 capital plan submission due to weaknesses in its capital planning processes. Deutsche Bank Trust Corporation’s stressed Common Equity Tier 1 capital ratio, however, was forecast by the Federal Reserve Board to substantially exceed the minimum required ratio under the supervisory severely adverse scenario. Deutsche Bank Trust Corporation will submit its 2017 capital plan, incorporating enhancements to its processes, on April 5, 2017. The Federal Reserve has indicated that this capital plan will be judged publicly only on a quantitative basis. DB USA Corporation will provide its first capital plan submission to the Federal Reserve Board in April 2017; however, the results of its first submission will not be made public by the Federal Reserve Board. Deutsche Bank Trust Corporation will remain subject to the capital planning and stress-testing requirements and certain enhanced prudential standards until corresponding requirements applicable to DB USA Corporation become fully effective in January 2018. It is possible this compliance date will be amended when the final U.S. NSFR rule is published.

Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) and the implementing regulations require each bank holding company with assets of U.S.\$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the “Title I US Resolution Plan”). For foreign-based covered companies such as Deutsche Bank AG, the Title I US Resolution Plan only relates to subsidiaries, branches, agencies and businesses that are domiciled in or conducted in whole or in material part in the United States. Deutsche Bank AG filed its most recent Title I US Resolution Plan in July 2015 and, as a foreign-based covered company, was not required to file one in 2016. In addition to the Title I US Resolution Plan, in 2014, Deutsche Bank Trust Company Americas (“DBTCA”), one of our insured depository institutions (“IDIs”) in the United States, became subject to the FDIC’s final rule requiring IDIs with total assets of U.S.\$ 50 billion or more to submit periodically to the FDIC a plan for resolution in the event of failure (the “IDI Rule”). In 2014, we expanded our Title I US Resolution Plan to also be responsive to the IDI Rule requirements, and in 2015 DBTCA submitted a separate resolution plan under the IDI Rule. Our next Title I US Resolution Plan filing is expected to be due on July 1, 2017. If the Federal Reserve Board and the FDIC were to jointly deem our Title I US Resolution Plan not credible and we failed to remedy the deficiencies in the required timeframe, we could be required to restructure or reorganize businesses, legal entities, operational systems and/or intra-company transactions in ways that may negatively impact our operations and strategy, or could be subject to restrictions on growth. We could also eventually be subjected to more stringent capital, leverage or liquidity requirements, or be required to divest certain assets or operations.

U.S. rules and interpretations, including those described above, could cause us to reduce assets held in the United States, inject capital and/or liquidity into or otherwise change the structure of our U.S. operations. To the extent that we are required to reduce operations in the United States or deploy capital in the United States that could be deployed more profitably elsewhere, these requirements could have an adverse effect on our business, financial condition and results of operations.

Any increased capital or liquidity requirements, including those described above, could have adverse effects on our business, financial condition and results of operations, as well as on perceptions in the market of our stability, particularly if any such proposal becomes effective and results in our having to raise capital at a time when financial markets are distressed. If these regulatory requirements must be implemented more quickly than currently foreseen, we may decide that the quickest and most reliable path to compliance is to reduce the level of assets on our balance sheet, dispose of divisions or separate out certain activities or reduce or close down certain business lines. The effects on our capital raising efforts in such a case could be amplified due to the expectation that our competitors, at least those subject to the same or similar capital requirements, would likely also be required to raise capital at the same time. Moreover, some of our competitors, particularly those outside the European Union, may not face the same or similar regulations, which could put us at a competitive disadvantage.

In addition to these regulatory initiatives, market sentiment may encourage financial institutions such as us to maintain significantly more capital, liquidity and loss-absorbing capital instruments than regulatory-mandated minima, which could exacerbate the effects on us described above or, if we do not increase our capital to the encouraged levels, could lead to the perception in the market that we are undercapitalized relative to our peers generally.

It is unclear whether the increased U.S. capital and other requirements described above, as well as similar developments in other jurisdictions could lead to a fragmentation of supervision of global banks that could adversely affect our reliance on regulatory waivers allowing us to meet capital adequacy requirements, large exposure limits and certain organizational requirements on a consolidated basis only rather than on both a consolidated and non-consolidated basis. Should we no longer be entitled to rely on these waivers, we would have to adapt and take the steps necessary in order to meet regulatory capital requirements and other requirements on a consolidated as well as a non-consolidated basis, which could result also in significantly higher costs and potential effects on our profitability and dividend paying ability.

[Our regulatory capital and liquidity ratios and our funds available for distributions on our shares or regulatory capital instruments will be affected by our business decisions and, in making such decisions, our interests and those of the holders of such instruments may not be aligned, and we may take decisions in accordance with applicable law and the terms of the relevant instruments that result in no or lower payments being made on our shares or regulatory capital instruments.](#)

Our regulatory capital and liquidity ratios are affected by a number of factors, including decisions we make relating to our businesses and operations as well as the management of our capital position, of our risk-weighted assets and of our balance sheet in general, and external factors, such as regulations regarding the risk weightings we are permitted to allocate to our assets, commercial and market risks or the costs of our legal proceedings. While we and our management are required to take into account a broad range of considerations in our and their managerial decisions, including the interests of the Bank as a regulated institution and those of our shareholders and creditors, particularly in times of weak earnings and increasing capital requirements, the regulatory requirements to build capital and liquidity may become paramount. Accordingly, in making decisions in respect of our capital and liquidity management, we are not required to adhere to the interests of the holders of instruments we have issued that qualify for inclusion in our regulatory capital, such as our Additional Tier 1 capital instruments. We may decide not to take any measures, including increasing our capital at a time when it is feasible to do so (through securities issuances or otherwise), even if our failure to take such an action would result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of any of our regulatory capital instruments. Our decisions could cause the holders of such regulatory capital instruments to lose all or part of the value of their investments in these instruments due to their effect on our regulatory capital ratios, and such holders will not have any claim against us relating to such decisions, even if they result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of such instruments they hold.

In addition, our annual profit and distributable reserves form an important part of the funds available for us to pay dividends on our shares and make payments on our other regulatory capital instruments, as determined in the case of each such instrument by its terms or by operation of law, and any adverse change in our financial prospects, financial position or profitability, or our distributable reserves, each as calculated on an unconsolidated basis, may have a material adverse effect on our ability to make dividend or other payments on these instruments. In addition, as part of the



implementation of our strategy, we may record impairments that reduce the carrying value of subsidiaries on our unconsolidated balance sheet and reduce profits and distributable reserves. Future impairments or other events that reduce our profit or distributable reserves on an unconsolidated basis could lead us to be unable to make such payments in respect of future years in part or at all. In particular, the direct costs of our potential settlements of litigation, enforcement and similar matters, especially to the extent in excess of provisions we have established for them, and their related business impacts, if they occur, could impact such distributable amounts.

In addition, German law places limits on the distribution of annual profits and otherwise-distributable reserves, as calculated on an unconsolidated basis, to be distributed to our shareholders or the holders of our other regulatory capital instruments, such as our Additional Tier 1 capital instruments. Our management also has, subject to applicable law, broad discretion under the applicable accounting principles to influence all amounts relevant for calculating funds available for distribution. Such decisions may impact our ability to make dividend or other payments under the terms of our regulatory capital instruments.

Consistent with our updated strategy, our Management Board intends to propose to our Annual General Meeting in May 2017 to resolve the payment of a dividend of €0.19 per share. The dividend to be paid out of Deutsche Bank AG's distributable profit for 2016 determined under German accounting rules for its stand-alone financial statements contains a component reflecting the distributable profit carried forward from 2015 of approximately €165 million and a dividend of €0.11 per share out of the remaining distributable profit for 2016. Overall we expect to pay out a total dividend of approximately €400 million in 2017.

**Legislation in the United States and in Germany as well as proposals in the European Union regarding the prohibition of proprietary trading or its separation from the deposit-taking business may materially affect our business model.**

On December 10, 2013, U.S. regulators released the final version of the rules implementing the “Volcker Rule”, as required by the Dodd-Frank Act. The final rules prohibit U.S. insured depository institutions and companies that control or are affiliated with U.S. insured depository institutions (such as us) from engaging in proprietary trading of certain securities, derivatives, commodity futures and options on these instruments, for their own account. The final rules also impose limits or restrictions on investments in, and other relationships with, hedge funds, private equity funds and other private funds and limit the ability of banking entities and their affiliates to enter into certain transactions with such funds with which they or their affiliates have certain relationships. The Volcker Rule requires banking entities to establish comprehensive compliance programs designed to help ensure and monitor compliance with restrictions under the Volcker Rule. The Federal Reserve Board has extended the Volcker Rule's general conformance period for investments in and relationships with covered funds and certain foreign funds that were in place on or prior to December 31, 2013 until July 21, 2017. The extension of the conformance period does not apply to the Volcker Rule's prohibitions on proprietary trading or to any investments in and relationships with covered funds made or entered into after December 31, 2013.

In Germany, the German Act on the Separation of Risks and Recovery and Resolution Planning for Credit Institutions and Banking Groups (Trennbankengesetz), referred to as the “Separation Act”, provides that deposit-taking banks and their affiliates are prohibited from engaging in proprietary trading that does not constitute a service for others, high-frequency trading (with the exception of market-making activities), and credit or guarantee transactions with hedge funds and comparable enterprises, unless such activities are transferred to a separate legal entity. The separation requirement applies if certain thresholds are exceeded, which we exceed. In addition, the German Separation Act authorizes the BaFin, since July 1, 2016, to prohibit the deposit-taking bank and its affiliates, on a case-by-case basis, from engaging in market-making and other activities that are comparable to the activities prohibited by law, if these activities may put the solvency of the deposit-taking bank or any of its affiliates at risk. In the event that the BaFin orders such a prohibition, the respective activities must be discontinued or transferred to a separate legal entity (referred to as financial trading institution (Finanzhandelsinstitut)). The prohibition for deposit-taking banks and their affiliates to conduct activities associated with increased risks became effective on July 1, 2015, with a further transitional period of

twelve months to accomplish the separation requirement, unless the BaFin extends this period. For Deutsche Bank Group, the period to cease or transfer activities concerned was extended by the BaFin until June 30, 2017. Non-compliance with the prohibitions set forth in the German Separation Act could ultimately result in civil and criminal liability.

On January 29, 2014, the European Commission published a proposal for a regulation on structural measures improving the resilience of European Union credit institutions (referred to as "Proposed Regulation"), which if enacted, will impose measures similar to the German Separation Act. The Proposed Regulation would apply to large banks which are either identified as G-SIBs (such as us), or whose total assets and trading activities exceed certain thresholds (which we exceed). If the Proposed Regulation were enacted as proposed, it would, inter alia, ban proprietary trading in financial instruments and commodities. On June 19, 2015, the Council of the European Union agreed its position at first reading on the Proposed Regulation, which contains significant amendments to the Proposed Regulation. If adopted, the Proposed Regulation might overrule certain requirements set out in the German Separation Act at the national level. The ultimate impact on us of the Proposed Regulation will depend on the content of the final version.

The Volcker Rule, the German Separation Act and the Proposed Regulation may have significant implications for the future structure and strategy of our Group, and may increase our Group's funding costs. This could adversely affect our business, financial condition and results of operations.

**Other regulatory reforms adopted or proposed in the wake of the financial crisis – for example, extensive new regulations governing our derivatives activities, compensation, bank levies, deposit protection or a possible financial transaction tax – may materially increase our operating costs and negatively impact our business model.** Beyond capital requirements, recovery and resolution planning, separation of certain bank activities and other requirements discussed above, we are affected, or expect to be affected, by various additional regulatory reforms adopted or proposed in the wake of the financial crisis including, among other things, new regulations governing our derivatives activities, compensation, bank levies, deposit protection or a possible financial transaction tax.

On August 16, 2012, the EU Regulation on over-the-counter ("OTC") derivatives, central counterparties and trade repositories, referred to as EMIR, entered into force. While a number of the compliance requirements introduced by EMIR already apply, the European Securities and Markets Authority ("ESMA") is still in the process of finalizing some of the implementing rules mandated by EMIR. EMIR introduced a number of requirements, including clearing obligations for certain classes of OTC derivatives and various reporting and disclosure obligations. Although some of the particular effects brought about by EMIR are not yet fully foreseeable, many of its elements have led and may lead to changes which may negatively impact our profit margins, require us to adjust our business practices or increase our costs (including compliance costs). The new Markets in Financial Instruments Directive ("MiFID II") and the corresponding Regulation ("MiFIR") introduce, among other changes, a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized. MiFID II/MiFIR are foreseen to be applicable to us starting on January 3, 2018. MiFID II needs yet to be transposed into national law, and ESMA and the European Commission yet have to finalize several related implementing regulations. We will also be impacted by the BCBS-IOSCO final minimum standards for margin requirements for non-centrally cleared derivatives, for which enabling legislation exists in the EU (EMIR) but where much of the impact depends on how these requirements are implemented.

In the United States, the Dodd-Frank Act has numerous provisions that may affect our operations. Pursuant to regulations implementing provisions of the Dodd-Frank Act, we registered as a swap dealer with the U.S. Commodity Futures Trading Commission ("CFTC") and became subject to the CFTC's extensive oversight. Regulation of swap dealers by the CFTC imposes numerous corporate governance, business conduct, capital, margin, reporting, clearing, execution and other regulatory requirements on us. It also requires us to comply with certain U.S. rules in some circumstances with respect to transactions conducted outside of the United States or with non-U.S. persons. Although the coverage of EMIR and CFTC regulations implementing the Dodd-Frank Act is in many ways similar, certain swaps may be subject to both regulatory regimes to a significant extent. However, the CFTC's guidance on cross-border swaps regulation, as well as the margin requirements recently adopted by the U.S. bank regulatory agencies and the CFTC, may allow us to comply with some, but not all, U.S. regulatory requirements on a substituted basis by complying with EMIR and MiFID. The new requirements under the Dodd-Frank Act may adversely affect our derivatives business and make us less

competitive, especially as compared to competitors not subject to such regulation. Additionally, under the Dodd-Frank Act, security-based swaps are subject to a standalone regulatory regime under the jurisdiction of the U.S. Securities and Exchange Commission (“SEC”). The SEC is finalizing rules for its security-based swap regime that are expected to be parallel to, but not identical to, the CFTC’s regulation of swaps. This will impose further regulation of our derivatives business.

In addition, CRD 4 provides for executive compensation reforms including caps on bonuses that may be awarded to “material risk takers” and other employees as defined in CRD 4, the German Banking Act and other applicable rules and regulations such as the Remuneration Regulation for Institutions (Institutsvergütungsverordnung). The compensation reforms of CRD 4, including any guidelines issued by the EBA to further implement them, could put us at a disadvantage to our competitors in attracting and retaining talented employees, especially compared to those outside the European Union that are not subject to these caps and other constraints.

Following the financial crisis, bank levies have been introduced in some countries including, among others, Germany and the United Kingdom. We accrued €342 million for bank levies in 2014, €653 million in 2015 and €771 million in 2016. Also, we are required to contribute substantially to the Single Resolution Fund (“SRF”) under the SRM (which is intended to reach a target level of 1 % of insured deposits of all banks in member states participating in the SRM by the end of 2023) and the statutory deposit guarantee and investor compensation schemes under the recast European Union directive on deposit guarantee schemes (“DGS Directive”) and the European Union directive on investor compensation schemes. The DGS Directive defines a 0.8 % target level of prefunding by 2024 (similar to resolution funds), which has significantly increased the costs of the statutory deposit protection scheme. In addition, in this context, on November 24, 2015, the European Commission proposed a regulation to establish a European Deposit Insurance Scheme, or “EDIS” for bank deposits of all credit institutions that are members of any of the current national statutory deposit guarantee schemes of member states participating in the banking union. While the total impact of these future levies cannot currently be quantified, they may have a material adverse effect on our business, financial condition and results of operations in future periods.

Separately, on January 22, 2013, the Council of the European Union adopted a decision authorizing eleven EU member states (Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain) to proceed with the introduction of a financial transaction tax under the European Union’s “enhanced cooperation procedure”. The European Commission on February 14, 2013 adopted a draft directive for the implementation of the financial transaction tax. Since then, the introduction of the financial transaction tax is subject to ongoing controversial discussions at the European Union level with the result that the final scope, design and entry into force of the financial transaction tax remain uncertain. Estonia is no longer participating. Depending on the final details, the proposed financial transaction tax could result in compliance costs as well as market consequences and have a materially adverse effect on our profits and business. Different forms of national financial transaction taxes have already been implemented in a number of European jurisdictions, including France and Italy.

**Adverse market conditions, asset price deteriorations, volatility and cautious investor sentiment have affected and may in the future materially and adversely affect our revenues and profits, particularly in our investment banking, brokerage and other commission- and fee-based businesses. As a result, we have in the past incurred and may in the future incur significant losses from our trading and investment activities.**

As a global investment bank, we have significant exposure to the financial markets and are more at risk from adverse developments in the financial markets than are institutions engaged predominantly in traditional banking activities. Sustained market declines have in the past caused and can in the future cause our revenues to decline, and, if we are unable to reduce our expenses at the same pace, can cause our profitability to erode or cause us to show material losses. Volatility can also adversely affect us, by causing the value of financial assets we hold to decline or the expense of hedging our risks to rise. Reduced customer activity can also lead to lower revenues in our “flow” business.

Specifically, our investment banking revenues, in the form of financial advisory and underwriting fees, directly relate to the number and size of the transactions in which we participate and are susceptible to adverse effects from sustained market downturns. These fees and other income are generally linked to the value of the underlying transactions and therefore can decline with asset values. In addition, periods of market decline and uncertainty tend to dampen client

appetite for market and credit risk, a critical driver of transaction volumes and investment banking revenues, especially transactions with higher margins. In recent and other times in the past, decreased client appetite for risk has led to lower levels of activity and lower levels of profitability in our Corporate & Investment Banking corporate division. Our revenues and profitability could sustain material adverse effects from a significant reduction in the number or size of debt and equity offerings and merger and acquisition transactions.

Market downturns also have led and may in the future lead to declines in the volume of transactions that we execute for our clients and, therefore, to declines in our noninterest income. In addition, because the fees that we charge for managing our clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of our clients' portfolios or increases the amount of withdrawals reduces the revenues we receive from our asset management and private banking businesses. Even in the absence of a market downturn, below-market or negative performance by our investment funds may result in increased withdrawals and reduced inflows, which would reduce the revenue we receive from our asset management business. While our clients would be responsible for losses we incur in taking positions for their accounts, we may be exposed to additional credit risk as a result of their need to cover the losses where we do not hold adequate collateral or cannot realize it. Our business may also suffer if our clients lose money and we lose the confidence of clients in our products and services.

In addition, the revenues and profits we derive from many of our trading and investment positions and our transactions in connection with them can be directly and negatively impacted by market prices, which have been volatile in recent years. In each of the product and business lines in which we enter into these trading and investment positions, part of our business entails making assessments about the financial markets and trends in them. When we own assets, market price declines can expose us to losses. Many of the more sophisticated transactions of our Global Markets corporate division are designed to profit from price movements and differences among prices. If prices move in a way we have not anticipated, we may experience losses. Also, when markets are volatile, the assessments we have made may prove to lead to lower revenues or profits, or may lead to losses, on the related transactions and positions. In addition, we commit capital and take market risk to facilitate certain capital markets transactions; doing so can result in losses as well as income volatility. Such losses may especially occur on assets we hold for which there are not very liquid markets initially. Assets that are not traded on stock exchanges or other public trading markets, such as derivatives contracts between banks, may have values that we calculate using models other than publicly-quoted prices. Monitoring the deterioration of prices of assets like these is difficult and could lead to losses we did not anticipate. We can also be adversely affected if general perceptions of risk cause uncertain investors to remain on the sidelines of the market, curtailing their activity and in turn reducing the levels of activity in those of our businesses dependent on transaction flow.

We announced the next phase of our strategy in April 2015, gave further details on it in October 2015 and announced an update in March 2017. If we are unable to implement our strategic plans successfully, we may be unable to achieve our financial objectives, or we may incur losses or low profitability or erosions of our capital base, and our financial condition, results of operations and share price may be materially and adversely affected. We announced the next phase of our strategy in April 2015, gave further details on it in October 2015 and announced an update in March 2017. Our plans included becoming simpler and more efficient by focusing on the markets, products and clients where we are better positioned to succeed, becoming less risky by modernizing our technology and by withdrawing from higher-risk client relationships, becoming better capitalized and running the Bank in a more disciplined way. In October 2015 we announced specific execution measures for each business division and updated our financial targets to highlight the financial objectives of our strategy. In March 2017, we announced an update that includes a number of new steps to further strengthen the Bank and place it in a better position to pursue growth opportunities, including a €8 billion capital raise, the reorganization of our business into three distinct units, the combination of Postbank's and PCB's German business, the establishment of a cost reduction plan as described below, and an update to the Group's targets. The details of our strategy are set forth in Item 4: "Information on the Company – Business Overview – Our Business Strategy."

Our strategy's goals are subject to various internal and external factors including market, regulatory, economic and political uncertainties, and to limitations relating to our operating model. These could negatively impact or prevent the implementation of our strategic goals or the realization of their anticipated benefits. Economic uncertainties such as the recurrence of extreme turbulence in the markets; weakness in global, regional and national economic conditions; the

continuation of the low interest rate environment; increased competition for business; and political instability, especially in Europe, may impact our ability to achieve our strategic goals. Regulatory changes could also adversely impact our ability to achieve our strategic aims. In particular, regulators could demand changes to our business model or organization that could reduce our profitability, or we may be forced to make changes that reduce our profitability in an effort to remain compliant with law and regulation. We are also involved in numerous litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside of Germany, especially in the U.S. Such matters are subject to many uncertainties. We expect the litigation environment to continue to be challenging. If litigation and regulatory matters continue to occur at the same rate and magnitude as in recent years or if we are subject to sustained market speculation about our potential settlement of such matters, we may not be able to achieve our strategic aspirations.

In particular, macroeconomic risks and the risks relating to regulatory changes and our legal proceedings may impact our ability to meet our financial and capital targets. As financial targets, we are aiming to achieve a post-tax return on tangible equity of approximately 10 %, assuming a normalized operating environment, in addition to the cost-related targets and net revenues expectations referred to below. Our capital targets comprise a fully loaded Common Equity Tier 1 capital ratio comfortably above 13.0 %, and a leverage ratio of 4.5 % over time. Furthermore, we intend to target a competitive dividend payout ratio for the financial year 2018 and thereafter. Our strategy is based on an ambitious financial plan with, we believe, some buffer for downside scenarios and contingencies. However, the base case scenario for our financial and capital plan includes revenue growth estimates which are dependent on positive macroeconomic developments. Stagnation or a downturn in the macroeconomic environment could significantly impact our ability to generate the revenue growth necessary to achieve these strategic financial and capital targets. Furthermore, even if we are able to grow our revenues in accordance with our strategic plans, the materialization of any of the regulatory changes or the costs for us – in terms of the outcomes or necessary changes to our businesses – of the litigation and regulatory matters mentioned above, including market speculation about our potential settlement of them, or any other unforeseen risk, could adversely impact our net income and thereby cause us to fall short of our strategic financial and capital targets.

Our capital targets are further dependent on our ability to reduce the size of our balance sheet in accordance with our strategy. We plan disposals of a number of smaller businesses with identified risk-weighted assets (RWAs) of approximately € 10 billion and leverage exposure of approximately € 30 billion, the majority of which are expected to take place over the next 18 months. We also plan for CIB to separately manage identified legacy asset portfolios with approximately € 20 billion of RWA and approximately € 60 billion leverage exposure, with a target to reduce them to approximately € 12 billion of RWA and approximately € 30 billion leverage exposure, respectively, by 2020. Difficult market conditions or regulatory uncertainties may prevent us from being able to dispose of assets at all, or at prices we would consider to be reasonable, thereby causing us either to sell these assets for losses (or losses that are higher than expected) or hold these assets for a longer period of time than desired or planned. If we cannot reduce our RWAs according to plan, we may not be able to achieve the capital targets set out under our strategy.

Our strategy's financial plan also includes substantial cost reduction targets, which we plan to achieve through efficiency gains from implementation of various initiatives. We aim to reduce our adjusted costs to approximately € 22 billion by 2018 and approximately € 21 billion by 2021, including the impact of retaining Postbank's adjusted costs (€ 2.7 billion in 2016). (We define 'adjusted costs' as noninterest expenses excluding impairment of goodwill and other intangible assets, litigation and restructuring and severance. In 2016 and prior years, we also reported adjusted costs, which in addition excluded policyholder benefits and claims arising from Abbey Life Assurance, which was sold at the end of 2016.) In respect of our reorganized Corporate & Investment Bank division, we expect efficiencies from the combination of the current CIB with GM to result in a reduction of adjusted costs by approximately € 0.7 billion by 2018. In respect of our reorganized Private & Commercial Bank division, we estimate the planned restructuring to produce approximately € 0.9 billion of cost savings by 2022, and are targeting a cost-income ratio of below 65 % following the completion of its restructuring. Our planned exit from certain businesses, offboarding of certain clients and disposals of certain assets may entail higher costs or take more time than anticipated and thereby impede us from achieving the cost reductions we have targeted as scheduled or at all. Furthermore, additional costs could arise from any number of anticipated or unanticipated developments, such as costs relating to compliance with additional regulatory requirements and increased regulatory charges. In order to achieve our strategic goals, we expect to incur restructuring and



severance costs of approximately €2 billion over the period 2017 to 2021, approximately 70 % of which is expected to be incurred within the next two years. In respect of our reorganized Private & Commercial Bank division, we estimate that restructuring and severance costs for the planned restructuring measures will be approximately € 1.0 billion by 2022. Our estimated restructuring and severance charges could ultimately run higher than anticipated, preventing us from achieving our adjusted costs target and the related divisional targets.

In the near term, in relation to our reorganized business divisions Corporate & Investment Bank, Private & Commercial Bank and Deutsche Asset Management, we have communicated our expectations for 2017 in respect of the directional development of our net revenues in the main businesses within each of those divisions.

Our ability to implement our strategy and meet its stated targets, both in the near term and thereafter, is based on a number of additional key assumptions relating to our business and operating model:

- We assume that we will be able to overcome significant challenges arising from our business model. We continue to rely on our trading and markets businesses as a significant source of profit. However, these businesses, in particular our fixed income securities franchise, have continued to face an extremely challenging environment, caused by uncertainty about the duration of the low interest rate environment, central bank intervention in markets and the gradual cessation thereof and overall sluggish economic growth. We are substantially dependent on the performance of these businesses, and this dependency exceeds that of many of our competitors. Many of our businesses dependent on client flow are increasingly challenged in uncertain times. In addition, some of our businesses may be resistant to change, posing risks to the implementation of changes to our business model. Should we be unable to implement this new business model successfully, or should the new business model fail to be profitable, we may not be able to achieve some or all of our strategic goals.
- We assume a continuation of the positive inflows and the return of many clients that we have seen in the first quarter of 2017 following the significant asset outflows and loss of clients in the third quarter of 2016 resulting from negative market perceptions concerning Deutsche Bank around our negotiations with the U.S. Department of Justice. Nevertheless, overall levels remain below those seen before impact of the negative market perceptions, and a renewed negative market focus on Deutsche Bank could end or reverse these positive inflows.
- We assume that we will be able to continue to attract and retain highly qualified staff. Given the operating environment in 2016, the Management Board decided to cancel the discretionary bonus element of the compensation for the Bank's senior employees. Across all our businesses, we need to attract and retain highly qualified staff. The decision to cancel the discretionary bonus element for 2016 may adversely affect our ability to succeed in attracting or retaining highly qualified employees. If our efforts to attract and/or retain employees should fail, this may have a material adverse effect on our ability to implement our strategy.
- We assume that we will be able to significantly upgrade and reduce the complexity of our infrastructure. We currently operate a highly complex infrastructure, which can compromise the quality of the overall control environment. Establishing a more efficient bank with a strong control environment depends on successfully streamlining and simplifying the IT landscape as well as cultural change. Furthermore, capital and execution plans require robust monitoring and tracking that is dependent on accurate, timely and relevant data. We have undertaken initiatives designed to address existing challenges in our IT and data architecture as well as in our data aggregation capabilities. Potential delays and challenges to implementing these initiatives would impact our ability to achieve efficiency improvements and enhance the control environment, thereby affecting our ability to implement our strategy successfully.
- We assume that we will be able to improve our internal control environment. A robust and effective internal control environment is necessary to ensure that we conduct our business in compliance with the laws and regulations applicable to us. We are undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen our controls and manage non-financial risks, in particular as a response to the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which the Bank has recently been subject. However, we may be unable to complete these initiatives as quickly as we intend or as our regulators demand, and our efforts may be insufficient to prevent all future deficiencies in our control environment or to result in fewer litigations or regulatory and enforcement investigations and proceedings in the future. Furthermore, implementation of enhanced controls may result in higher than expected costs of regulatory compliance that could offset efficiency gains. Any of these factors could affect our ability to implement our strategy in a timely manner or at all.

- We assume that the buffers we have included in our financial targets will be sufficient to reflect a plausible range of downside scenarios and that absent more substantial dislocations we will be able to achieve the targets. However, the buffers that we have provided for in order to achieve these goals may prove to be insufficient in a downside scenario. Should this risk materialize as a result of the macroeconomic, regulatory, litigation or other factors discussed above, we may fail to meet our strategic targets.
- Our plan for 2017 is based on assumed foreign exchange rates of EUR/USD 1.01 and EUR/GBP 0.88.

If we fail to implement our strategic initiatives in whole or in part or should the initiatives that are implemented fail to produce the anticipated benefits, or should the costs we incur to implement our initiatives exceed the amounts anticipated, or should we fail to achieve the publicly communicated targets we have set for implementation of these initiatives, we may fail to achieve our financial objectives, or incur losses or low profitability or erosions of our capital base, and our financial condition, results of operations and share price may be materially and adversely affected.

As part of our March 2017 updates to our strategy, we announced our intention to reconfigure our Global Markets, Corporate Finance and Transaction Banking businesses into a single, corporate client-led Corporate & Investment Banking division to position ourselves for growth through increased cross-selling opportunities for Deutsche Bank's higher return corporate clients. Clients may choose not to expand their businesses or portfolios with us, thereby negatively influencing our ability to capitalize on these opportunities.

As part of our strategic initiatives announced in March 2017, we intend to reconfigure our Global Markets, Corporate Finance and Transaction Banking businesses into a single, corporate client-led Corporate & Investment Banking division. The combination is intended to promote a more seamless and aligned offering of products to clients, meaningfully enhance cross selling opportunities, ensure better client rationalization with resources being focused on higher return relationships, and achieve greater cost and asset efficiencies to drive improved returns. The franchise is intended to be primarily a corporate-client focused business, while retaining a focused institutional client business. Our corporate clients' product needs, business plans and general willingness to engage into a deeper banking relationship with us will ultimately determine whether we are successful in capturing this anticipated spending. Should we be unable to deliver on the cross-selling efforts due to either lack of client demand, product availability or quality or delivery, there is a risk that this could negatively influence our ability to capitalize on these opportunities. The aforementioned macroeconomic, geo-political and regulatory risks also pose a challenge to the operating models of our Corporate & Investment Bank clients, and our ability to capture the incremental opportunity. In addition, in connection with the formation of the new Corporate & Investment Bank division, we will be required by the relevant accounting rules to allocate the businesses being reconfigured into one or more cash generating units (CGU) within the new division. Depending on the outcome of this accounting determination, some or all of the goodwill in the existing Corporate & Investment Banking CGU, amounting to EUR 532 million as of December 31, 2016, may be offset by the shortfall in recoverable amount of the current Global Markets CGU such that this goodwill would be written off on consummation of the reconfiguration. Any such writedown would have an equivalent adverse effect on the statement of income of the Group for the period in which it occurs.

As part of our March 2017 updates to our strategy, we announced our intention to retain and combine Deutsche Postbank AG (together with its subsidiaries, "Postbank") with our existing retail and commercial operations, after earlier having announced our intention to dispose of Postbank. We may face difficulties integrating Postbank into the Group following the completion of operational separability from the Group. Consequently, the cost savings and other benefits we expect to realize may only come at a higher cost than anticipated, or may not be realized at all.

As part of our strategy, we initially announced our intention to dispose of Postbank. However, we have since decided to retain Postbank and combine it with our existing German retail and commercial operations over the next five years. This shift from the prior strategy reflects a number of evolving factors, including our belief that growth in small and mid-sized German corporate clients and private banking clients will continue, changes in the expected regulatory requirements and market expectations for leverage ratios of European banks, the positive impact on the business model of retaining a large and stable business with a substantial deposit base, our revised view on the possible degree of integration of Postbank and the resulting scale and incremental synergies, and future growth opportunities we have identified, reflecting a potential improvement in the macroeconomic outlook and the changing dynamics in private and commercial banking, the growing likelihood of eventual industry consolidation in German retail banking and the contin-

ued positive opportunities presented by digitization. We expect that the integration of Postbank will create Germany's largest private and commercial bank. This integration is intended to achieve cost efficiencies by more readily permitting rationalization of central functions, improved efficiency across technology platforms and infrastructure and more efficient investment in areas including digitization, distribution channels and regulatory change.

In furtherance of the earlier plan to deconsolidate Postbank, we engaged in a project to separate Postbank operationally from the Deutsche Bank Group. This process was completed at the end of the second quarter of 2016. We estimate that the total cost of the planned restructuring measures to integrate Postbank into the Group will be € 1.9 billion, with restructuring and severance costs estimated to be approximately € 1.0 billion by 2022 and the remainder related to IT and other costs, and we are targeting benefits of € 0.9 billion in annual cost savings by 2022. By the end of 2018 we expect to finalize the existing transformation programs which we anticipate will result in cost reductions of € 0.4 billion. Unforeseen difficulties may emerge in connection with the integration efforts, including potential difficulties due to differing IT systems, difficulties in integrating personnel, the commitment of management resources in connection with the integration process and the potential loss of key personnel. The benefits, cost and timeframe of the integration could be adversely affected by any of these factors, as well as a variety of factors beyond our and Postbank's control, such as negative market developments. Should any of these risks materialize, the cost savings and other benefits we expect to realize from the integration may only come at a higher cost than anticipated, or may not be realized within the period we anticipate or to the extent we plan, or at all.

As part of our March 2017 updates to our strategy, we announced our intention to create an operationally segregated Asset Management division through a partial initial public offer (IPO). If economic or market conditions, or the financial position, results of operations and business prospects of Deutsche AM, are unfavorable, or if any required regulatory approvals are not obtained or would be available only on disadvantageous terms, we may not be able to sell a stake in Deutsche AM at a favorable price or timing, or at all. Additionally, we may not be able to capitalize on the expected benefits that we believe an operationally segregated Deutsche AM can offer.

One of the three incremental strategic initiatives we announced in March 2017 is our intention to create a segregated Asset Management business and offer a portion of it in an initial public offer (IPO). We believe that the growth potential of Deutsche Asset Management (Deutsche AM) has been constrained by its full ownership by the Bank, with reputational issues and wider market concerns around Deutsche Bank's capital strength in late 2016 affecting Deutsche AM. Additionally, resourcing limitations, as Deutsche Bank has pursued its restructuring efforts, further constrained Deutsche AM. We therefore believe that Deutsche AM remains undervalued in the current corporate structure. Accordingly, we intend to sell a minority stake in Deutsche AM and provide the division with more flexibility to enhance its ability to pursue growth opportunities globally and gain market share. We intend to complete the IPO over the next 24 months, subject to market conditions.

However, we may have difficulties selling a stake in Deutsche AM at a favorable price or timing, or at all. Our ability to sell a stake in Deutsche AM will, among other things, depend on economic, regulatory and market conditions, particularly those relevant to the asset management business in Germany. Our ability to sell a stake in Deutsche AM will also depend on the financial position, results of operations and business prospects of Deutsche AM. Furthermore, the steps necessary to implement an IPO, even of a minority stake, may require the approval of relevant regulators in the European Union, the United States and elsewhere. If economic, regulatory or market conditions, or the financial position, results of operations and business prospects of Deutsche AM, are unfavorable, or if regulatory approvals are not obtained or would be available only on disadvantageous terms, we may not be able to sell a stake in Deutsche AM at a favorable price or timing, or at all.

Additionally, we may not be able to capitalize upon the expected benefits that we believe a more operationally segregated Deutsche AM has to offer. Furthermore, an IPO of Deutsche AM may not entirely mitigate the market concerns about Deutsche Bank that impacted Deutsche AM's business in 2016.



We may have difficulties selling companies, businesses or assets at favorable prices or at all and may experience material losses from these assets and other investments irrespective of market developments.

As part of our strategy, we are seeking to continue to reduce our assets, including in particular those of our Global Markets corporate division (which will become part of the new CIB corporate division), which include assets transferred to such division at the beginning of 2017 upon the closing of our Non-Core Operations Unit. We are planning to dispose of businesses with identified risk-weighted assets of approximately € 10 billion and leverage exposure of approximately € 30 billion, the majority of which we plan to complete over the next 18 months. We also plan for CIB to separately manage identified legacy asset portfolios with approximately € 20 billion of RWA and approximately € 60 billion leverage exposure, with a target to reduce them to approximately € 12 billion of RWA and approximately € 30 billion leverage exposure, respectively, by 2020. We also have other assets that are not part of our core business, and we may seek to sell them or otherwise reduce the amount and the risk of our exposure to them.

These reductions are part of our strategy to simplify and focus our business and to meet or exceed the new capital and leverage requirements by reducing risk-weighted assets and leverage exposures and thereby improving our capital and leverage ratios, as well as to help us meet our return on tangible equity target. This strategy may prove difficult in the current and future market environment as many of our competitors are also seeking to dispose of assets to improve their capital and leverage ratios and returns on equity. We have already sold a substantial portion of our non-core assets, and our remaining non-core assets may be particularly difficult for us to sell as quickly as we have expected at prices we deem acceptable. Also, we are often a passive investor in such investments and as such we are reliant on the actions of third parties. Where we sell companies or businesses, we may remain exposed to certain of their losses or risks under the terms of the sale contracts, and the process of separating and selling such companies or businesses may give rise to operating risks or other losses. Unfavorable business or market conditions may make it difficult for us to sell companies, businesses or assets at favorable prices, or may preclude a sale altogether.

If we cannot reduce our assets according to plan, we may not be able to achieve the capital targets set out under our strategy.

A robust and effective internal control environment is necessary to ensure that we conduct our business in compliance with the laws and regulations applicable to us. We have identified the need to strengthen our internal control environment and have embarked on initiatives to accomplish this. If these initiatives are not successful or are delayed, our reputation, regulatory position and financial condition may be materially adversely affected, and our ability to achieve our strategic ambitions may be impaired.

Our businesses are highly dependent on our ability to maintain a robust and effective internal control environment. This is needed for the Bank to process and monitor, on a daily basis, a wide variety of transactions – many of which are highly complex and occur at high speeds, volumes and frequencies, across numerous and diverse markets and currencies. However, the infrastructure (comprising people, policies and procedures, controls testing and IT systems) that underlies our internal control environment sometimes is not sufficiently comprehensive or well integrated across the Bank. In particular, the infrastructure requires, especially in the case of our IT infrastructure, the use of numerous platforms that are fragmented across the Bank. Therefore our business processes often require manual procedures and actions that make information available for management more prone to human error than would be the case with more seamlessly integrated systems. These processes span processing and settling transactions, valuation of assets, identifying risks, escalating reviews and mitigation and remediating actions, as well as regulatory reporting and other data processing and compliance activities. As a result, it is often difficult and labor intensive for us to obtain information of a consistently high quality and on a timely basis to manage our risk levels and to comply with regulatory reporting and other compliance requirements. Furthermore, it takes intensive efforts to identify, when possible, inappropriate behavior by our staff and attempts by third parties to misuse our services as a conduit for prohibited activities, including those relating to anti-financial crime laws and regulation.

Against this backdrop, our regulators, our Management Board and our Group Audit function have increasingly and more intensively focused on our internal controls through numerous formal reviews and audits of its operations. These reviews and audits have identified various areas for improvement relating to certain elements of our control environment. These include the infrastructure relating to transaction capturing and recognition, classification of assets, asset valuation frameworks and data and process consistency. They also include regulatory reporting, anti-money laundering

(AML), “know your customer” and other internal processes that are aimed at preventing use of our products and services for the purpose of committing or concealing financial crime. As one example, our recent settlement with the UK Financial Conduct Authority (FCA) relating to trading activities involving our Russian operations stemmed in part from the FCA’s review of the AML control functions in our investment bank.

In order to improve in the areas discussed above, we are undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen our controls and manage non-financial risks. We believe that these initiatives will better enable us to avoid the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which we have recently been subject. In particular, we are making efforts to reduce the complexity of our business and to integrate and automate processes and business line controls. We have also exited certain businesses, for example in Russia, selectively off-boarded a number of clients, worked to strengthen our compliance culture and control functions and increased the size of our Group Audit function. However, we may be unable to complete these initiatives as quickly as we intend or as our regulators demand, and our efforts may be insufficient to prevent all future deficiencies in our control environment or to result in fewer litigations or regulatory and enforcement investigations and proceedings in the future. If we are unable to significantly improve our control environment in a timely manner, some of our regulators may require us to reduce our exposure to certain kinds of products or businesses, counterparties or regions, which could, depending on the extent of such requirement, significantly challenge our ability to operate profitably under our current business model.

Regulators can also impose capital surcharges, requiring capital buffers in addition to those directly required under the regulatory capital rules applicable to us, to reflect the additional risks posed by deficiencies in our control environment. In extreme cases, regulators can suspend our permission to operate in the businesses and regions within their jurisdictions. Furthermore, implementation of enhanced controls may result in higher than expected costs of regulatory compliance that could offset or exceed efficiency gains. Any of these factors could affect our ability to implement our strategy in a timely manner or at all.

**We operate in a highly and increasingly regulated and litigious environment, potentially exposing us to liability and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm.**

The financial services industry is among the most highly regulated industries. Our operations throughout the world are regulated and supervised by the central banks and regulatory authorities in the jurisdictions in which we operate. In recent years, regulation and supervision in a number of areas has increased, and regulators, law enforcement authorities, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations or enforcement actions. This trend has accelerated markedly as a result of the global financial crisis and the European sovereign debt crisis. There has been a steep escalation in the severity of the terms which regulators and law enforcement authorities have required to settle legal and regulatory proceedings against financial institutions, with recent settlements including unprecedented monetary penalties as well as criminal sanctions. As a result, we may continue to be subject to increasing levels of liability and regulatory sanctions, and may be required to make greater expenditures and devote additional resources to addressing these liabilities and sanctions. Regulatory sanctions may include status changes to local licenses or orders to discontinue certain business practices.

We and our subsidiaries are involved in various litigation proceedings, including civil class action lawsuits, arbitration proceedings and other disputes with third parties, as well as regulatory proceedings and investigations by both civil and criminal authorities in jurisdictions around the world. We expect that the costs to us arising from the resolution of litigation, enforcement and similar matters pending against us to continue to be significant in the near to medium term and to adversely affect our business, financial condition and results of operations. Litigation and regulatory matters are subject to many uncertainties, and the outcome of individual matters is not predictable with assurance. We may settle litigation or regulatory proceedings prior to a final judgment or determination of liability. We may do so for a number of reasons, including to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when we believe we have valid defenses to liability. We may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, we may, for similar reasons, reimburse counterparties for their losses even in situations where we do not believe that we

are legally compelled to do so. The financial impact of legal risks might be considerable but may be difficult or impossible to estimate and to quantify, so that amounts eventually paid may exceed the amount of provisions made or contingent liabilities assessed for such risks.

We are under continuous examination by tax authorities in the jurisdictions in which we operate. Tax laws are increasingly complex. In the current political and regulatory environment, tax administrations' and courts' interpretation of tax laws and regulations and their application are evolving, and scrutiny by tax authorities has become increasingly intense. Wide ranging changes in the principles of international taxation emanating from the OECD's Base Erosion and Profit Shifting agenda are generating significant uncertainties for us and our subsidiaries and may result in an increase in instances of bilateral tax disputes going forward, as member states may take different approaches in transposing these requirements into national law. In addition, tax administrations have focused on the eligibility of taxpayers for relief from or reduced withholding taxes on dividends in connection with certain cross-border lending or derivative transactions as well as reduced withholding taxes on other payments (with Germany recently reforming the German Investment Tax Act (*Investmentsteuergesetz*) in this area), thus causing uncertainties in the application of existing withholding tax principles. As a result, the cost to us arising from the conclusion and resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes, as well as from rapidly changing and increasingly complex and uncertain tax laws and principles, may increase and may adversely affect our business, financial condition and results of operation.

Actions currently pending against us or our current or former employees may not only result in judgments, settlements, fines or penalties, but may also cause substantial reputational harm to us. The risk of damage to our reputation arising from such proceedings is also difficult or impossible to quantify.

Regulators have increasingly sought admissions of wrongdoing in connection with settlement of matters brought by them. This could lead to increased exposure in subsequent civil litigation or in consequences under so-called "bad actor" laws, in which persons or entities determined to have committed offenses under some laws can be subject to limitations on business activities under other laws, as well as adverse reputational consequences. In addition, the U.S. Department of Justice ("DOJ") conditions the granting of cooperation credit in civil and criminal investigations of corporate wrongdoing on the company involved having provided to investigators all relevant facts relating to the individuals responsible for the alleged misconduct. This policy may result in increased fines and penalties if the DOJ determines that we have not provided sufficient information about applicable individuals in connection with an investigation. Other governmental authorities could adopt similar policies.

In addition, the financial impact of legal risks arising out of matters similar to some of those we face have been very large for a number of participants in the financial services industry, with fines and settlement payments greatly exceeding what market participants may have expected and, as noted above, escalating steeply over the last few years to unprecedented levels. The experience of others, including settlement terms, in similar cases is among the factors we take into consideration in determining the level of provisions we maintain in respect of these legal risks. Recent developments in cases involving other financial institutions have led to greater uncertainty as to the predictability of outcomes and could lead us to add to our provisions. Moreover, the costs of our investigations and defenses relating to these matters are themselves substantial. Further uncertainty may arise as a result of a lack of coordination among regulators from different jurisdictions or among regulators with varying competencies in a single jurisdiction, which may make it difficult for us to reach concurrent settlements with each regulator. Should we be subject to financial impacts arising out of litigation and regulatory matters to which we are subject in excess of those we have calculated in accordance with our expectations and the relevant accounting rules and contrary to our publicly communicated expectation that 2015 and 2016 were peak years for the financial impact of litigation and regulatory matters, our provisions in respect of such risks may prove to be materially insufficient to cover these impacts. This could have a material adverse effect on our results of operations, financial condition or reputation as well as on our ability to maintain capital, leverage and liquidity ratios at levels expected by market participants and our regulators. In such an event, we could find it necessary to reduce our risk-weighted assets (including on terms disadvantageous to us) or substantially cut costs to improve these ratios, in an amount corresponding to the adverse effects of the provisioning shortfall.

Regulatory and law enforcement agencies globally are currently investigating us in connection with alleged misconduct relating to manipulation of foreign exchange rates. The extent of our financial exposure to these matters could be material, and our reputation may suffer material harm as a result.

We have received requests for information from certain regulatory and law enforcement agencies globally who are investigating trading, and various other aspects, of the foreign exchange market. We are cooperating with these investigations. The investigations underway have the potential to result in the imposition of significant financial penalties and other consequences for us. Relatedly, we have conducted our own internal global review of foreign exchange trading and other aspects of our foreign exchange business.

The CFTC Division of Enforcement has issued a letter notifying us that the CFTC has closed its foreign exchange investigation of us, and the DOJ, Criminal Division, Fraud Section, has issued a letter notifying Deutsche Bank that the DOJ has closed its criminal inquiry concerning possible violations of federal criminal law in connection with the foreign exchange markets. Both letters noted that the respective authorities may reopen their investigations in the future. Further, such letters have no binding impact on other regulatory and law enforcement agency investigations regarding our foreign exchange trading and practices, which remain pending. On December 7, 2016, it was announced that we have reached an agreement with CADE, the Brazilian antitrust enforcement agency, to settle an investigation into conduct in the foreign exchange market by a former Brazil-based Deutsche Bank trader. This has had the effect of bringing to a close CADE's administrative process as far as it relates to us. Investigations conducted by certain other regulatory and law enforcement agencies are ongoing and we are cooperating with these investigations.

We have also been named as a defendant in multiple putative class actions brought in the U.S. District Court for the Southern District of New York alleging antitrust and U.S. Commodity Exchange Act claims relating to the alleged manipulation of foreign exchange rates. There are now four actions pending. The first pending action is a consolidated action brought on behalf of putative classes of over-the-counter traders and central-exchange traders and alleges illegal agreements to restrain competition with respect to and to manipulate both benchmark rates and spot rates, particularly the spreads quoted on those spot rates; the complaint further alleges that those supposed conspiracies, in turn, resulted in artificial prices on centralized exchanges for foreign exchange futures and options. Our motion to dismiss the consolidated action was granted in part and denied in part on September 20, 2016. A second action tracks the allegations in the consolidated action and asserts that such purported conduct gave rise to, and resulted in a breach of, defendants' fiduciary duties under the U.S. Employment Retirement Income Security Act of 1974 ("ERISA"). The third putative class action alleges that we rejected FX orders placed over electronic trading platforms through the application of a function referred to as "Last Look" and that these orders were later filled at prices less favorable to putative class members. Plaintiff has asserted claims for breach of contract, quasi-contractual claims, and claims under New York statutory law. The fourth putative class action tracks the allegations in the consolidated action and asserts that such purported conduct injured "indirect purchasers" of FX instruments. These claims are brought pursuant to the Sherman Act, New York's Donnelly Act, California's Cartwright Act and California's Unfair Competition Law.

On August 24, 2016, the Court granted defendants' motion to dismiss the ERISA action. Plaintiffs in that action filed an appellate brief in the United States Court of Appeals for the Second Circuit on January 9, 2017. On February 14, 2017, the court granted in part and denied in part our motion to dismiss the Last Look action. We moved to dismiss the indirect purchasers action on January 24, 2017. Discovery has commenced in the consolidated and Last Look actions. Discovery has not yet commenced in the ERISA and indirect purchasers actions.

We have also been named as a defendant in two Canadian class proceedings brought in the provinces of Ontario and Quebec. Filed on September 10, 2015, these class actions assert factual allegations similar to those made in the consolidated action in the United States and seek damages pursuant to the Canadian Competition Act as well as other causes of action.

Many of these matters are not advanced enough to estimate their outcome or any fines that may be levied by governmental bodies or damages that may be incurred from private litigation. A number of other financial institutions are also currently being investigated. Any settlements by these institutions may adversely affect the outcomes for other financial institutions, such as us, in similar actions, especially as large settlements may be used as the basis or template for other settlements. As a result, these matters may expose us to substantial monetary damages and defense costs in

addition to criminal and civil penalties, and they could accordingly have a material adverse effect on our results of operations, financial condition or reputation.

We are currently the subject of industry-wide investigations by regulatory and law enforcement agencies relating to interbank offered rates, as well as civil actions. Due to a number of uncertainties, including those related to the high profile of the matters and other banks' settlement negotiations, the eventual outcome of these matters is unpredictable, and may materially and adversely affect our results of operations, financial condition and reputation.

We have received requests for information from various regulatory and law enforcement agencies, including various U.S. states attorneys general, in connection with industry-wide investigations concerning the setting of the London Interbank Offered Rate (LIBOR), Euro Interbank Offered Rate (EURIBOR), Tokyo Interbank Offered Rate (TIBOR) and other interbank offered rates. We are cooperating with these investigations. The investigations underway have the potential to result in the imposition of significant financial penalties and other consequences for the Bank.

As previously reported, we reached a settlement with the European Commission on December 4, 2013 as part of a collective settlement to resolve the European Commission's investigations in relation to anticompetitive conduct in the trading of Euro interest rate derivatives and Yen interest rate derivatives. Under the terms of the settlement agreement, we agreed to pay €725 million in total.

Also as previously reported, on April 23, 2015, we entered into separate settlements with the DOJ, the CFTC, the UK Financial Conduct Authority ("FCA"), and the New York State Department of Financial Services ("DFS") to resolve investigations into misconduct concerning the setting of LIBOR, EURIBOR, and TIBOR. Under the terms of these agreements, we agreed to pay penalties of U.S.\$ 2.175 billion to the DOJ, CFTC and DFS and GBP 226.8 million to the FCA. These fines have been paid in full, save for U.S.\$150 million that is payable to the DOJ, subject to court approval (currently scheduled for March 28, 2017), following the sentencing of DB Group Services (UK) Ltd. (an indirectly-held, wholly-owned subsidiary of ours) in connection with its guilty plea to one count of wire fraud. As part of the resolution with the DOJ, we entered into a Deferred Prosecution Agreement with a three year term pursuant to which we agreed (among other things) to the filing of an Information in the U.S. District Court for the District of Connecticut charging us with one count of wire fraud and one count of price fixing in violation of the Sherman Act.

Factual admissions we have made in connection with these settlements could make it difficult for us to defend against pending and future claims.

As reported above, we are subject to an inquiry by a working group of U.S. state attorneys general in relation to the setting of LIBOR, EURIBOR, and TIBOR. We continue to cooperate with the U.S. state attorneys generals' inquiry. Other investigations of us concerning the setting of various interbank offered rates remain ongoing, and we remain exposed to further action.

In addition, we are party to 47 civil actions concerning alleged manipulation relating to the setting of various Interbank Offered Rates. Most of the civil actions, including putative class actions, are pending in the U.S. District Court for the Southern District of New York (SDNY), against us and numerous other defendants. All but six of the civil actions were filed on behalf of parties who allege losses as a result of manipulation relating to the setting of U.S. dollar LIBOR. The six civil actions pending against us that do not relate to U.S. dollar LIBOR are also pending in the SDNY, and include two actions concerning Yen LIBOR and Euroyen TIBOR, one action concerning EURIBOR, one consolidated action concerning Pound Sterling (GBP) LIBOR, one action concerning Swiss franc (CHF) LIBOR, and one action concerning two Singapore Dollar (SGD) benchmark rates, the Singapore Interbank Offered Rate (SIBOR) and the Swap Offer Rate (SOR).

We cannot predict the effect on us of the interbank offered rates matters, which could include fines levied by government bodies, damages from private litigation for which we may be liable, legal and regulatory sanctions (including possible criminal sanctions) and other consequences.

This uncertainty is further exacerbated by several factors outside of our control, such as the high profile of these matters and the contours of other financial institutions' settlement negotiations. In addition, regulatory and law enforcement authorities may make assessments about the conduct of institutions in the industry as a whole, which may influence their actions with respect to us. Any fines, damages, legal or regulatory sanctions or other consequences may have a material adverse effect, beyond provisions taken, on our results of operations, financial condition or reputation.

[We have received inquiries from regulatory and law enforcement authorities, including requests for information and documents, pertaining to investigations of precious metals trading and related conduct. The investigations underway have the potential to result in the imposition of significant financial penalties and other consequences for us. We are also named as a defendant in several putative class action complaints in respect of precious metals trading and related conduct.](#)

We have received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to investigations of precious metals trading and related conduct. We are cooperating with these investigations and engaging with relevant authorities, as appropriate. The investigations underway have the potential to result in the imposition of significant financial penalties and other consequences for us. Relatedly, we have been conducting our own internal review of our historic participation in the precious metals benchmarks and other aspects of our precious metals trading and precious metals business.

In addition, we are a defendant in Canadian class action proceedings in the province of Ontario concerning gold and in the provinces of Ontario and Quebec concerning silver. Each of the proceedings seeks damages for alleged violations of the Canadian Competition Act and other causes of action. These complaints may result in material liability for us.

[We have investigated the circumstances around equity trades entered into by certain clients in Moscow and London and have advised regulators and law enforcement authorities in several jurisdictions about those trades. In the event that violations of law or regulation are found to have occurred, any resulting penalties against us may materially and adversely affect our results of operations, financial condition and reputation.](#)

We have investigated the circumstances around equity trades entered into by certain clients with us in Moscow and London that offset one another. The total volume of the transactions under review is significant. Our internal investigation of potential violations of law, regulation and policy and into the related internal control environment has concluded, and we are assessing the findings identified during the investigation; to date we have identified certain violations of our policies and deficiencies in our control environment. We have advised regulators and law enforcement authorities in several jurisdictions (including Germany, Russia, the UK and U.S.) of this investigation and have taken disciplinary measures with regards to certain individuals in this matter and will continue to do so with respect to others as warranted. On January 30 and 31, 2017, the New York State Department of Financial Services (DFS) and UK Financial Conduct Authority (FCA) announced settlements with the Bank related to their investigations into this matter. The settlements conclude the DFS and the FCA's investigations into the bank's anti-money laundering (AML) control function in its investment banking division, including in relation to the equity trading described above. Under the terms of the settlement agreement with the DFS, Deutsche Bank entered into a Consent Order, and agreed to pay civil monetary penalties of U.S.\$ 425 million and to engage an independent monitor to conduct a comprehensive review of its existing AML compliance programs that pertain to or affect activities conducted by or through DBTCA and our New York branch for a term of up to two years. Under the terms of the settlement agreement with the FCA, Deutsche Bank agreed to pay civil monetary penalties of approximately GBP 163 million. The settlement amounts were already materially reflected in existing litigation reserves. Deutsche Bank is cooperating with other regulators and law enforcement authorities (including the DOJ and the Federal Reserve), which have their own ongoing investigations into these securities trades. In the event that violations of law or regulation are found to have occurred, legal and regulatory sanctions in respect thereof may materially and adversely affect our results of operations, financial condition and reputation.



Regulatory and law enforcement agencies in the United States are investigating whether our historical processing of certain U.S. dollar payment orders for parties from countries subject to U.S. embargo laws complied with U.S. federal and state laws. While we have settled some matters, other investigations are still in progress and the eventual outcomes of these matters are unpredictable, and may continue materially and adversely to affect our results of operations, financial condition and reputation.

We have received requests for information from certain regulatory and law enforcement agencies concerning our historical processing of U.S. dollar payment orders through U.S. financial institutions for parties from countries subject to U.S. embargo laws. These agencies are investigating whether such processing complied with U.S. federal and state laws. On November 3, 2015, we entered into agreements with the New York State Department of Financial Services and the Federal Reserve Bank of New York to resolve their investigations of us. We paid the two agencies U.S.\$ 200 million and U.S.\$ 58 million, respectively, and agreed to terminate certain employees, not rehire certain former employees and install an independent monitor for one year. In addition, the Federal Reserve Bank of New York ordered certain remedial measures, specifically, the requirement to ensure an effective OFAC compliance program and an annual review of such program by an independent party until the Federal Reserve Bank of New York is satisfied as to its effectiveness. We continue to provide information to and otherwise cooperate with other investigating agencies (which include the DOJ). While it is too early to predict, the eventual outcomes of the investigations to which we are subject may materially and adversely affect our results of operations, financial condition and reputation.

We have been subject to contractual claims, litigation and governmental investigations in respect of our U.S. residential mortgage loan business that may materially and adversely affect our results of operations, financial condition or reputation.

From 2005 through 2008, as part of our U.S. residential mortgage loan business, we sold approximately U.S.\$ 84 billion of loans into private label securitizations and U.S.\$ 71 billion through whole loan sales. We have been, and may in the future be, presented with demands to repurchase loans from purchasers, investors and financial insurers based on alleged material breaches of representations and warranties or to indemnify such persons with respect to losses allegedly caused thereby. Our general practice is to process valid repurchase claims that are presented in compliance with contractual rights and applicable statutes of limitations. As of December 31, 2016, we have approximately U.S.\$ 847 million of mortgage repurchase demands outstanding and not subject to agreements to rescind (based on original principal balance of the loans). Against these outstanding demands, we have established provisions of U.S.\$ 173 million (€164 million) as of December 31, 2016 (for part of which we are indemnified). As with provisions generally, however, it is possible that the provisions we have established may ultimately be insufficient, either with respect to particular claims or with respect to the full set of claims that have been or may be presented. There are other potential mortgage repurchase demands that we anticipate may be made, but we cannot reliably estimate their timing or amount. As of December 31, 2016, we have completed repurchases, obtained agreements to rescind or otherwise settled claims on loans with an original principal balance of approximately U.S.\$ 8.8 billion. In connection with those repurchases, agreements and settlements, we have obtained releases for potential claims on approximately U.S.\$ 98.1 billion of loans sold by us as described above.

From 2005 through 2008, we or our affiliates have also acted as an underwriter of approximately U.S.\$ 105 billion of U.S. residential mortgage-backed securities (referred to as "RMBS") for third-party originators.

As is the case with a significant number of other participants in the mortgage securitizations market and as described in Note 30 "Provisions" to the consolidated financial statements, we have received subpoenas and requests for information from certain regulators and government entities concerning our activities regarding the origination, purchase, securitization, sale, valuation and/or trading of mortgage loans, RMBS, commercial mortgage-backed securities (CMBS), collateralized debt obligations (CDOs), other asset-backed securities and credit derivatives. We are cooperating fully in response to those subpoenas and requests for information. Some of these investigations are similar in nature to those that led to other financial institutions entering into settlements with members of the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force and paying significant penalties.

Discussions with the DOJ concerning a settlement of potential claims that the DOJ was considering bringing based on its investigation of our RMBS origination and securitization activities began with an initial demand of U.S.\$ 14 billion on September 12, 2016. On December 23, 2016, we announced that we reached a settlement-in-principle with the DOJ

to resolve potential claims related to our RMBS business conducted from 2005 to 2007. The settlement became final and was announced by the DOJ on January 17, 2017. Under the settlement, we paid a civil monetary penalty of U.S.\$ 3.1 billion and agreed to provide U.S.\$ 4.1 billion in consumer relief. Other investigations of us concerning the foregoing businesses remain ongoing, and we remain exposed to further action.

We also have numerous pending lawsuits against us or our affiliates as issuer, underwriter and/or trustee of RMBS. Such pending RMBS litigations are in various stages and we continue to defend these actions vigorously while seeking opportunities to achieve sensible out of court resolutions.

Legal and regulatory proceedings are subject to many uncertainties, and the outcome of individual matters is not predictable. The extent of our financial exposure to these matters could be material, and our reputation may suffer material harm as a result of these matters.

**We are currently involved in civil proceedings in connection with our voluntary takeover offer for the acquisition of all shares of Postbank. The extent of our financial exposure to this matter could be material, and our reputation may be harmed.**

On September 12, 2010, we announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG. On October 7, 2010, we published the official offer document. In our takeover offer, we offered Postbank shareholders consideration of €25 for each Postbank share. The takeover offer was accepted for a total of approximately 48.2 million Postbank shares.

In November 2010, a former shareholder of Postbank, Effecten-Spiegel AG, which had accepted the takeover offer, brought a claim against us alleging that the offer price was too low and was not determined in accordance with the applicable law of the Federal Republic of Germany. The plaintiff alleges that we had been obliged to make a mandatory takeover offer for all shares in Deutsche Postbank AG, at the latest, in 2009. The plaintiff avers that, at the latest in 2009, the voting rights of Deutsche Post AG in Deutsche Postbank AG had to be attributed to us pursuant to Section 30 of the German Takeover Act. Based thereon, the plaintiff alleges that the consideration offered by us for the shares in Deutsche Postbank AG in the 2010 voluntary takeover offer needed to be raised to €57.25 per share.

The Cologne District Court dismissed the claim in 2011 and the Cologne appellate court dismissed the appeal in 2012. The Federal Court set aside the Cologne appellate court's judgment and referred the case back to the appellate court. In its judgment, the Federal Court stated that the appellate court had not sufficiently considered the plaintiff's allegation that we and Deutsche Post AG "acted in concert" in 2009. The Cologne appellate court has scheduled a further hearing for November 8, 2017.

Starting in 2014, additional former shareholders of Deutsche Postbank AG, who accepted the 2010 tender offer, brought similar claims as Effecten-Spiegel AG against us which are pending with the Cologne District Court, and three of these plaintiffs applied for model case proceedings (Musterverfahren) under the German Capital Markets Model Case Act. The Cologne District Court has heard these follow-on matters on January 27, 2017 and announced its intention to publish a decision on April 28, 2017.

In September 2015, former shareholders of Deutsche Postbank AG filed in the Cologne District Court shareholder actions against Deutsche Postbank AG to set aside the squeeze-out resolution taken in the shareholders meeting of Deutsche Postbank AG in August 2015. Among other things, the plaintiffs allege that we (Deutsche Bank AG) were subject to a suspension of voting rights with respect to our shares in Postbank based on the allegation that we failed to make a mandatory takeover offer at a higher price in 2009. The squeeze out is final and the proceeding itself has no reversal effect, but may result in damage payments. The claimants in this proceeding refer to legal arguments similar to those asserted in the Effecten-Spiegel proceeding described above. The Cologne District Court indicated its intention to announce a decision in the spring of 2017.

The extent of our financial exposure to this matter could be material, and our reputation may be harmed.



We are currently involved in civil and criminal proceedings in connection with transactions with Monte dei Paschi di Siena. The extent of our financial exposure to these matters could be material, and our reputation may be harmed.

In February 2013 Banca Monte Dei Paschi Di Siena, which we refer to as “MPS”, issued civil proceedings in Italy against us alleging that we assisted former MPS senior management in an accounting fraud on MPS, by undertaking repo transactions with MPS and “Santorini”, a wholly owned SPV of MPS, which helped MPS defer losses on a previous transaction undertaken with us. Subsequently, in July 2013, the Fondazione Monte Dei Paschi, MPS’ largest shareholder, also commenced civil proceedings in Italy for damages based on substantially the same facts. In December 2013, we reached an agreement with MPS to settle the civil proceedings and the transactions were unwound at a discount for MPS. The civil proceedings by the Fondazione Monte Dei Paschi, in which damages of between €220 million and €381 million are claimed, remain pending. The Fondazione’s separate claim filed in July 2014 against their former administrators and a syndicate of 12 banks including DB S.p.A. for €286 million has resumed before the Florence Court.

A criminal investigation was launched by the Siena Public Prosecutor into the transactions and certain unrelated transactions entered into by MPS with other parties. Such investigation was moved in summer 2014 from Siena to the Milan Public Prosecutors as a result of a change in the alleged charges being investigated. On February 16, 2016, the Milan Public Prosecutors issued a request of committal to trial against us and six current and former employees. The committal process concluded with a hearing on October 1, 2016, during which the Milan court committed all defendants in the criminal proceedings to trial. Our potential exposure is for administrative liability under Italian Legislative Decree n. 231/2001 and for civil vicarious liability as an employer of current and former employees who are being criminally prosecuted. Trial commenced on December 15, 2016 and is ongoing. We continue to cooperate and update our regulators. The extent of our financial exposure to these matters could be material, and our reputation may suffer material harm as a result of these matters.

We are currently involved in a legal dispute with the German tax authorities in relation to the tax treatment of certain income received with respect to our pension plan assets. The proceeding is pending in front of the relevant lower fiscal court. Should the courts ultimately rule in favor of the German tax authorities, the outcome could have a material effect on our comprehensive income and financial condition.

We sponsor a number of post-employment benefit plans on behalf of our employees. In Germany, the pension assets that fund the obligations under these pension plans are held by Benefit Trust GmbH. The German tax authorities are challenging the tax treatment of certain income received by Benefit Trust GmbH in the years 2010 to 2013 with respect to its pension plan assets. For the year 2010 Benefit Trust GmbH paid the amount of tax and interest assessed of €160 million to the tax authorities and is seeking a refund of the amounts paid in litigation with the relevant lower fiscal court. For 2011 to 2013 the matter is stayed pending the outcome of the 2010 tax litigation. The amount of tax and interest under dispute for years 2011 to 2013, which also has been paid to the tax authorities, amounts to €456 million. Any decision by the lower fiscal court is potentially subject to appeal by either party and thus a resolution of the matter may not take place for a number of years. An ultimate decision by the courts that is unfavorable to us could materially and adversely affect our comprehensive income and financial condition.

Guilty pleas by or convictions of us or our affiliates in criminal proceedings may have consequences that have adverse effects on certain of our businesses.

We and our affiliates have been and are subjects of criminal proceedings or investigations. In particular, as part of the resolution of the investigation of the DOJ into misconduct relating to interbank offered rates, our subsidiary DB Group Services (UK) Ltd. entered into a plea agreement with the DOJ, pursuant to which the company pled guilty to one count of wire fraud. Also, in connection with the KOSPI Index unwind matters, our subsidiary Deutsche Securities Korea Co. was convicted of vicarious corporate criminal liability in respect of spot/futures linked market manipulation by its employees. We and our subsidiaries are also subjects of other criminal proceedings or investigations.

Guilty pleas or convictions against us or our affiliates could lead to our ineligibility to use an important trading exemption under ERISA. In particular, such guilty pleas or convictions could cause our affiliates to no longer qualify as a “qualified professional asset manager” (“QPAM”) under the QPAM Prohibited Transaction Exemption, which exemption is relied on to provide asset management services to certain pension plans in connection with certain asset management strategies. Loss of QPAM status could cause customers who rely on such status (whether because they are legally required to do so or because we have agreed contractually with them to maintain such status) to cease to do business or refrain from doing business with us and could negatively impact our reputation more generally. In addition, other clients may mistakenly see the loss as a signal that we are somehow no longer approved by the U.S. Department of Labor (DOL), the agency responsible for ERISA, and cease to do business or refrain from doing business with us for that reason. This could have a material adverse effect on our results of operations, particularly those of our asset management business in the United States. We have filed an application with the DOL for exemptive relief permitting us to retain our QPAM status despite both the guilty plea of DB Group Services (UK) Ltd. and the conviction of Deutsche Securities Korea Co. The DOL has granted us a temporary QPAM exemption, effective through the earlier of April 23, 2017 or the effective date of a permanent QPAM exemption, if granted to us by the DOL, covering both the guilty plea and the conviction. We have provided additional information to the DOL in support of our QPAM application which is still pending with the DOL. It is unclear whether the QPAM application will be approved, and a denial, and thus loss of QPAM status, could occur, with the potential for the adverse effects described above.

[In addition to our traditional banking businesses of deposit-taking and lending, we also engage in nontraditional credit businesses in which credit is extended in transactions that include, for example, our holding of securities of third parties or our engaging in complex derivative transactions. These nontraditional credit businesses materially increase our exposure to credit risk.](#)

As a bank and provider of financial services, we are exposed to the risk that third parties who owe us money, securities or other assets will not perform their obligations. Many of the businesses we engage in beyond the traditional banking businesses of deposit-taking and lending also expose us to credit risk.

In particular, much of the business we conduct through our Global Markets corporate division entails credit transactions, frequently ancillary to other transactions. Nontraditional sources of credit risk can arise, for example, from holding securities of third parties; entering into swap or other derivative contracts under which counterparties have obligations to make payments to us; executing securities, futures, currency or commodity trades that fail to settle at the required time due to nondelivery by the counterparty or systems failure by clearing agents, exchanges, clearing houses or other financial intermediaries; and extending credit through other arrangements. Parties to these transactions, such as trading counterparties, may default on their obligations to us due to bankruptcy, political and economic events, lack of liquidity, operational failure or other reasons.

Many of our derivative transactions are individually negotiated and non-standardized, which can make exiting, transferring or settling the position difficult. Certain credit derivatives require that we deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, we do not hold, and may not be able to obtain, the underlying security, loan or other obligation. This could cause us to forfeit the payments otherwise due to us or result in settlement delays, which could damage our reputation and ability to transact future business, as well as impose increased costs on us. Recently enacted legislation in the European Union (EMIR) and the U.S. (the Dodd-Frank Act) has introduced requirements for the standardization, margining, central clearing and transaction reporting of certain over-the-counter derivatives. While such requirements are aimed at reducing the risk posed to counterparties and the financial system by such derivatives, they may reduce the volume and profitability of the transactions in which we engage, and compliance with such provisions may impose substantial costs on us.

The exceptionally difficult market conditions experienced since the global financial crisis severely adversely affected certain areas in which we do business that entail nontraditional credit risks, including the leveraged finance and structured credit markets, and may do so in the future.

A substantial proportion of the assets and liabilities on our balance sheet comprise financial instruments that we carry at fair value, with changes in fair value recognized in our income statement. As a result of such changes, we have incurred losses in the past, and may incur further losses in the future.

A substantial proportion of the assets and liabilities on our balance sheet comprise financial instruments that we carry at fair value, with changes in fair value recognized in the income statement. Fair value is defined as the price at which an asset or liability could be exchanged in an arm's length transaction between knowledgeable, willing parties, other than in a forced or liquidation sale. If the value of an asset carried at fair value declines (or the value of a liability carried at fair value increases) a corresponding unfavorable change in fair value is recognized in the income statement. These changes have been and could in the future be significant. Additionally, in recent periods there has been a significant difference between fair value and book value for some assets.

Observable prices or inputs are not available for certain classes of financial instruments. Fair value is determined in these cases using valuation techniques we believe to be appropriate for the particular instrument. The application of valuation techniques to determine fair value involves estimation and management judgment, the extent of which will vary with the degree of complexity of the instrument and liquidity in the market. Management judgment is required in the selection and application of the appropriate parameters, assumptions and modeling techniques. If any of the assumptions change due to negative market conditions or for other reasons, subsequent valuations may result in significant changes in the fair values of our financial instruments, requiring us to record losses.

Our exposure and related changes in fair value are reported net of any fair value gains we may record in connection with hedging transactions related to the underlying assets. However, we may never realize these gains, and the fair value of the hedges may change in future periods for a number of reasons, including as a result of deterioration in the credit of our hedging counterparties. Such declines may be independent of the fair values of the underlying hedged assets or liabilities and may result in future losses.

Our risk management policies, procedures and methods leave us exposed to unidentified or unanticipated risks, which could lead to material losses.

We have devoted significant resources to developing our risk management policies, procedures and assessment methods and intend to continue to do so in the future. Nonetheless, the risk management techniques and strategies have not been and may in the future not be fully effective in mitigating our risk exposure in all economic market environments or against all types of risk, including risks that we fail to identify or anticipate. Some of our quantitative tools and metrics for managing risk are based upon our use of observed historical market behavior. We apply statistical and other tools to these observations to arrive at quantifications of our risk exposures. During the financial crisis, the financial markets experienced unprecedented levels of volatility (rapid changes in price direction) and the breakdown of historically observed correlations (the extent to which prices move in tandem) across asset classes, compounded by extremely limited liquidity. In this volatile market environment, our risk management tools and metrics failed to predict some of the losses we experienced, particularly in 2008, and may in the future fail to predict important risk exposures. In addition, our quantitative modeling does not take all risks into account and makes numerous assumptions regarding the overall environment, which may not be borne out by events. As a result, risk exposures have arisen and could continue to arise from factors we did not anticipate or correctly evaluate in our statistical models. This has limited and could continue to limit our ability to manage our risks especially in light of geopolitical developments, many of the outcomes of which are currently unforeseeable. Our losses thus have been and may in the future be significantly greater than the historical measures indicate.

In addition, our more qualitative approach to managing those risks not taken into account by our quantitative methods could also prove insufficient, exposing us to material unanticipated losses. Also, if existing or potential customers or counterparties believe our risk management is inadequate, they could take their business elsewhere or seek to limit their transactions with us. This could harm our reputation as well as our revenues and profits. See "Management Report: Risk Report" beginning on page 88 of the Annual Report 2016 for a more detailed discussion of the policies, procedures and methods we use to identify, monitor and manage our risks.

Operational risks, which may arise from errors in the performance of our processes, the conduct of our employees, instability, malfunction or outage of our IT system and infrastructure, or loss of business continuity, or comparable issues with respect to our vendors, may disrupt our businesses and lead to material losses.

We face operational risk arising from errors, inadvertent or intentional, made in the execution, confirmation or settlement of transactions or from transactions not being properly recorded, evaluated or accounted for. An example of this risk concerns our derivative contracts, which are not always confirmed with the counterparties on a timely basis. For so long as the transaction remains unconfirmed, we are subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce the contract. The European sovereign debt crisis and the global financial crisis, in which the risk of counterparty default increased, have increased the possibility that this operational risk materializes.

In addition, our businesses are highly dependent on our ability to process manually or through our systems a large number of transactions on a daily basis, across numerous and diverse markets in many currencies. Some of the transactions have become increasingly complex. Moreover, management relies heavily on its financial, accounting and other data processing systems that include manual processing components. If any of these processes or systems do not operate properly, or are disabled, or subject to intentional or inadvertent human error, we could suffer financial loss, a disruption of our businesses, liability to clients, regulatory intervention or reputational damage.

We are also dependent on our employees to conduct our business in accordance with applicable laws, regulations and generally accepted business standards. If our employees do not conduct our business in this manner, we may be exposed to material losses. Furthermore, if an employee's misconduct reflects fraudulent intent, we could also be exposed to reputational damage. We categorize these risks as conduct risk, which comprises inappropriate business practices, including selling products that are not suitable for a particular customer, fraud, unauthorized trading and failure to comply with applicable regulations, laws and internal policies.

We in particular face the risk of loss events due to the instability, malfunction or outage of our IT system and IT infrastructure. Such losses could materially affect our ability to perform business processes and may, for example, arise from the erroneous or delayed execution of processes as either a result of system outages or degraded services in systems and IT applications. A delay in processing a transaction, for example, could result in an operational loss if market conditions worsen during the period after the error. IT-related errors may also result in the mishandling of confidential information, damage to our computer systems, financial losses, additional costs for repairing systems, reputational damage, customer dissatisfaction or potential regulatory or litigation exposure.

Business continuity risk is the risk of incurring losses resulting from the interruption of normal business activities. We operate in many geographic locations and are frequently subject to the occurrence of events outside of our control. Despite the contingency plans we have in place, our ability to conduct business in any of these locations may be adversely impacted by a disruption to the infrastructure that supports our business, whether as a result of, for example, events that affect our third party vendors or the community or public infrastructure in which we operate. Any number of events could cause such a disruption including deliberate acts such as sabotage, terrorist activities, bomb threats, strikes, riots and assaults on the bank's staff; natural calamities such as hurricanes, snow storms, floods, disease pandemic and earthquakes; or other unforeseen incidents such as accidents, fires, explosions, utility outages and political unrest. Any such disruption could have a material adverse effect on our business and financial position.

Services provided by third-party vendors bear comparable risks as if they were performed by ourselves, and we are ultimately responsible for the services. We are dependent on our vendors to conduct our business services in accordance with applicable laws, regulations and generally accepted business standards. If our vendors do not conduct our business in this manner, we may be exposed to material losses and could be subject to regulatory action. Furthermore, if a vendor's misconduct reflects fraudulent intent, we could also be exposed to reputational damage.

Our operational systems are subject to an increasing risk of cyber attacks and other internet crime, which could result in material losses of client or customer information, damage our reputation and lead to regulatory penalties and financial losses.

Among the operational risks we face is the risk of breaches of the security of our computer systems due to unauthorized access to networks or resources, the introduction of computer viruses or malware, or other forms of cyber attack or internet crime. Such breaches could threaten the confidentiality of our clients' data and the integrity of our systems. We devote significant resources toward the protection of our computer systems against such breaches. To address the evolving cyber threat risk, we have expended significant resources to modify and enhance our protective measures and to investigate and remediate any information security vulnerabilities. Nevertheless, a residual risk remains that such measures may not be effective against all threats. Given our global footprint and the volume of transactions we process, certain errors or actions may be repeated or compounded before they are discovered and rectified.

We and other financial institutions have experienced attacks on computer systems, including attacks aimed at obtaining unauthorized access to confidential company or customer information or damaging or interfering with company data, resources or business activities. The increasing frequency and sophistication of recent cyber-attacks has resulted in an elevated risk profile for many organizations around the world, and significant attention by our management has been paid to the overall level of preparedness against such attacks. Cyber security is growing in importance due to factors such as the continued and increasing reliance on our technology environment. Although we have to date not experienced any material loss of data from these attacks, it is possible, given the use of new technologies and increasing reliance on the Internet and the varying nature and evolving sophistication of such attacks, that we may not be able to effectively anticipate and prevent all such attacks. A successful attack could have a significant negative impact on us, including as a result of disclosure or misappropriation of client or proprietary information, damage to computer systems, financial losses, additional costs to us (such as for investigation and reestablishing services), reputational damage, customer dissatisfaction and potential regulatory or litigation exposure.

The size of our clearing operations exposes us to a heightened risk of material losses should these operations fail to function properly.

We have large clearing and settlement businesses and an increasingly complex and interconnected information technology (IT) landscape. These give rise to the risk that we, our customers or other third parties could lose substantial sums if our systems fail to operate properly for even short periods. This will be the case even where the reason for the interruption is external to us. In such a case, we might suffer harm to our reputation even if no material amounts of money are lost. This could cause customers to take their business elsewhere, which could materially harm our revenues and profits.

We may have difficulty in identifying and executing acquisitions, and both making acquisitions and avoiding them could materially harm our results of operations and our share price.

We consider business combinations from time to time. Even though we review the companies, businesses, assets, liabilities or contracts we plan to acquire, it is generally not feasible for these reviews to be complete in all respects. As a result, we may assume unanticipated liabilities, or an acquisition may not perform as well as expected. Were we to announce or complete a significant business combination transaction, our share price could decline significantly if investors viewed the transaction as too costly or unlikely to improve our competitive position. In addition, we might have difficulty integrating any entity with which we combine our operations. Failure to complete announced business combinations or failure to integrate acquired businesses successfully into ours could materially and adversely affect our profitability. It could also affect investors' perception of our business prospects and management, and thus cause our share price to fall. It could also lead to departures of key employees, or lead to increased costs and reduced profitability if we felt compelled to offer them financial incentives to remain.

**Intense competition, in our home market of Germany as well as in international markets, could materially adversely impact our revenues and profitability.**

Competition is intense in all of our primary business areas, in Germany as well as in international markets. If we are unable to respond to the competitive environment in these markets with attractive product and service offerings that are profitable for us, we may lose market share in important areas of our business or incur losses on some or all of our activities. In addition, downturns in the economies of these markets could add to the competitive pressure, through, for example, increased price pressure and lower business volumes for us.

In recent years there has been substantial consolidation and convergence among financial services companies, culminating in unprecedented consolidations in the course of the global financial crisis. This trend has significantly increased the capital base and geographic reach of some of our competitors and has hastened the globalization of the securities and other financial services markets. As a result, we must compete with financial institutions that may be larger and better capitalized than we are and that may have a stronger position in local markets. Also, governmental action in response to the global financial crisis may place us at a competitive disadvantage.

In addition to our traditional competitors such as other universal banks and financial services firms, an emerging group of future competitors in the form of start-ups and technology firms are showing an increasing interest in banking services and products. These new competitors could increase competition in both core products, e.g., payments, basic accounts and loans and investment advisory, as well as in new products, e.g., peer to peer lending and equity crowd funding.

**Transactions with counterparties in countries designated by the U.S. State Department as state sponsors of terrorism or persons targeted by U.S. economic sanctions may lead potential customers and investors to avoid doing business with us or investing in our securities, harm our reputation or result in regulatory action which could materially and adversely affect our business.**

We engage or have engaged in a limited amount of business with counterparties, including government-owned or -controlled counterparties, in certain countries or territories that are subject to comprehensive sanctions, including Iran and Cuba (referred to as "Sanctioned Countries"), or with persons targeted by U.S. economic sanctions (referred to as "Sanctioned Persons"). U.S. law generally prohibits U.S. persons or any other persons acting within U.S. jurisdiction from doing business with Sanctioned Countries or Sanctioned Persons. Thus, U.S. regulations may extend to activities in other geographic areas and by non-U.S. persons depending on the circumstances. Our U.S. subsidiaries, branch offices, and employees are and our non-U.S. subsidiaries, branch offices, and employees may become subject to those prohibitions and other regulations. We are a German bank and our activities with respect to Sanctioned Countries and Sanctioned Persons have been subject to policies and procedures designed to avoid the involvement of persons acting within U.S. jurisdiction in any managerial or operational role and to ensure compliance with United Nations, European Union and German embargoes; in reflection of legal developments in recent years, we further developed our policies and procedures with the aim of ensuring compliance with regulatory requirements extending to other geographic areas regardless of jurisdiction. However, should our policies prove to have been ineffective, we may be subject to regulatory action that could materially and adversely affect our business. By 2007, our Management Board decided that we will not engage in new business with counterparties in countries such as Iran, Syria, Sudan and North Korea and to exit existing business to the extent legally possible. It also decided to limit our business with counterparties in Cuba. Of these, Iran, Sudan and Syria are currently designated as state sponsors of terrorism by the U.S. State Department.

We had a representative office in Tehran, Iran, which we discontinued at December 31, 2007. Our remaining business with Iranian counterparties consists mostly of participations as lender and/or agent in a few large trade finance facilities arranged before 2007 to finance the export contracts of exporters in Europe and Asia. The lifetime of most of these facilities is ten years or more and we are legally obligated to fulfill our contractual obligations. We do not believe our business activities with Iranian counterparties are material to our overall business, with the outstanding loans to Iranian borrowers representing substantially less than 0.01 % of our total assets as of December 31, 2016 and the revenues from all such activities representing less than 0.01 % of our total revenues for the year ended December 31, 2016.



In recent years, the United States has taken steps, including the passage of the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010, the National Defense Authorization Act for Fiscal Year 2012, the Iran Threat Reduction and Syria Human Rights Act of 2012, the Iran Freedom and Counter-Proliferation Act of 2012, and a number of Executive Orders, to deter foreign companies from dealing with Iran by providing for possible sanctions against companies that provide services in support of certain Iranian activity in (among others) the financial, energy, shipping or military sectors or with certain Iranian counterparties, whether or not such dealings occur within U.S. jurisdiction. Among the targets of these indirect, or “secondary”, U.S. economic sanctions are foreign financial institutions that, among other things, facilitate significant transactions with, or provide significant financial services to, a wide range of Iranian entities, persons, and financial institutions.

Following the occurrence on January 16, 2016 of “Implementation Day” of the Joint Comprehensive Plan of Action between the “P5+1” parties and Iran, pursuant to which Iran agreed to limits on its nuclear program and the P5+1 parties agreed to provide certain sanctions relief, secondary sanctions targeting Iran have been narrowed but not eliminated. Following the Implementation Day, we engage in new activities with respect to Iran, but only to a limited extent. We execute cash payments in Euro from or to Iran on behalf of our own non-Iranian clients with enhanced due diligence. In principle, we remain restrictive towards any new trade finance activities and do not plan to engage in loan arrangements with Iranian counterparties.

We do not believe we have engaged in activities sanctionable under these statutes, but the U.S. authorities have considerable discretion in applying the statutes, and any imposition of sanctions against us could be material. It is also possible that primary and secondary sanctions imposed by the U.S. and other jurisdictions could be expanded in the future, particularly if the Joint Comprehensive Plan of Action with Iran is not considered to be effective. Proposals for expanded sanctions are discussed on a continuing basis in the U.S. Congress and elsewhere.

As required by Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 (Section 13(r) of the Securities Exchange Act of 1934, as amended) we have disclosed certain information regarding our activities or transactions with persons subject to U.S. sanctions against Iran and other persons subject to such provision. Such disclosure is set forth in the section of this document entitled “Disclosures Under Iran Threat Reduction and Syria Human Rights Act of 2012”, which follows “Item 16H: Mine Safety Disclosure”.

We are also engaged in a limited amount of business with counterparties domiciled in Cuba, which is not subject to any United Nations, European Union or German embargo. The business consists of a limited number of letters of credit, as well as claims resulting from letters of credit, and it represented substantially less than 0.01 % of our assets as of December 31, 2016. The transactions served to finance commercial products such as machinery as well as medical products.

We are aware, through press reports and other means, of initiatives by governmental and non-governmental entities in the United States and elsewhere to adopt laws, regulations or policies prohibiting transactions with or investment in, or requiring divestment from, entities doing business with Sanctioned Countries, particularly Iran. Such initiatives may result in our being unable to gain or retain entities subject to such prohibitions as customers or as investors in our securities. In addition, our reputation may suffer due to our association with such countries. Such a result could have significant adverse effects on our business or the price of our securities. It is also possible that new direct or indirect secondary sanctions could be imposed by the United States or other jurisdictions without warning as a result of geopolitical developments.

## Item 4: Information on the Company

### History and Development of the Company

The legal and commercial name of our company is Deutsche Bank Aktiengesellschaft. It is a stock corporation organized under the laws of Germany.

Deutsche Bank Aktiengesellschaft originated from the reunification of Norddeutsche Bank Aktiengesellschaft, Hamburg, Rheinisch-Westfälische Bank Aktiengesellschaft, Düsseldorf, and Süddeutsche Bank Aktiengesellschaft, Munich. Pursuant to the Law on the Regional Scope of Credit Institutions, these were disincorporated in 1952 from Deutsche Bank, which had been founded in 1870. The merger and the name were entered in the Commercial Register of the District Court Frankfurt am Main on May 2, 1957.

We are registered under registration number HRB 30 000. Our registered address is Taunusanlage 12, 60325 Frankfurt am Main, Germany, and our telephone number is +49-69-910-00. Our agent in the United States is: Deutsche Bank Americas, c/o Office of the Secretary, 60 Wall Street, Mail Stop NYC60-4099, New York, NY 10005.

For information on significant capital expenditures and divestitures, please see “Management Report: Operating and Financial Review: Deutsche Bank Group: Significant Capital Expenditures and Divestitures” on page 46 of the Annual Report 2016.

### Business Overview

#### Our Organization

Please see “Management Report: Operating and Financial Review: Deutsche Bank Group: Our Organization” on page 38 of the Annual Report 2016. For information on net revenues by geographic area and by corporate division please see Note 4 “Business Segments and Related Information: Entity-Wide Disclosures” to the consolidated financial statements and “Management Report: Operating and Financial Review: Results of Operations: Segment Results of Operations” on pages 56 through 58 of the Annual Report 2016.

#### Management Structure

Please see “Management Report: Operating and Financial Review: Deutsche Bank Group: Management Structure” on page 39 of the Annual Report 2016.

## Our Business Strategy

We are a leading European bank with a global reach supported by a strong home base in Germany, Europe's largest economy. We serve the real economy needs of our corporate, institutional, asset management and private clients, providing services in transaction banking, corporate finance and capital markets, asset management, wealth management and retail banking.

Our franchise remained strong across our core businesses despite a challenging environment in 2016. We were a top three investment bank in Europe, the Middle East and Africa (EMEA) on the basis of investment banking fees according to Dealogic; a top-five global transaction bank on the basis of publicly reported revenues; a top-six global sales & trading franchise and the number one franchise among European banks based on publicly reported sales & trading revenues; a leading asset manager that is the second largest provider of exchange traded products and exchange traded funds in Europe and the largest retail asset management presence in Germany based on publicly reported assets under management; the largest private and commercial bank in Germany with over 20 million clients; and the number one wealth manager in Germany based on assets under management.

## Update on Strategy Execution

We outlined a multi-year strategy in October 2015 to build on the core strengths of our business model and client franchise. The four key goals were to be: simpler and more efficient, less risky, better capitalized and better run with more disciplined execution.

In 2016, we made material progress towards our goals in what proved to be an unexpectedly challenging market environment. Major achievements in 2016 included:

- A reduction of our adjusted costs<sup>1</sup> by 7 % (by 5 % excluding the effect of changes in exchange rates) in 2016 to € 24.7 billion.
- The completion, on schedule, of the accelerated wind down of the Non-Core Operations Unit, which was then closed at the start of 2017.
- The settlement or resolution of over two dozen major litigation matters, including some of our most significant litigation matters such as the settlement with the U.S. Department of Justice (DOJ) relating to U.S. residential mortgage-backed securities (RMBS).
- The completion of key strategic disposals, including the sale of our stake in the Hua Xia Bank and the sales of Abbey Life and the U.S. Private Client Services.
- All previously announced country exits completed or on track for completion in 2017.
- The transformation of the German retail business including branch reductions is well on track.
- The strengthening of our CET1 ratio to 11.8 % on a fully loaded basis and 13.4 % on a phase-in basis at year end 2016, increases of 70 basis points and 20 basis points respectively from December 31, 2015. The strengthening of the CET1 ratios largely reflected managed reductions in risk-weighted assets (RWA) over the course of 2016.
- Substantial investment in our control functions, including the ongoing implementation of a more comprehensive Know-Your-Client (KYC) process and an off-boarding process for higher risk clients.
- The replacement or reassignment of approximately 70 % of top management to drive improved execution of our strategy.

Global Markets (GM) has completed the reshaping of the Securitized Trading business (ahead of the targeted timeline), substantially completed its targeted leverage reduction in Agency RMBS, strengthened Know-Your-Client (KYC) processes and controls, ceased active coverage of approximately 3,800 clients identified as high risk/low potential, completed most of its country optimization strategy in 2016 (ahead of schedule), and remains on target to complete the remainder on time. GM has also completed the exit of its residual presence in South Korea, Russia and Brazil.

Corporate & Investment Banking (CIB) has sharpened its focus on priority clients and banker productivity to optimize returns across the CIB business. Despite a challenging macroeconomic environment in the eurozone, we remained a top 3 investment bank in EMEA and continued to be involved in some of the largest deals. We also continued to deliver resilient Transaction Banking results in a challenging market environment with prolonged low interest rates, a volatile geo-political backdrop, and its implications for global trade. A new global head was recently appointed to lead the Global Transaction Banking business.

The Deutsche Asset Management (Deutsche AM) franchise continues to perform very well amidst some challenging and volatile market conditions. We recently completed the sale of the Abbey Life unit to Phoenix Life Holdings. This improved the Bank's CET1 ratio by approximately 10 basis points. The Bank also hired and appointed a new head of Asset Management, Nicolas Moreau, to drive the future growth of the Deutsche AM business going forward.

The Private, Wealth & Commercial Clients (PW&CC) franchise is closing branches and reducing staff in the German retail business. PCC International branch closures are ahead of plan. PW&CC has also made significant progress on digitization initiatives, including the opening of the Digital Factory in Frankfurt in September 2016.

As per 2016 targets, the former corporate division NCOU successfully executed its de-risking strategy and achieved its 2016 year-end target risk weighted assets (RWA) of less than € 10 billion. At the end of 2016, NCOU had € 9.2 billion RWA and € 7.9 billion leverage exposure, down from € 32.9 billion RWA and € 36.6 billion leverage exposure at the end of 2015. The residual NCOU assets have been transferred back to respective divisions they originally came from, as of the start of 2017.

In addition to the difficult operating environment in 2016 driven in large part by macroeconomic and geopolitical uncertainty, we also faced substantial challenges specific to Deutsche Bank itself. These challenges arose from adverse speculation about our financial health. This led to concerns among some clients and counterparties and negatively affected revenues in 2016. That was particularly the case in the late third and early fourth quarters around the purported size of a settlement with the DOJ in respect of the RMBS matter and its potential impact on us.

<sup>1</sup> We define "adjusted costs" as total noninterest expenses excluding impairment of goodwill and other intangible assets, litigation, restructuring and severance, and policyholder benefits and claims (until the disposition of Abbey Life). To exclude the effect of changes in exchange rates, 2015 adjusted costs were recalculated using 2016 monthly average exchange rates.

## Overview of New Strategic Measures

The macroeconomic, geopolitical, and regulatory outlook has changed substantially since we launched our strategy in 2015. As a result of these changes in the operating environment and the substantial challenges specific to Deutsche Bank in 2016, we undertook an updated planning process and strategic review in late 2016 and early 2017.

This review has now been completed. Its fundamental conclusion is that our core business model of being a global bank, which serves a range of institutional, corporate and private clients combined with a strong home base in Germany with a resilient corporate, institutional, asset management and private client franchise, remains the foundation of our strength and long-term growth prospects.

Nonetheless, our management decided to undertake a number of new steps to further strengthen the bank and place it in a better position to pursue growth opportunities. These actions include:

- Substantially strengthened capitalization through a capital increase, expected to result in net proceeds of approximately € 8 billion, which is expected to result in a CRR/CRD4 fully loaded Common Equity Tier 1 capital ratio (fully loaded CET 1 ratio) of approximately 14 % and a CRR/CRD4 fully loaded leverage ratio of approximately 4 % pro forma as of December 31, 2016.
- Up to € 2 billion of incremental capital creation targeted through the planned initial public offering (IPO) of a minority stake in the Deutsche Asset Management division (Deutsche AM), and from additional business disposals with an identified RWA of approximately € 10 billion and leverage exposure of approximately € 30 billion, the majority of which we plan to complete over the next 18 months.
- Reorganization of our business divisions into three distinct units, with the goals of strengthening the businesses of each, enhancing client coverage, improving market share and driving efficiencies and growth:
  - The new Corporate & Investment Bank (CIB) that combines our markets, advisory, financing and transaction banking businesses.
  - Private & Commercial Bank (PCB) that combines Postbank and our existing private, commercial and wealth management businesses.
  - An operationally segregated Deutsche Asset Management (Deutsche AM).
- The integration of Postbank and PCB's German business with the goal of creating a market leading retail presence in Germany, driving greater efficiency through scale and better earnings and funding stability for Deutsche Bank.
- The establishment of a cost reduction program targeting to achieve adjusted costs of approximately € 22 billion in 2018 and approximately € 21 billion by 2021, which would include the impact of retaining Postbank's adjusted costs (€ 2.7 billion in 2016).
- Separately managing identified legacy asset portfolios with approximately € 20 billion of RWA and approximately € 60 billion leverage exposure targeted to be reduced to approximately € 12 billion of RWA and approximately € 30 billion leverage exposure, respectively, by 2020.
- The incurrence of restructuring and severance costs of approximately € 2 billion, the majority of which is expected to be incurred in 2017 to 2019.
- Targeting a competitive dividend payout ratio for the financial year 2018 and thereafter with an intention that the Management Board will recommend at the Annual General Meeting in May 2017 to pay a dividend of € 0.19 per share out of distributable profit for 2016. The dividend to be paid out of Deutsche Bank AG's distributable profit for 2016 contains a component reflecting the distributable profit carried forward from 2015 of approximately € 165 million and a dividend of € 0.11 per share out of the remaining distributable profit for 2016. Overall, we expect to pay out a total dividend of approximately € 400 million in 2017.
- Targeting a Post-tax Return on Average Tangible Equity (RoTE) of circa 10 % in a normalized operating environment.

The fundamental goal of these additional strategic measures is to make Deutsche Bank a stronger, safer bank that is well positioned to pursue growth opportunities through its strong global client franchise. Our management believes we will be able to achieve this by:

- having capital levels the sufficiency of which are beyond question,
- having a leading CIB franchise with the scale and strength to successfully compete and grow globally,
- occupying the number one private and commercial banking position in our home market of Germany,
- giving our world class Deutsche AM division operational segregation that can support accelerated growth,
- reducing the size of our corporate center and cost base in part through more front to back alignment and shifting large portions of infrastructure functions to the business divisions, and
- shifting our earnings and business mix more towards stable businesses.

## Impact of the Proposed Capital Raise

The proposed capital raise aims to make us much stronger from a capital perspective with an intention to remain comfortably above 13 % on a fully-loaded CET1 basis. The immediate impact of the capital raise, assuming it raises net proceeds of €8 billion, but excluding any additional capital impact resulting from the planned IPO of a minority stake in Deutsche AM or the additional portfolio of asset disposals, will be:

### Phase-in CET1 Ratio:

- An increase from 13.4 % as reported on December 31, 2016 to 15.7 % on a pro-forma basis as of that date.
- An improvement in the CET1 ratio under the phase-in rules effective January 1, 2017 from 12.6 % to 14.9 % on a pro-forma basis as of that date.

**Fully loaded CET1 Ratio** would increase from 11.8 % as reported on December 31, 2016 to 14.1 % on a pro-forma basis as of that date.

**Fully loaded leverage ratio** would improve from 3.5 % as of December 31, 2016 to 4.1 % on a 2016 pro-forma basis as of the same date.

## New Financial Targets

We have adopted new financial targets that replace the targets announced in October 2015. The new targets are:

- Adjusted costs of €22 billion by 2018, and €21 billion by 2021, which includes the adjusted costs of Postbank.
- Post-tax RoTE of approximately 10 % in a normalized operating environment.
- CET1 Ratio comfortably above 13 % on a fully loaded basis.
- Leverage Ratio of 4.5 %. The pro forma 2016 leverage ratio reflecting the impact of the proposed capital raise is 4.1 %, which we aim to increase to 4.5 % over time.
- Targeting a competitive dividend payout ratio for the financial year 2018 and thereafter.

Our plan for 2017 is based on assumed foreign exchange rates of EUR/USD 1.01 and EUR/GBP 0.88.



## New Business Division Structure

Effective in 2017, we plan to have three business divisions going forward: the new CIB, PCB and Deutsche AM. CIB will combine the existing Corporate & Investment Banking and Global Markets divisions. PCB will consist of private and commercial banking, including Postbank, and wealth management. Deutsche Asset Management will be more operationally segregated with a minority stake traded on the public markets, assuming the planned IPO is successfully undertaken, while Deutsche Bank retains a majority stake.

Geographically, Germany will remain our anchor – our home market where we intend not only to maintain, but to further expand our leading position in all three of our business divisions. PCB will be primarily focused in Germany, with wealth management businesses around the world. Given the global nature of our core corporate clients, we intend to retain CIB capabilities across Germany and EMEA (ex-Germany), the U.S. and Canada, and in Asia Pacific (APAC). While we intend to have a global institutional client footprint, we expect to be primarily focused on Germany and EMEA (ex-Germany) where our competitive franchise is strongest. We also intend to maintain a strong but more focused U.S. footprint. Deutsche AM intends to retain its core focus in Germany and EMEA (ex-Germany), with selective capabilities in the U.S. and APAC.

Fundamentally, we intend to retain our global capabilities, but plan to focus those capabilities where our management believes our franchise is the strongest, the growth potential the largest, and the potential risk adjusted returns the highest. Our management believes that the reorganization of the business divisions will be critical to achieve this.

## Strategy in Corporate & Investment Bank

Our current CIB division primarily serves corporate clients, infrastructure and private equity, governments and financial institutions in treasury and financing solutions, leveraged lending, advisory and corporate finance (including debt and equity issuance), risk management and transaction banking.

The current Global Markets division operates alongside CIB and primarily serves large institutional clients (asset managers, pension funds, banks) in key capital markets areas including foreign exchange, rates, money markets, and credit. The two divisions currently work jointly to serve clients when appropriate.

We will merge the existing CIB and GM divisions into a new division to be called Corporate & Investment Bank (CIB). Based on a pro forma combination of net revenues for 2016, CIB would have had revenues of € 16.8 billion and would have been the largest division in Deutsche Bank.

The combined CIB division is intended to promote a more seamless and aligned offering of products to clients, meaningfully enhance cross selling opportunities, ensure better client rationalization with resources being focused on higher return relationships, and achieve greater cost and asset efficiencies to drive improved returns. CIB's franchise is intended to be primarily a corporate-client led business, while retaining a focused institutional client business.

We believe there to be a substantial opportunity to capture market share from clients through the reorganized CIB. Currently, two-thirds of our large corporate clients in the newly combined CIB division have a relationship with just one part of CIB (markets, corporate finance or transaction banking). Integrating CIB and GM should support more efficient and seamless client coverage and product offering, better rationalization of clients and the ability to direct resources to the highest return relationships, and ultimately increase our share of clients' "wallet" (amounts they spend on banking products).

As part of the new focus of CIB, we will separately manage a portfolio of legacy assets within the division. These assets are both residual NCOU assets that were transferred to the relevant divisions at the beginning of 2017 and other assets deemed non-strategic, reflecting in part the result of the reshaping of GM's business portfolio (primarily derivatives in Rates and Credit). The legacy asset portfolio at year-end 2016 accounted for approximately €20 billion of RWA (€36 billion including associated operational risk RWA), and approximately €60 billion of leverage exposure. We estimate that these legacy assets represent an approximate 200 basis point reduction of the return on equity of CIB per annum. While many of these legacy assets are long dated, we will seek to accelerate their wind down when economic to do so.

Over time, to improve its asset efficiency and returns, CIB expects that approximately 65 % of its RWA will be eventually deployed to support corporate clients (versus 55 % on the basis of a combined division at year-end 2016), and 35 % to institutional clients, excluding any remaining legacy asset portfolio. Despite the increased focus on corporate clients, Deutsche Bank remains committed to its institutional capabilities as they are critical to the success of CIB, and Deutsche Bank has no intention to exit any whole business lines offered in the current GM division.

CIB also intends to target further cost efficiencies. The combination of the current CIB and GM is intended to support accelerated front-to-back office optimization and the rationalization of support staff, which we expect to result in a reduction in CIB's adjusted costs by approximately €0.7 billion.

Through the above measures, and our strengthened capital position, our management believes that CIB will be better placed to grow globally and intends to pursue a number of objectives to achieve this:

- In **Origination and Advisory**, we intend to regain our number one position in EMEA as measured by revenues and to strengthen its franchise globally, with particular emphasis on deepening strategic client relationships to drive M&A and equity capital market mandates. Additionally, we intend to grow our leading debt capital markets franchise with an emphasis on Financial Institutions, and Sovereign, Supranational and Agency clients.
- In **Transaction Banking**, we intend to continue to capitalize on our top five position by improved cross selling of cash management on the back of our strong trade finance franchise and by continuing to drive improved cost income ratios through infrastructure investments.
- In **Financing**, we intend to maintain our leading Credit Financing & Solutions franchise with particular emphasis in Asset Backed Securities, Commercial Real Estate, and the Transport, Infrastructure and Energy sector.
- In **Debt Sales & Trading**, we intend to occupy a top-five position globally and a top-three position in EMEA. Of particular focus will be deepening strategic partnerships in Rates with insurance and pension clients and continuing to invest in cutting edge technology with the goal of becoming the top provider of foreign exchange payments and treasury solutions services.
- In **Equity Sales & Trading**, we are targeting to be an international equity franchise ranked amongst the top ten competitors by reported revenues with leading Prime and Investment Solution platforms through enhancing our liquidity and collateral management product offerings, and selectively gaining share in equity trading and derivatives.

## Strategy in Private & Commercial Bank (PCB)

We have decided that we will retain Postbank and combine it with our existing German operations over the next three to five years. This is a shift from the prior strategy and reflects a number of evolving factors.

We believe that good opportunities exist in PCB in Germany despite the challenging environment from low interest rates and high competition. In particular, we believe that growth in small and mid-sized German corporate clients and private banking clients will continue. These two client segments represent a majority of the identified fee pool in Germany and both are client segments that we believe we are well positioned to serve. In the more standard retail banking segment where fee pools are expected to be flat, we will respond with continued efficiency efforts and market share gains through digitization.

Additional factors that contributed to the decision to retain and integrate Postbank include:

- A lower targeted leverage ratio, which we initially set at 5 % when we announced our strategy in 2015. This reflects changes in the expected regulatory requirements and market expectations for leverage ratios of European banks. We have set 4.5 % as our new leverage ratio target.
- The positive impact on the business model of retaining a large and stable business with a substantial deposit base.
- Revised view on the possible degree of integration of Postbank and resulting scale and incremental synergies.
- Future growth opportunities we have identified, reflecting both a potential improvement in the macroeconomic outlook, but more importantly the changing dynamics in private and commercial banking in Germany. The likelihood of eventual industry consolidation is growing in German retail banking as well as the continued positive opportunities presented by digitalization.

The integration of Postbank will create Germany's largest private and commercial bank with over 20 million clients.

PCB intends to continue to operate with two distinct brands in Germany. By building one joint banking platform for all clients, the Deutsche Bank brand will remain focused on affluent, wealth management and commercial clients. Both franchises significantly improved their starting position in the last two years. Postbank, in particular, will offer a highly standardized and digitized banking service to retail clients. We expect our ongoing digital efforts not only to support efficiency goals, but also create an opportunity to gain market share among the Millennials client segment.

PCB intends to continue to execute its ongoing strategic initiatives including:

- Continued transformation of its private & commercial clients business, including cost reduction programs.
- The current branch rationalization efforts (additional 180 branches are scheduled to close in Germany by the end of 2017).
- Ongoing efforts to automate key processes and ongoing investment into digitalization.
- Investment in and expansion of the wealth management business.

In terms of products, PCB will focus on three key offerings: current account & transaction banking, lending products (which continue to serve as an anchor product) and distinct and tailor-made investment and insurance advice to our private clients. All of these come with a comprehensive digital offering as well as onsite branch advice to provide a full omni-channel banking experience.

A critical part of the PCB restructuring is the planned integration of Postbank. This integration is intended to more readily facilitate rationalization of central functions, improved efficiency across technology platforms and infrastructure and more efficient investment in areas including digitalization, distribution channels, and regulatory change.

We estimate that the planned restructuring in PCB will produce an estimated €0.9 billion of annual synergies by 2022. The total cost of the planned restructuring measures is estimated to be €1.9 billion, with restructuring and severance costs estimated to be approximately €1.0 billion by 2022 and the remainder related to IT and other costs. By the end of 2018 we expect to finalize the existing transformation programs, which we anticipate will result in cost reductions of €0.4 billion. PCB is targeting a cost income ratio of below 65 % following completion of this restructuring.

## Strategy in Deutsche Asset Management

Deutsche AM is a core business for us that has generated stable income and relatively higher returns on equity than many other businesses by earning recurring, fee-based revenues. It has a market-leading position as the largest retail asset manager in Germany and the number four retail asset manager in Europe, the number two position in Europe and number six position globally in passive/ETFs, all based on publicly disclosed assets under management. Deutsche AM also has a strong track record in the Alternatives business, particularly in infrastructure.

We believe that Deutsche AM's growth potential has been constrained by its full ownership by Deutsche Bank. Reputational issues in Deutsche Bank have affected Deutsche AM as did wider market concerns around our capital strength in late 2016. Additionally, resourcing limitations as we have pursued our restructuring efforts further constrained Deutsche AM.

Deutsche AM's growth prospects are rooted in core strengths of passive/ETFs and active multi-asset solutions as well as alternative investments, including real estate and infrastructure. We believe that allowing Deutsche AM to operate with more operational segregation can enhance its ability to pursue growth opportunities globally and gain market share.

We believe that Deutsche AM remains under-valued in the current corporate structure. We expect that a separate Deutsche AM operating company will permit its value to be enhanced over time while also positioning the business for future growth. An operationally segregated asset management business should also reduce the impact of any idiosyncratic impacts linked to the Deutsche Bank group, place the business on a more level competitive footing in the market, enhance its market profile, and make it easier for Deutsche AM to attract and retain talent through a separate compensation model with its own equity to fund and reward business growth.

We intend to sell a minority stake in Deutsche AM through an IPO. In preparation for this transaction, all asset management and supporting activity will be aligned to the Deutsche AM division. Going forward, the division is expected to have sufficient flexibility to better manage the resourcing and cost profile of the business and build a scale-efficient platform.

Deutsche AM has already completed its feasibility assessment of the separation alternatives and the target legal entity structure required to prepare the unit for an IPO. We intend to complete the IPO over the next 24 months, subject to market conditions.

## Our Corporate Divisions

Please see "Management Report: Operating and Financial Review: Deutsche Bank Group: Corporate Divisions" beginning on page 39 of the Annual Report 2016.

## The Competitive Environment

### Competitor Landscape

The economic environment stabilized or improved in many countries during the course of 2016, despite the heightened political uncertainty we experienced in this period, which in particular reflected the outcome of the UK referendum on EU membership and the U.S. presidential election. Central banks of the major economies played a key role in this recovery by continuing to support the global economy through expansionary monetary policy.

The Eurozone economy surpassed its average annual growth rate since the inception of the Euro in 2016, driven by consumption and investment. This supported import growth, even as exports were weighted down as a result of some adverse developments in global trade. The monetary policy stance of the European Central Bank ("ECB") continues to be highly expansionary, as reflected in negative interest rates and asset purchases ranging from €60 to 85 billion per month. In December 2016, the ECB extended this asset purchase program until the end of 2017, but with a reduction in purchases to a maximum volume of €60 billion per month, starting from April 2017. This implies a prolonged low interest rate environment in 2017, which creates a fundamental challenge for the European financial services sector.

The economic outlook for Europe as a whole also remains challenging. The upcoming elections and related political uncertainty may hold European growth back in the first six months of 2017. Assuming that further political risks do not

materialize, Eurozone GDP growth is expected to accelerate in the second half of 2017 owing to a stronger U.S. economy, the fiscal stimulus, and the expansionary monetary policy of the ECB. We believe, however, that Brexit remains a threat to EU stability. The UK is on course to trigger Article 50 in March, which may result in some tense UK-EU negotiations for 15 to 18 months with a deadline of 24 months from the date of invoking Article 50. The outcome of the negotiations, or the potential consequences of lack an agreement at the end of the 24 month period, remains highly uncertain. This is likely to create significant volatility over the course of 2017, which firms need to consider in their strategic and financial plans.

In the U.S., economic growth in 2016 was the weakest since 2009. While solid private consumption supported economic growth, weak oil prices were a drag on the energy sector, and destocking and net trade dampened growth. The outlook for 2017 has improved following the U.S. presidential election, owing to the likelihood of economic stimulus from a combination of tax cuts, deregulation and infrastructure investments. We believe such measures could increase growth strongly in the second half of 2017 and the first half of 2018. We expect two further rate hikes by the Federal Reserve in 2017, following the 25 basis points increase in December 2016. This is expected to create growth opportunities for banks operating in the U.S. Additionally, there is continued uncertainty around the potential for changes in the U.S. regulatory rules under the Dodd-Frank Act, which the U.S. government is seeking to review. Market expectations indicate a possibility of lighter-touch banking regulation, but this is still in a very nascent stage.

In emerging markets, growth remained weak in 2016, but reached what we believe to be its cyclically lowest levels. We believe the prospects for the emerging markets will improve selectively in 2017 due to stronger global growth and better asset valuations. The uncertainty around U.S. foreign policy will likely create a fundamental divergence among emerging markets, which stand to benefit or lose from the new geo-political alliances and associated trade flows. This will have an impact on the fortunes of financial services competitors who have sizeable footprints in emerging markets.

In China, the moderate growth slowdown continued in 2016, and the prospects for increased economic growth remain uncertain. This has made forecasting difficult. The Chinese government faces a policy dilemma in 2017. China may be able to achieve its 6.5 % growth target by implementing strong fiscal easing in 2017, but this would require further credit expansion, which could reignite the risk of a property bubble and capital outflows. The Chinese government will likely continue to tighten capital controls. On the monetary policy front, we do not expect a rate cut in 2017, but the People's Bank of China may loosen credit supply to mitigate the slowdown in property sector.

In Japan, we expect that the economic recovery to continue in 2017, driven by private consumption and the modest support from the announced tax reform proposals.

Against this backdrop, Deutsche Bank competes in the financial services sector with a spectrum of competitors, who include other universal banks, commercial banks, savings banks, public sector banks, brokers and dealers, investment banking firms, asset management firms, private banks, investment advisors, payments services providers and insurance companies. Some of the competitors are global like Deutsche Bank, while others have a regional, product or niche client footprint. Deutsche Bank competes on a number of factors, including the quality of client relationships, transaction execution, products and services, innovation, reputation and price.

The European banking industry continues to be challenged by a number of factors. On the macroeconomic front, weak economic growth and a low rates environment continues to keep the Net Interest Margin under pressure. At the micro-economic level, several European banks have recently had to focus on resolving legacy litigation and run complex restructurings, while delivering on sizeable regulatory requirements. While good progress has been made on all these fronts, this has also led to management distractions and the loss of market share to U.S. competitors.

The uncertainty around the outcome and timing of key regulations also continues to complicate this picture. Looking forward, we believe that the European banking sector will continue to be challenged by the ongoing macroeconomic and regulatory uncertainty in 2017. Strategic flexibility and disciplined execution would be critical to respond to these challenges.

In our home market, Germany, the retail banking market remains fragmented and our competitive environment is influenced by the three pillar system of private banks, public banks and cooperative banks. Competitive intensity has increased in recent years following some consolidation activity, particularly among public regional commercial banks (Landesbanken) and private banks, and increased activity levels from foreign players.

Looking at the wider banking ecosystem, the evolution of financial technology firms remains as much an opportunity as a challenge for banks. While we see the risk of banking disruption in select product areas, particularly the unregulated segments, there is also the opportunity to selectively partner with financial technology firms and leverage their solutions to become more efficient and/or develop differentiated delivery channels for the end clients.

## Regulatory Reform

In the past year, key areas of the post-financial crisis G20 regulatory agenda – strengthening international standards to create financially resilient institutions and ensuring resolvability of all banks – have been finalized while others continue to be developed.

### Overview

In 2016, elements of the core Basel 3 capital adequacy, liquidity and leverage requirements have been implemented or defined and are expected to be further implemented and defined in 2017 and beyond. In the European Union, the Capital Requirements Regulation and the Capital Requirements Directive (“CRR/CRD 4”), which implemented the Basel 3 framework, became effective on January 1, 2014, with some of the requirements, such as capital buffers, being phased in through 2019. In parallel, the Basel Committee on Banking Supervision (“BCBS”) made progress on finalizing the Basel 3 framework, including changes to Standardized Approaches for credit, operational and market risk, as well as advancing work on capital floors.

In the United States, the U.S. implementation of the Basel 3 framework took effect on January 1, 2015 for Deutsche Bank Trust Corporation (“DBTC”), our U.S. bank holding company subsidiary. From July 1, 2016, the U.S. rules implementing the Basel 3 framework and related capital planning and stress testing requirements became applicable to DB USA Corporation, our U.S. intermediate holding company, which holds all of our U.S. non-branch operations – that is, excluding Deutsche Bank AG New York Branch.

On November 23, 2016, following a routine review of the CRR/CRD 4 legislative package and other major legal acts in the area of banking regulation and supervision, the European Commission published a comprehensive package of reforms to further strengthen the resilience of European Union banks. If implemented, the proposals will amend, among other laws and regulations, CRR/CRD 4, in order to incorporate various remaining elements of the regulatory framework agreed within the Basel Committee and the Financial Stability Board (“FSB”) to refine and supplement Basel 3, such as more risk-sensitive capital requirements, in particular in the area of market risk, counterparty credit risk, and for exposures to central counterparties, methodologies that reflect more accurately the actual risks to which banks may be exposed, a binding leverage ratio, a binding net stable funding ratio, tighter regulation of large exposures, and a requirement for global systemically important banks (“G-SIBs”), such as Deutsche Bank, to hold certain minimum levels of capital and other instruments which are capable of bearing losses in resolution (“Total Loss-Absorbing Capacity” or “TLAC”). Other proposed measures are aimed at improving banks’ lending capacity to support the European Union economy and further facilitate the role of banks in achieving deeper and more liquid European Union capital markets. It is expected that most of the proposed amendments will start being applied in 2019 at the earliest.



## Regulation of the Securities and Derivatives Markets

2016 also saw progress in the regulation of the securities and derivatives markets. Given the global nature of these markets, a continuing key issue is the global cooperation and coordination of regulation and supervision. Important agreements were reached on cross-border harmonization, most notably the conclusion of an agreement between the European Commission (EC) and the U.S. Commodity Futures Trading Commission (CFTC) on the regulation of central counterparties (CCPs) that operate in the transatlantic market. At the same time, 2016 saw a major deviation from globally agreed approaches to the implementation of new rules, as the global timeline to commence margin requirements for non-cleared derivatives was not observed by key jurisdictions including the European Union, which deferred the application of the requirements to exchange initial and variation margins. By the first quarter of 2017, we expect commencement of margin requirements in the European Union and across the Asia Pacific, where most jurisdictions (save Japan) also deferred the application of their rules. Another key area of work at the global level in 2016 was efforts to develop more granular international standards relating to the recovery and resolution of CCPs – and the publication of a legislative proposal on this issue in the European Union.

## Structural Reform

In connection with the structural reform of banks, 2016 saw further regulatory developments. In Germany, work has continued to ensure that we will be compliant with the mid-2017 deadline for implementation of the German Act on the Separation of Risks and Recovery and Resolution Planning for Credit Institutions and Banking Groups (Trennbankengesetz, the “Separation Act”). The German Separation Act provides that deposit-taking banks and their affiliates are prohibited from engaging in proprietary trading that does not constitute a service for others, high-frequency trading (with the exception of market-making activities), and credit or guarantee transactions with hedge funds and comparable enterprises, unless such activities are transferred to a separate legal entity. At the European Union level, the EC published already in 2014 a proposal for a regulation on structural measures improving the resilience of European Union credit institutions. The proposal, if enacted, will impose measures similar to the Separation Act. The proposal is currently being negotiated at the European level and its ultimate impact on us will depend on the outcome of such negotiations.

## Risk, Capital Floors, Leverage Ratio; Stress Testing

In the U.S., DBTC also participated for the second time in the Federal Reserve Board’s Comprehensive Capital Adequacy Review (“CCAR”) process, an annual capital planning and stress testing exercise. At the international level, in January 2016 the BCBS published its final revised standards for market risk following the “Fundamental Review of the Trading Book”, or “FRTB”. The BCBS also published consultative documents on revising the standardized approach for credit risk, operational risk, constraining the use of internal models for credit risk, capital floors, and revisions to the leverage ratio. This package represents the finalization of the Basel 3 framework, and we expect final rules to be agreed and published in the first half of 2017. While the Basel FRTB standards are expected to enter into force in 2019, the timing on the remainder of the BCBS proposals is yet to be established. In July 2016, the BCBS published further changes to the capital standards for securitization exposures and in April 2016, the final standard to enhance Pillar 2 principles, and changes to the calculation of interest rate risk in the banking book (IRRBB). The changes contemplated by the FRTB and IRRBB are part of the EC proposals to change the CRR/CRD 4 legislative package published on November 23, 2016 (see above). This package furthermore includes proposals to implement the standardized approach for counterparty credit risk, Leverage Ratio, Large Exposures, Pillar III disclosures and the Net Stable Funding Ratio. We expect that the European Union and U.S. regulators will propose rules implementing the revisions to credit, operational risk and capital floors in 2018. These rules could well have phased-in implementation timelines. Full compliance with the European Union rules could be required at some point between 2020 and 2025. While the expected impacts on capital requirements of the proposed new standardized approaches have been factored into our strategy projections and objectives to the extent possible, their ultimate impact on us will depend on how they are implemented through binding legislation and regulation.

## Other Key Post-Crisis Reforms

Other key post-crisis reforms, while agreed in final standards and, in many cases, primary legislation, are still at an early stage of their phase-in or implementation, particularly where regulators have yet to develop detailed rules and regulations or determine their cross-border application. Thus, the impact of the implementation of such final standards and primary legislation on specific institutions remains uncertain. Examples of such post-crisis reforms include:

- **Legislation for OTC derivatives clearing, reporting and margining** has been enacted in the European Union and in the U.S. and some requirements are already in effect. While Canada, Japan and the U.S. complied with the globally agreed timeline to require large banks to exchange initial and variation margin for their uncleared trades from September 1, 2016, the European Union and jurisdictions across Asia-Pacific have deferred the application of such rules. We expect the cost for trading OTC derivatives across the market to increase as a result of the margin requirements as well as a rise in demand for high quality collateral. Margin rules will be phased in in Europe starting February 2017 and in most other deferred jurisdictions beginning in March 2017. While margin rules in the U.S. are already in effect for large banks, U.S. margin requirements will continue to be phased in for trades with other market participants through September 2020. Mandatory clearing of certain derivatives began in the EU and will continue to be phased in across 2017, and additional interest rate swaps will become subject to mandatory clearing in the U.S. in phases up to October 2018. The cross-border scope of certain requirements is still not fully resolved, with the CFTC proposing rules in October 2016 that would significantly expand the application of U.S. swap dealer registration requirements to swaps involving foreign subsidiaries of U.S. companies. However, the CFTC did extend relief from certain transaction-level requirements for swaps between non-U.S. swap dealers and non-U.S. persons involving U.S. personnel until September 30, 2017. Progress continued on the cross-border recognition of CCPs with the recognition of major U.S.-domiciled CCPs by the EU in 2016, and it is expected that additional jurisdictions will be found equivalent in 2017. The issue of equivalence of trading venues for swaps, important for trading obligations in the U.S., EU and elsewhere, was not resolved in 2016 and is expected to be an important cross-border agenda item in 2017. In addition, market liquidity in certain mandated products could be damaged by a bifurcation of markets along jurisdictional lines.
- **A framework for the recovery and resolution of central counterparties (CCPs)** is being developed at the international level. In 2016, the FSB and the Committee on Payments and Market Infrastructure (CPMI) and the International Organization of Securities Commissions (IOSCO) published joint consultations to ensure that CCPs are resilient to market stress and have certain default management processes in place. On November 28, 2016, the EC released proposals to implement this framework in the European Union with an entry into force envisaged together with the proposals published on November 23, 2016 (see "Overview"). One of the elements to be determined is the extent to which clearing members' resources can be called upon to support the recovery of a CCP in distress.
- **Updated European Union rules for market structure**, pre- and post-trade transparency for equities, fixed income, currency and commodities transactions and investor protection through the (revised) Markets in Financial Instruments Directive ("MiFID 2") and Regulation ("MiFIR", together "MiFID 2/MiFIR"). MiFID 2/MiFIR will also introduce a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized and liquid. Originally, most requirements introduced by MiFID 2/MiFIR were provided to be applicable to us starting on January 3, 2017. However, the application of MiFID 2/MiFIR has been formally delayed by one year to January 3, 2018. This notwithstanding, MiFID 2 needs to be transposed into national law by July 3, 2017. The updated MiFID 2/MiFIR will have a substantial impact on the way we trade with clients, transparency requirements, the willingness to deploy our risk capital and the way we distribute products. The final rules are now being published and 2017 will see considerable resources and effort dedicated to their implementation, much of which will depend on further implementation guidance to be published by EU authorities.

- **Capital planning and stress testing** will continue to be a focus in 2017. In 2016, DBTC submitted its second capital plan and related information to the Federal Reserve Board. Although the Federal Reserve Board objected to DBTC's capital plan on qualitative grounds, the Federal Reserve Board confirmed that DBTC's capital ratios would significantly exceed the quantitative minimum requirements even under the supervisor's hypothetical severely adverse economic stress scenario. In 2017, we will file an initial capital plan for our intermediate holding company, DB USA Corporation, but DB USA Corporation will not become subject to the full CCAR process until 2018. At the EU level, the European Banking Authority (EBA) decided not to carry out an EU-wide stress test in 2017. Rather, it will perform its regular annual transparency exercise. At the international level, the BCBS has started working on global standards for stress testing as part of its work-plan.
- **Recovery and resolution** – the major jurisdictions where we have significant group operations finalized implementation of the FSB's Key Attributes for Effective Resolution Regimes. In particular, the European Union Bank Recovery and Resolution Directive ("BRRD") was implemented in Germany and in the United Kingdom on January 1, 2015. The BRRD grants far-reaching powers to the competent resolution authorities to impose resolution measures upon failing banks. Such resolution measures may include a range of measures including the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders of a failing bank or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank's outstanding debt instruments, for example by way of deferral of payments or a reduction of the applicable interest rate or the temporary suspension of termination rights. Furthermore, the principal amount of a bank's capital instruments and certain eligible unsecured liabilities may be written down, including to zero, or converted into equity of the bank or a bridge institution (commonly referred to as "bail-in"). In addition, in January 2016, the European Union regulation (the "SRM Regulation") establishing the Single Resolution Mechanism ("SRM") and the Single Resolution Fund ("SRF") for banks domiciled in European Union member states participating in the Single Supervisory Mechanism ("SSM") became fully effective and created a harmonized mechanism for the application of the BRRD under responsibility of a single European resolution authority (referred to as the Single Resolution Board or "SRB"). With the aim of ensuring cross-border group resolution of globally active banks, the BRRD and the SRM Regulation also contain rules regarding the cooperation with non-European Union member states and recognition of non-European Union resolution proceedings. A proposed update to the BRRD was published on November 23, 2016, in order to address some operational and legal issues and to facilitate the implementation into EU law of global standards relating to the creation of a requirement to maintain a certain minimum loss-absorbing capacity (see below).
- **Loss-absorbing capacity and MREL** – following the FSB's final term-sheet on minimum total loss-absorbing capacity (TLAC) in November 2015, several jurisdictions have started to implement the TLAC standard in their regulatory frameworks. The TLAC standard is designed to ensure that G-SIBs, such as Deutsche Bank, maintain enough capital and long-term debt instruments that can be effectively bailed-in to absorb losses and recapitalize the bank. Our TLAC requirements will be determined by the EU implementation of the FSB's TLAC standard. A corresponding proposal was put forward by the EC on November 23, 2016. Also, the EC published proposals to update the BRRD and the SRM Regulation to reflect the introduction of TLAC (applicable to G-SIBs) and to amend the existing provisions (applicable to all EU banks) to maintain a minimum requirement for own funds and eligible liabilities ("MREL") in order to accommodate these to the proposed TLAC standard. In addition, whereas several EU Member States (including Germany by way of the German Resolution Mechanism Act) have amended their national creditor hierarchies in insolvency proceedings to facilitate the expected implementation of the TLAC standard, the EC proposed an amendment to the BRRD aimed at harmonizing the creditor hierarchies for all EU banks, while respecting the currently existing national insolvency laws of the EU Member States (including their recent changes, if any). We also expect that we may be subject to internal TLAC requirements in other jurisdictions. For example, on December 15, 2016, the U.S. Federal Reserve Board finalized rules implementing the TLAC standard in the United States, with internal TLAC requirements that would apply to the U.S. intermediate holding companies (such as ours) of non-U.S. G-SIBs. Compliance with these rules, including a minimum Long Term Debt requirement and clean holding company requirements is required by January 1, 2019.
- **Measures to further harmonize legislation in the European Union**, including revised European Union legislation on anti-money laundering, payment services and distribution of bank products, are also in the process of being developed.

Several regulatory proposals (including in connection with the implementation of existing laws) as discussed below are being contemplated which have not yet been finalized. Such proposals, depending on whether and in what form they become law, might have a material impact on our activities, balance sheet and profitability. To the extent possible, the impact of such proposals on us has been taken into account in our strategy projections and objectives. The proposals include:

- **Further structural changes**, as a result of the separation of certain business activities considered risky under the proposed European Union regulation on structural measures improving the resilience of European Union credit institutions or as a result of changes in the bank organization potentially required by the Single Resolution Board to ensure resolvability.
- **Additional direct costs as a result of financial sector specific tax and levies**, for example the European Union enhanced cooperation financial transaction tax, which is still under negotiation, and possible changes to contributions to the Single Resolution Fund or other resolution financing arrangements. A proposal to create a Eurozone deposit insurance system is also still under negotiation in the EU.
- **Additional regulation of asset management activities, with new recommendations to be proposed at the international level following consultations conducted in 2016**, such as the FSB's Proposed Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities of June 22, 2016, may also impact us, even though recommendations are expected to be consistent with existing requirements with which Deutsche Bank is complying.
- **Cyber-crime and cyber security**, which will continue to be a focus for policymakers in 2017, with draft rules published in the U.S. in December and other jurisdictions potentially following suit.
- **Further measures to harmonize banking regulation and supervision in the European Union** – such as initiatives by the EBA and the ECB to reduce existing options and discretions and harmonize national supervisory practices under European Union legislation in connection with the CRR/CRD 4 legislative package such as ECB's TRIM project to reduce variance in internal model outcomes.

## Climate change, environmental and social issues

Many governments, corporations and investors are extending their focus on climate change, environmental and social issues by enacting legislation, changing business models, setting business operational policies, and changing investment decision making. In 2016, the Paris Agreement, an outcome of Conference of the Parties 21 (COP 21), was officially approved. Among other things, the agreement aims at making financial flows consistent with a pathway to low greenhouse gas emissions and climate-resilient development. Implementation of the agreement will require massive financing over the next quarter century, supported by systemic reforms towards a low-carbon economy. Like other sectors, financial institutions are exposed to climate change. Accordingly, we seek to demonstrate how we contribute to the mitigation of climate-related risks and support low-carbon solutions in our core businesses.

Projects and products that contribute to climate change or have other negative environmental or social impacts, as well as their financing and other services for these projects, are being reviewed critically by investors, customers, environmental authorities, non-governmental organizations and others. At Deutsche Bank, such a review is conducted based on the Environmental and Social Risk Policy Framework, which we have published on our corporate website in 2016. Where our own assessment of these issues so indicates, we may abstain from participating in such projects.

In response to the economic, social and environmental challenges our planet faces, the United Nations ("UN") Sustainable Development Goals ("SDGs") define global priorities and aspirations for 2030. On January 1, 2016, the world's governments officially began implementation of this agenda at country level – the transformative plan of action based on 17 goals – to address urgent global challenges over the next 15 years. Private sector participation is needed to achieve the goals. We understand that the SDGs form a useful benchmark for corporations by defining and prioritizing the most urgent challenges for mankind to improve life worldwide. We expect that third-party views of us will increasingly depend on our contributions to the SDGs.

Additionally, we see rising public scrutiny for non-state actors to uphold human rights in their activities. We follow the UN Guiding Principles that financial institutions, and the wider private sector, have a responsibility to respect human rights wherever they operate. Amidst global economic instability, policy uncertainty and flux within the financial sector, we need to take a proactive approach to collectively review and update processes, as an ongoing and formal part of daily business.

## Regulation and Supervision

### Overview

Our operations throughout the world are regulated and supervised by the relevant authorities in each of the jurisdictions where we conduct business. Such regulation relates to licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. It affects the type and scope of the business we conduct in a country and how we structure specific operations. In reaction to the crisis in the financial markets, the regulatory environment has undergone and is still undergoing significant changes.

In December 2010, the Basel Committee on Banking Supervision ("Basel Committee") proposed revised minimum capital adequacy and liquidity standards that were significantly more stringent than the then-existing requirements. The set of comprehensive changes to the capital adequacy framework published by the Basel Committee, known as Basel 3, was implemented into European Union law by a legislative package referred to as "CRR/CRD 4". The CRR/CRD 4 legislative package includes a European Union regulation (which is referred to as the Capital Requirements Regulation or "CRR") which is directly enforceable as law in every member state of the European Union, and a European Union directive (which is referred to as the Capital Requirements Directive or "CRD 4"), which has been implemented into national (in our case, German) law. CRR/CRD 4 contains, among other things, detailed rules on regulatory banking capital, increased capital requirements and the introduction of additional capital buffers, tightened liquidity standards and a non-risk based leverage ratio. Most of the new rules came into effect on January 1, 2014, with some of the regulatory requirements being gradually phased in through January 1, 2019.

On November 23, 2016, following a routine review of the CRR/CRD 4 legislative package and other major legal acts in the area of banking regulation and supervision, the European Commission published a comprehensive package of reforms to further strengthen the resilience of European Union banks. If implemented, the proposals will amend, among others, CRR/CRD 4, in order to incorporate various remaining elements of the regulatory framework agreed within the Basel Committee and the Financial Stability Board ("FSB") to refine and supplement Basel 3. This includes more risk-sensitive capital requirements, in particular in the area of market risk, counterparty credit risk, and for exposures to central counterparties, methodologies that reflect more accurately the actual risks to which banks may be exposed, a binding leverage ratio, a binding net stable funding ratio, tighter regulation of large exposures, and a requirement for global systemically important banks ("G-SIBs"), such as us, to hold certain minimum levels of capital and other instruments which are capable of bearing losses in resolution ("Total Loss-Absorbing Capacity" or "TLAC"). Other proposed measures are aimed at improving banks' lending capacity to support the European Union economy and further facilitate the role of banks in achieving deeper and more liquid European Union capital markets. It is expected that most of the proposed amendments will start being applied in 2019 at the earliest.

In addition to the continued implementation and refinement of the CRR/CRD 4 legislative package, the European Union is pursuing a deeper integration and harmonization of banking regulation and supervision by establishing a banking union. Currently, the banking union consists of two pillars, the Single Supervisory Mechanism ("SSM") and the Single Resolution Mechanism ("SRM") for banks domiciled in the eurozone as well as for banks domiciled in other member states of the European Union that decide to participate in the SSM and the SRM. The banking union shall be complemented by a third pillar, a common European Deposit Insurance Scheme ("EDIS"), and is underpinned by an increasingly harmonized regulatory framework (the so-called "single rulebook") for financial services in the European Union. While the SSM and the SRM have already become effective, the EDIS is currently debated among European Union member states, based upon a proposal of the European Commission published on November 24, 2015.

Under the SSM, the European Central Bank ("ECB") is the primary supervisor of "significant" credit institutions (such as us) and their banking affiliates in the relevant member states. The competent national authorities supervise the remaining, "less significant" banks under the oversight of the ECB. The SSM is based on a European Union regulation (referred to as the "SSM Regulation") which is directly enforceable as law in every participating member state.

The SRM, which came into force on January 1, 2016, centralizes at a European level the key competences and resources for managing the failure (or likely failure) of any bank in the participating member states. Under the SRM, broad resolution powers with respect to banks domiciled in the participating member states are granted to the Single Resolution Board ("SRB") as the central European resolution authority and to the competent national resolution authorities. Resolution powers in particular include the power to reduce, including to zero, the nominal value of shares, or to cancel shares outright, and to write down certain eligible subordinated and unsubordinated unsecured liabilities, including to zero, or convert them into equity (commonly referred to as "bail-in"). The SRB is also in charge of the Single Resolution Fund ("SRF"), a pool of money financed by the banking sector which is set up to ensure that medium-term funding support is available for purposes of restructuring banks under the SRM. The SRM is based on a European Union regulation (referred to as the "SRM Regulation") which is directly enforceable as law in every participating member state and a European Union directive (referred to as the Bank Recovery and Resolution Directive or "BRRD") which has been implemented into national (in our case, German) law. The BRRD is also applicable to member states that do not participate in the SRM.

In February 2012, the European Commission established a High-level Expert Group chaired by Erkki Liikanen to examine possible reforms to the structure of the European Union's banking sector. In its final report of October 2, 2012 (the so-called "Liikanen report"), the expert group proposed, inter alia, a legal separation of certain particularly risky financial activities from deposit-taking banks within a banking group. Taking into account the recommendations of the Liikanen report, the German Federal Parliament, in 2013, adopted the German Act on the Separation of Risks and Recovery and Resolution Planning for Credit Institutions and Banking Groups (Trennbankengesetz, the "Separation Act"). Since July 1, 2016 (unless such period is extended, as it has been for us, to June 30, 2017), the Separation Act prohibits deposit-taking banks and their affiliates from engaging in certain activities unless these activities are transferred to a separate legal entity as further described below. Also based upon the Liikanen report, the European Commission published on January 29, 2014 a proposal which, if enacted, will impose measures similar to the Separation Act. The proposal is currently being negotiated at the European level and its ultimate impact on us will depend on the outcome of such negotiations.

Finally, as discussed below under "Regulation and Supervision in the United States", in July 2013, U.S. federal bank regulators issued final rules implementing many elements of the Basel 3 framework and other U.S. capital reforms.

Further changes continue to be under consideration in the jurisdictions in which we operate. While the extent and nature of these changes cannot be predicted now, they may include a further increase in regulatory oversight and enhanced prudential standards relating to capital, liquidity, leverage, employee compensation, conduct of business, limitations on activities and other aspects of our operations that may have a material effect on our business and the services and products that we will be able to offer.

The following sections present a description of the regulation and supervision of our business by the authorities in Germany, our home market, in the contracting states to the European Economic Area, and in the U.S., which we view as the most significant markets for us. Beyond these regions, local country regulations generally have limited impact on our operations that are unconnected with these countries.

## Regulation and Supervision in Germany – Basic Principles

Deutsche Bank AG is authorized to conduct banking business and to provide financial services as set forth in the German Banking Act (Kreditwesengesetz) and is subject to comprehensive regulation and supervision by the ECB, the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, "BaFin") and the Deutsche Bundesbank ("Bundesbank"), the German central bank.



As a “significant” credit institution within the meaning of the SSM Regulation, we are directly supervised by the ECB. With respect to us and other “significant” credit institutions, the ECB is the primary supervisor and is responsible for most tasks of prudential supervision, such as compliance with regulatory requirements set forth in CRR/CRD 4 concerning own funds, large exposure limits, leverage, liquidity, securitizations, corporate governance, business organization and risk management requirements. The ECB carries out its supervisory functions through a Joint Supervisory Team (“JST”) established for Deutsche Bank Group. The JST is led by the ECB and comprises staff from the ECB and national supervisory authorities, including the BaFin and the Bundesbank. In addition, and regardless of whether an institution is significant or not, the ECB is responsible for issuing new licenses to credit institutions and for assessing the acquisition and increase of significant participations (also referred to as qualifying holdings) in credit institutions established in those member states of the European Union that participate in the SSM and where notification of such changes must be filed.

The BaFin is our principal supervisor for regulatory matters with respect to which we are not supervised by the ECB. These include the rules on business conduct in the securities markets, in particular when providing securities services to clients, the regulation of anti-money laundering, terrorist financing and payment services, as well as certain special areas of bank regulation, such as those related to the issuance of covered bonds (Pfandbriefe) and the supervision of German home loan banks (Bausparkassen). Generally, the BaFin also supervises us with respect to those requirements under the German Banking Act that are not based upon European law. The Bundesbank supports the BaFin and the ECB and closely cooperates with them. The cooperation includes the ongoing review and evaluation of reports submitted by us and of our audit reports as well as assessments of the adequacy of our capital base and risk management systems. The ECB, the BaFin and the Bundesbank receive comprehensive information from us in order to monitor our compliance with applicable legal requirements and to obtain information on our financial condition. Generally, supervision by the ECB (together with the BaFin and the Bundesbank) applies on an unconsolidated basis (company only) and on a consolidated basis (the company and the entities consolidated with it for German regulatory purposes) (see “Consolidated Regulation and Supervision” below). However, banks forming part of a consolidated group may be allowed to waive the application of specific regulatory requirements on an unconsolidated basis if certain conditions are met. As of December 31, 2016, Deutsche Bank AG was allowed to waive the application of provisions on own funds (Part Two CRR), capital requirements (Part Three CRR), large exposures (Part Four CRR), exposures to transferred credit risk (Part Five CRR), leverage (Part Seven CRR) and disclosure by institutions (Part Eight CRR) as well as certain risk management requirements on a stand-alone basis.

The ECB and the BaFin have extensive supervisory and investigatory powers, including the ability to issue requests for information, to conduct regulatory investigations and on-site inspections, to impose monetary and other sanctions, to request the replacement of members of the bank’s management or supervisory board, or to repeal the license of a bank.

## Banking Legislation

The German Banking Act and the CRR contain the principal rules for German banks, including the requirements for a banking license, and regulate the business activities of German banks. In particular, the German Banking Act requires that an enterprise that engages in one or more of the activities defined in the German Banking Act as “banking business” or “financial services” in Germany must be licensed as a “credit institution” (Kreditinstitut) or “financial services institution” (Finanzdienstleistungsinstitut), as the case may be. Deutsche Bank AG is licensed as a credit institution.

Significant parts of the regulatory framework for banks in the European Union are governed by the CRR. The CRR primarily sets forth the requirements applicable to us relating to regulatory capital, risk-based capital adequacy, monitoring and control of large exposures, consolidated supervision, leverage, liquidity and public disclosure. Certain other requirements applicable to us, including those with respect to capital buffers, organizational and risk management requirements, are set forth in the German Banking Act and other German laws, partly implementing European Union directives such as CRD 4.

Furthermore, European banking regulation is to a large extent based on legislative and administrative acts at the European level with the purpose of implementing or complementing the rules contained in the so-called “basic acts” and to ensure a consistent application of European Union law by the relevant national supervisory authorities (so-called level 2 and 3 measures). Among these acts are delegated and implementing regulations enacted by the European Commission (level 2) as well as regulatory and technical standards, guidelines, recommendations and questions and answers (Q&A) developed and issued by the European Supervisory Authorities (“ESAs”), in particular the European Banking Authority (“EBA”) and the European Securities and Markets Authority (“ESMA”) (level 3).

## Securities Trading Legislation

Under the German Securities Trading Act (Wertpapierhandelsgesetz), the BaFin regulates and supervises securities trading, including the provision of securities services, in Germany. The German Securities Trading Act contains, among other things, disclosure and transparency rules for issuers of securities that are listed on a German exchange and organizational requirements as well as rules of conduct which apply to all businesses that provide securities services. Securities services include, in particular, the purchase and sale of securities or derivatives for others and the intermediation of transactions in securities or derivatives and investment advice. The BaFin has broad powers to investigate businesses providing securities services to monitor their compliance with the organizational requirements, rules of conduct and reporting requirements. In addition, the German Securities Trading Act requires an independent auditor to perform an annual audit of the securities services provider’s compliance with its obligations under the German Securities Trading Act.

On July 3, 2016, a new legal regime on market abuse entered into force consisting of a directly applicable European Union regulation on market abuse (“Market Abuse Regulation” or “MAR”) and a European Union directive on criminal sanctions for market abuse (“MAD”) which has been implemented into national (in our case, German) law. The MAR establishes a common European Union framework for, inter alia, insider dealing, the public disclosure of inside information, market manipulation, and managers’ transactions. The German Securities Trading Act, which had contained rules on market abuse prior to the entering into force of the MAR, continues to supplement the MAR and, e.g., provides for sanctions in case of violations of the MAR.

The European Union has enacted several legislative proposals which result in further regulation of securities trading and the trading in derivatives in particular. Notably, the European Union adopted the European Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (“EMIR”), which became effective on August 16, 2012. EMIR introduced requirements for standardized over-the-counter derivatives to be centrally cleared and derivative transactions to be reported to trade repositories. EMIR also includes additional capital and margin requirements for non-cleared trades. While a number of the compliance requirements introduced by EMIR have come into effect, the ESAs (mainly the ESMA) are still in the process of finalizing certain implementing rules mandated by EMIR. Further legislative measures such as the overhauled Markets in Financial Instruments Directive (“MiFID 2”) and the new Markets in Financial Instruments Regulation (“MiFIR”) and corresponding delegated legislation provide for, among other things, greater regulation and oversight by covering additional markets and instruments, extension of pre- and post-trade transparency rules from equities to all financial instruments, greater restrictions on operating trading platforms, and greater sanctioning powers. MiFID 2/MiFIR, which will be applicable as from January 3, 2018, will also introduce a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized, and new investor protection rules which will significantly impact the way we distribute products. MiFID 2 will need to be implemented into national law, whereas MiFIR is a directly applicable European Union regulation.

Furthermore, European securities regulation is to a large extent based on technical standards, guidelines and recommendations developed by the ESMA.

## Capital Adequacy Requirements

### Minimum Capital Adequacy Requirements (Pillar 1)

The minimum capital adequacy requirements for banks are primarily set forth in the CRR. The CRR requires German banks to maintain an adequate level of regulatory capital in relation to their risk positions. Risk positions (commonly referred to as “risk-weighted assets”) include credit risks, market risks and operational risks (including, among other things, risks related to certain external factors, as well as to technical errors and errors of employees). The most important type of capital for compliance with the capital requirements under the CRR (see below) is “Common Equity Tier 1” capital. Common Equity Tier 1 capital primarily consists of share capital, retained earnings and other reserves, subject to certain regulatory adjustments. Another component of regulatory capital is “Additional Tier 1” capital which includes, for example, certain unsecured subordinated perpetual capital instruments and related share premium accounts. Generally, the terms and conditions of all instruments recognized as Additional Tier 1 capital must require that the principal amount of the instruments will be written down, or converted into Common Equity Tier 1 capital when the Common Equity Tier 1 capital ratio of the financial institution falls below a minimum of 5.125 % (or such higher level as the issuing bank may determine), although regulators may require an earlier conversion, for example for stress-testing purposes. Common Equity Tier 1 capital and Additional Tier 1 capital together constitute “Tier 1” capital. Tier 1 capital requirements are aimed at ensuring the ability to absorb losses on a “going concern” basis. The other type of regulatory capital is “Tier 2” capital which generally consists of long-term subordinated debt instruments and must be able to absorb losses on a “gone concern” basis. Tier 1 capital and Tier 2 capital together constitute “own funds”. Pursuant to the CRR, hybrid capital instruments that qualified as Tier 1 or Tier 2 capital under what is known as Basel 2.5 cease to qualify as such and will be gradually phased out through the end of 2021. Tier 3 capital is no longer recognized as own funds under the CRR. In addition, the CRR tightened the regime for certain deductions from capital.

Under the CRR, banks are required to maintain a minimum ratio of Tier 1 capital to risk-weighted assets of 6 % and a minimum ratio of Common Equity Tier 1 capital to risk-weighted assets of 4.5 %. The minimum total capital ratio of own funds to risk-weighted assets is 8 %.

### Capital Buffers

The German Banking Act also requires banks to build up a mandatory capital conservation buffer (Common Equity Tier 1 capital amounting to 2.5 % of risk-weighted assets), and authorizes the BaFin to set a domestic counter-cyclical capital buffer for Germany (Common Equity Tier 1 capital of generally 0 % to 2.5 % of risk-weighted assets, or more in particular circumstances) during periods of high credit growth. In order to comply with the countercyclical capital buffer requirement, banks must calculate their institution-specific countercyclical capital buffer as the weighted average of the countercyclical capital buffers that apply to them in the jurisdictions where their relevant credit exposures are located. Accordingly, the total countercyclical buffer requirement (if any) that we need to comply with also depends on the corresponding buffer requirements in other jurisdictions. In addition, the BaFin may require banks to build up a systemic risk buffer (Common Equity Tier 1 capital of between 1 % and 3 % of risk-weighted assets for all exposures and – in exceptional cases – up to 5 % for domestic and third-country exposures) to prevent and mitigate long term non-cyclical systemic or macro-prudential risks not otherwise covered by CRR/CRD 4. G-SIBs (such as us) are subject to an additional capital buffer (Common Equity Tier 1 capital of between 1 % and 3.5 % of risk-weighted assets), which the BaFin determines for German banks based on a scoring system measuring the bank's global systemic importance. The BaFin can also determine a capital buffer of Common Equity Tier 1 capital of up to 2 % of risk-weighted assets for other systemically important banks (so-called O-SIBs, such as us) in Germany, based on criteria measuring, among others, the bank's importance for the economy in Germany and the European Economic Area. The provisions in the German Banking Act on capital buffers are generally being phased in gradually through January 1, 2019. The systemic risk buffer, the buffers for G-SIBs and the buffer for O-SIBs are generally not cumulative; only the highest of these buffers applies. If a bank fails to build up the required capital buffers, it will be subject to restrictions on the pay-out of dividends, share buybacks and discretionary compensation payments. Also, the ECB may require banks to maintain higher capital buffers than those required by the BaFin.

The Basel 3 framework also proposes a non-risk based leverage ratio as a complement to the risk-based capital requirements. While the CRR, as currently in effect, does not require banks to comply with a specific leverage ratio, banks are required to report and publish their leverage ratios for a future assessment and calibration of the leverage ratio. Among the package of reforms published by the European Commission on November 23, 2016 (see "Overview" above) is a proposal to introduce a binding minimum leverage ratio requirement of 3 % of Tier 1 capital into the CRR.

## Supervisory Review and Evaluation Process or "SREP" (Pillar 2)

Furthermore, the ECB may impose capital requirements on individual significant credit institutions within the SSM which are more stringent than the statutory minimum requirements set forth in the CRR, the German Banking Act or the related regulations. In this context, in December 2014, the EBA published its final guidelines for common procedures and methodologies for the supervisory review and evaluation process ("SREP"). In connection with the SREP, competent supervisory authorities, including the ECB, are required to review the arrangements, strategies, processes and mechanisms of supervised banks on a regular basis, in order to evaluate risks to which they are or might be exposed, risks they could pose to the financial system, and risks revealed by stress testing, taking into account the nature, scale and complexity of their activities. At the end of the process, the competent supervisory authority takes an SREP decision in relation to each relevant bank setting out, depending on the outcome of the SREP, specific capital and liquidity requirements for each affected bank. Any additional bank-specific capital requirements resulting from the SREP are referred to as "Pillar 2" requirements and must be fulfilled in addition to the statutory minimum capital and buffer requirements. The "Pillar 2" requirement must be met with Common Equity Tier 1 capital. Also following the SREP, the ECB may communicate to individual banks an expectation to hold a further "Pillar 2" Common Equity Tier 1 capital add-on, the so-called "Pillar 2" guidance. The ECB has stated that it expects banks to meet the "Pillar 2" guidance although it is not legally binding and failure to meet the "Pillar 2" guidance does not automatically trigger legal action. Finally, also based on the outcome of the SREP, the competent supervisory authority may take a range of other measures in response to shortcomings in a bank's governance and risk management processes as well as its capital or liquidity position, such as prohibiting dividend payments to shareholders or distributions to holders of regulatory capital instruments.

For details of Deutsche Bank's regulatory capital, see "Management Report: Risk Report: Risk and Capital Performance" on pages 136 through 198 of our Annual Report 2016.

## Limitations on Large Exposures

The CRR also contains the primary restrictions on large exposures, which limit a bank's concentration of credit risks. The German Banking Act and the Large Exposure Regulation (Großkredit- und Millionenkreditverordnung) supplement the CRR. For example, the Large Exposure Regulation sets forth exemptions (in addition to those contained in the CRR) from the applicability of limits to large exposures. Under the CRR, our exposure to a customer (and any customers affiliated with it) is deemed to be a "large exposure" when the value of such exposure is equal to or exceeds 10 % of our "eligible regulatory capital". All exposures to a single customer (and customers affiliated with it) are aggregated for these purposes. In general, no large exposure may exceed 25 % of our eligible regulatory capital. "Eligible regulatory capital" for this purpose means the sum of Tier 1 capital and Tier 2 capital which may not exceed one third of Tier 1 capital. If the customer is a credit institution or investment firm, the exposure is limited to the higher of 25 % of our eligible regulatory capital or €150 million. Competent authorities may set a lower limit than €150 million. Among the package of reforms published by the European Commission on November 23, 2016 (see "Overview" above), is a proposal to restrict a bank's exposures to a single counterparty to 25 % of its Tier 1 capital (instead of 25 % of the sum of its Tier 1 and Tier 2 capital) and further limit exposures between banks designated as G-SIBs (such as us) to 15 % of Tier 1 capital.

Under certain conditions, the limits to large exposures may be exceeded by the exposures on the bank's trading book. In this case, the bank must meet an additional own funds requirement.

## Consolidated Regulation and Supervision

Deutsche Bank AG, headquartered in Frankfurt am Main, Germany, is the parent institution of the Deutsche Bank Group of institutions (the “regulatory group”), which is subject to the supervisory provisions of the German Banking Act and the CRR. Generally, a regulatory group of institutions (Institutsgruppe) consists of an institution (meaning a credit institution or an investment firm within the meaning of the CRR that is responsible for the consolidation of the group) as the parent company, and all other institutions, financial institutions (comprising inter alia financial holding companies, payment institutions and asset management companies) and ancillary services undertakings that are the parent company’s subsidiaries as defined in the CRR. The provisions of the German Banking Act and the CRR on consolidated supervision require that a regulatory group of institutions taken as a whole complies with the requirements on capital adequacy, limitations on large exposures as well as organizational, risk management and other prudential requirements under the CRR and the German Banking Act. The ECB is responsible for our supervision on a consolidated basis.

Financial groups which offer services and products in various financial sectors (banking and securities business, insurance and reinsurance business) are subject to supplementary supervision as a financial conglomerate (Finanzkonglomerat) once certain thresholds have been exceeded. Supervision of financial conglomerates comprises requirements regarding own funds, risk concentration, risk management, transactions within the conglomerate and organizational matters. In November 2007, the BaFin designated Deutsche Bank Group as a financial conglomerate. Therefore, we are required to comply with and report capital adequacy requirements and risk concentrations also on a conglomerate level. In addition, we are required to report significant conglomerate internal transactions as well as significant risk concentrations. Our supervision at the conglomerate level is coordinated by the ECB. Following a reorganization of the insurance sector within our financial conglomerate in 2016, including a sale of the most material insurance entity Abbey Life Assurance Company Limited with effect from December 30, 2016, we have initiated a re-assessment of our status as a financial conglomerate.

## Liquidity Requirements

The CRR introduced a new liquidity coverage requirement intended to ensure that banks have an adequate stock of unencumbered high quality liquid assets that can be easily and quickly converted into cash to meet their liquidity needs for a 30-calendar day liquidity stress scenario. The required liquidity coverage ratio (“LCR”) is calculated as the ratio of a bank’s liquidity buffer to its net liquidity outflows. Also, banks must regularly report the composition of the liquid assets in their liquidity buffer to their competent authorities. The liquidity coverage requirement is being gradually phased in through January 1, 2018, with a minimum required level of liquidity of 80 % in 2017 which will be increased to 100 % in 2018. Details on the liquidity coverage requirement have been set forth by the European Commission in implementing legislation, which became applicable on October 1, 2015. The ECB supervises our compliance with the liquidity coverage requirement under the CRR and the corresponding implementing legislation.

In addition, Basel 3 contains a proposal to introduce a net stable funding ratio (“NSFR”) to reduce medium- to long-term funding risks by requiring banks to fund their activities with sufficiently stable sources of funding over a one-year period. The CRR contains interim reporting requirements on stable funding but does not yet include substantive provisions relating to the NSFR. Among the package of reforms published by the European Commission on November 23, 2016 (see “Overview” above) is a proposal to introduce a binding NSFR into the CRR. According to this proposal, the NSFR is defined as the ratio of a bank’s available stable funding relative to the amount of required stable funding over a one-year period. According to the proposal, banks must maintain an NSFR of at least 100 %.

National liquidity requirements under the German Banking Act and the German Liquidity Regulation (Liquiditätsverordnung) will continue to be applicable to us until the full introduction of the liquidity coverage requirement at the European level on January 1, 2018. The German Banking Act generally requires banks and certain financial services

institutions to invest their funds so as to maintain adequate liquidity at all times. The German Liquidity Regulation provides for minimum liquidity requirements based upon a comparison of the remaining terms of certain assets and liabilities. It requires maintenance of a ratio (Liquiditätskennzahl or "liquidity ratio") of liquid assets to liquidity reductions expected during the month following the date on which the ratio is determined of at least one. The German Liquidity Regulation also allows banks and financial services institutions subject to it to use their own methodology and procedures to measure and manage liquidity risk if the BaFin has approved such methodology and procedures. The liquidity ratio (and estimated liquidity ratios for the next eleven months) must be reported to the Bundesbank on a monthly basis.

The ECB and the BaFin may impose on individual banks liquidity requirements which are more stringent than the general statutory requirements if such bank's continuous liquidity would otherwise not be ensured.

## Financial Statements and Audits

As required by the German Commercial Code (Handelsgesetzbuch), we prepare our non-consolidated financial statements in accordance with German GAAP. Our consolidated financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS"), and our compliance with capital adequacy requirements and large exposure limits is determined solely based upon such consolidated financial statements.

Under German law, we are required to be audited annually by a certified public accountant (Wirtschaftsprüfer). The Bank's auditor is appointed each year at the annual shareholders' meeting. However, the supervisory board mandates the auditor and supervises the audit. The BaFin must be informed of and may reject the auditor's appointment. The German Banking Act requires that a bank's auditor inform the BaFin of any facts that come to the auditor's attention which would lead it to refuse to certify or to limit its certification of the bank's annual financial statements or which would adversely affect the bank's financial position. The auditor is also required to notify the BaFin in the event of a material breach by management of the articles of association or of any other applicable law. The auditor is required to prepare a detailed and comprehensive annual audit report (Prüfungsbericht) for submission to the bank's supervisory board, the BaFin and the Bundesbank. The BaFin and the Bundesbank share their information with the ECB.

## Investigative and Enforcement Powers

### Investigations and Supervisory Audits

The ECB and the BaFin may conduct audits of banks on a random basis, as well as for cause. In particular, the ECB may audit our compliance with requirements with respect to which it supervises us, such as those set forth in CRR/CRD 4. The BaFin may also decide to audit our compliance with requirements with respect to which it supervises us, such as those relating to business conduct in the securities markets and the regulation of anti-money laundering, to counter terrorist financing and payment services, as well as certain special areas of bank regulation, such as those related to the issuance of covered bonds (Pfandbriefe) and the supervision of German home loan banks (Bausparkassen).

The ECB as well as the BaFin may require a bank to furnish information and documents in order to ensure that the bank is complying with applicable bank supervisory laws. The ECB and the BaFin may conduct investigations without having to state a reason therefore. Such investigations may also take place at a foreign entity that is part of a bank's group for regulatory purposes. Investigations of foreign entities are limited to the extent that the law of the jurisdiction where the entity is located restricts such investigations.

The ECB and the BaFin may attend meetings of a bank's supervisory board and shareholders meetings. They also have the authority to require that such meetings be convened.



## Supervisory and Enforcement Powers

The ECB has a wide range of enforcement powers in the event it discovers any irregularities concerning adherence to requirements with respect to which it supervises us. It may, for example,

- impose additional own funds or liquidity requirements in excess of statutory minimum requirements;
- restrict or limit a bank's business;
- require the cessation of activities to reduce risk;
- require a bank to use net profits to strengthen its own funds;
- restrict or prohibit dividend payments to shareholders or distributions to holders of Additional Tier 1 instruments; or
- remove the members of the bank's management or supervisory board members from office.

To the extent necessary to carry out the tasks granted to it, the ECB may also require national supervisory authorities to make use of their powers under national law. If these measures are inadequate, the ECB may revoke the bank's license. Furthermore, the ECB has the power to impose administrative penalties in case of breaches of directly applicable European Union laws, such as the CRR, or of applicable ECB regulations and decisions. Penalties imposed by the ECB may amount to up to twice the amount of profits gained or losses avoided because of the violation, or up to 10 % of the total annual turnover of the relevant entity in the preceding business year or such other amounts as may be provided for in relevant European Union law. In addition, where necessary to carry out the tasks granted to it, the ECB may also require that the BaFin initiate proceedings to ensure that appropriate penalties are imposed on the affected bank.

The BaFin also retains a wide range of enforcement powers. As discussed above, it may take action if instructed by the ECB in connection with supervisory tasks granted to the ECB. With respect to supervisory tasks remaining with the BaFin, the BaFin may take action upon its own initiative. In particular, if a bank is in danger of defaulting on its obligations to creditors, the BaFin may take emergency measures to avert default. These emergency measures may include:

- issuing instructions relating to the management of the bank;
- prohibiting the acceptance of deposits and the extension of credit;
- prohibiting or restricting the bank's managers from carrying on their functions;
- prohibiting payments and disposals of assets;
- closing the bank's customer services; and
- prohibiting the bank from accepting any payments other than payments of debts owed to the bank.

The BaFin may also impose administrative pecuniary penalties under the German Banking Act and other German laws. Penalties under the German Banking Act may amount to generally up to €5 million or, in certain cases, €20 million, depending of the type of offense. If the economic benefit derived from the offense is higher, the BaFin may impose penalties of up to 10 % of the net turnover of the preceding business year or twice the amount of the economic benefit derived from the violation.

Finally, violations of the German Banking Act may result in criminal penalties against the members of the Management Board or senior management.

## Recovery and Resolution Planning, Restructuring Powers

Germany participates in the SRM, which centralizes at a European level the key competences and resources for managing the failure of banks in member states of the European Union participating in the banking union. The SRM is based on the SRM Regulation and the BRRD, which was implemented in Germany through the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, "SAG"). In addition, the German Resolution Mechanism Act (Abwicklungsmechanismusgesetz) adapted German bank resolution laws to the SRM. The SRM Regulation and the German Recovery and Resolution Act require the preparation of recovery and resolution plans for banks and grant broad powers to public authorities to intervene in a bank which is failing or likely to fail. For a bank directly supervised by the ECB, such as us, the SRB draws up the resolution plan, assesses the bank's resolvability and may require legal and operational changes to the bank's structure to ensure its resolvability.

In the event that a bank is failing or likely to fail and certain other conditions are met, in particular where there is no reasonable prospect that any alternative private sector measures would prevent the failure and resolution measures are necessary in the public interest, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (in Germany: the Federal Agency for Financial Market Stabilization, "FMSA").

Resolution measures that could be imposed upon a failing bank may include a range of measures including the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders of a failing bank or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank's outstanding debt instruments, for example by way of deferral of payments or a reduction of the applicable interest rate. Furthermore, certain eligible unsecured liabilities, in particular certain senior unsecured debt instruments specified by the German Resolution Act, as amended by the German Resolution Mechanism Act, may be written down, including to zero, or converted into equity (commonly referred to as "bail-in"). In addition, the SRB is charged with administering the SRF, a pool of money which is financed by bank levies raised at national level and is intended to reach a target level of 1 % of insured deposits of all banks in member states participating in the SRM by the end of 2023. It will be used for resolving failing banks after other options, such as the bail-in tool, have been exhausted. In line with the German Recovery and Resolution Act, public financial support for a failing bank should only be used as a last resort, after having assessed and exploited, to the maximum extent possible, resolution measures set forth in the SRM Regulation and the German Recovery and Resolution Act, including the bail-in tool.

To prevent banks from structuring their liabilities in a way that impedes the effectiveness of the bail-in or other resolution tools, the SRM Regulation and the German Recovery and Resolution Act, implementing the BRRD, introduced a requirement for banks to meet minimum requirements for own funds and eligible liabilities ("MREL"). The MREL is to be determined by the competent resolution authorities for each supervised bank individually. MREL applies to all banks across the European Union. In addition, on November 9, 2015, the FSB published a similar new standard applicable to all G-SIBs (and not only European G-SIBs), such as us, to meet a new minimum requirement for TLAC as from January 1, 2019. The FSB has proposed that competent authorities determine a firm-specific minimum TLAC requirement for each G-SIB of at least 16 % of risk-weighted assets as from January 1, 2019, rising to at least 18 % from January 1, 2022. In addition, the FSB has proposed that minimum TLAC must be at least 6 % of the Basel 3 leverage ratio denominator from January 1, 2019, rising to at least 6.75 % of the Basel 3 leverage ratio denominator from January 1, 2022. Among the package of reforms published by the European Commission on November 23, 2016 (see "Overview" above) is a proposal to implement the FSB's TLAC proposal in the European Union and harmonize it with MREL through amendments to CRR/CRD 4, the BRRD and the SRM Regulation. The ultimate impact of any TLAC requirements on us will depend on how the proposals will be implemented into binding legislation.

Furthermore, under the German Resolution Act, as amended by the German Resolution Mechanism Act, obligations of banks resulting from specifically defined senior unsecured debt instruments issued by them (such as bank bonds) would, in an insolvency proceeding of the issuing bank, rank junior to all other outstanding unsecured unsubordinated obligations of such bank (such as certain structured products), without technically constituting subordinated debt, but continue to rank in priority to contractually or statutorily subordinated debt instruments. Correspondingly, such senior unsecured debt instruments, in a resolution proceeding, would be bailed in prior to any other unsubordinated debt, but only after contractually or otherwise subordinated debt. This order of priority applies to insolvency proceedings commenced, and resolution measures imposed upon the relevant bank, on or after January 1, 2017, and applies to all instruments then outstanding. Among the package of reforms published by the European Commission on November 23, 2016 (see “Overview” above) is a proposal to harmonize national rules on the priority of claims of banks creditors in the European Union by requiring member states to create a new asset class of “non-preferred” senior debt that should be affected by a bail-in during resolution after other regulatory capital instruments, but prior to other unsubordinated liabilities. The ultimate impact on us will depend on how the proposal will be implemented into binding legislation.

Finally, in addition to resolution proceedings under the SRM and the German Recovery and Resolution Act, a German bank can become subject to a stabilization plan or reorganization proceedings under the German Credit Institution Reorganization Act (Gesetz zur Reorganisation von Kreditinstituten).

## Separation of Proprietary Trading Activities by Universal Banks

The German Separation Act provides that deposit-taking banks and their affiliates are prohibited from engaging in proprietary trading that does not constitute a service for others, high-frequency trading (with the exception of market-making activities), and credit or guarantee transactions with hedge funds and comparable enterprises, unless such activities are transferred to a separate legal entity (referred to as a financial trading institution (Finanzhandelsinstitut)). The separation requirement applies if certain thresholds are exceeded, which is the case for us. In addition, the German Separation Act authorizes the BaFin, since July 1, 2016, to prohibit the deposit-taking bank and its affiliates, on a case-by-case basis, from engaging in market-making and other activities that are comparable to the activities prohibited by law, if these activities may put the solvency of the deposit-taking bank or any of its affiliates at risk. In the event that the BaFin orders such a prohibition, the respective activities must be discontinued or transferred to a separate financial trading institution. The financial trading institution may be established in the form of an investment firm or a bank and may be part of the same group as the deposit-taking bank. However, it must be economically and organizationally independent from the deposit-taking bank and its (other) affiliates, and it has to comply with enhanced risk management requirements. The prohibition for deposit-taking banks and their affiliates to conduct activities associated with increased risks became effective on July 1, 2015, with a further transitional period of twelve months to accomplish the separation requirement, unless the BaFin extends this period. For Deutsche Bank Group, the period to cease or transfer activities concerned was extended by the BaFin until June 30, 2017 (see “Overview” above). The implementation of the German Separation Act will require ongoing surveillance of the activities of banks within the scope of the legislation and assessment of compliance and control frameworks to ensure that no prohibited activities are conducted. We are currently in the process of implementing the necessary controls to be compliant with the law as of July 1, 2017.

On January 29, 2014, the European Commission published a proposal for a regulation on structural measures improving the resilience of European Union credit institutions (referred to as “Proposed Regulation”), which if enacted, will impose measures similar to the German Separation Act. The Proposed Regulation would apply to large banks which are either identified as G-SIBs (such as us), or whose total assets and trading activities exceed certain thresholds (which we exceed). If the Proposed Regulation were enacted as proposed, it would, inter alia, ban proprietary trading in financial instruments and commodities. On June 19, 2015, the Council of the European Union agreed its position at first reading on the Proposed Regulation, which contains significant amendments to the Proposed Regulation. If adopted, the Proposed Regulation might overrule certain requirements set out in the German Separation Act at the national level. The ultimate impact on us of the Proposed Regulation will depend on the content of the final version thereof.

## Remuneration Rules

Under the German Banking Act and the German Credit Institution Remuneration Regulation (Institutsvergütungsverordnung), we are subject to certain restrictions on the remuneration we pay our management board members and employees. The remuneration rules have been revised on the basis of the CRR/CRD 4 framework which imposes a cap on bonuses. Pursuant to this cap, the variable remuneration for management board members and employees must not exceed the fixed remuneration. The variable remuneration may be increased to twice the management board member's or employee's fixed remuneration if expressly approved by the shareholders' meeting with the required majority. In addition, we are obliged to identify individuals who have a material impact on our risk profile ("material risk takers"). Such material risk takers are subject to additional rules, such as the requirement that between 40 % and 60 % of the variable remuneration granted to them must be on a deferred basis. The deferral period must be at least three to five years. Also at least 50 % of the variable remuneration for material risk takers must be paid in the form of instruments that adequately reflect the credit quality of the bank, such as shares or instruments linked to shares. Finally, we are required to comply with certain disclosure requirements relating to the remuneration we pay to, and our remuneration principles in respect of, our material risk takers and other affected employees.

For details of Deutsche Bank's remuneration system, see "Management Report: Compensation Report on pages 199 through 249 of our Annual Report 2016.

## Deposit Protection and Investor Compensation in Germany

### The Deposit Protection Act and the Investor Compensation Act

The German Deposit Protection Act (Einlagensicherungsgesetz) and the German Investor Compensation Act (Anlegerentschädigungsgesetz) provide for a mandatory deposit protection and investor compensation system in Germany, based on a European Union directive on deposit guarantee schemes ("DGS Directive"), recast in 2014, and a European Union directive on investor compensation schemes.

The German Deposit Protection Act requires that each German bank participates in one of the statutory government-controlled deposit protection schemes (Entschädigungseinrichtungen). Entschädigungseinrichtung deutscher Banken GmbH acts as the deposit protection scheme for private sector banks such as us, collects and administers the contributions of the member banks, and settles any compensation claims of depositors in accordance with the German Deposit Protection Act.

Under the German Deposit Protection Act, deposit protection schemes are liable for obligations resulting from deposits denominated in any currency in an amount of up to €100,000 per depositor and bank. In addition, deposits made in connection with particular life events (such as the sale of private residential properties, marriage or severance payments) are protected up to an amount of €500,000 for a period of six months after the amount has been deposited or become transferable. Deposit protection schemes are not liable for liabilities the existence of which can be proven only by financial instruments such as transferable securities that are not repayable at par or the principal of which is repayable at par only under a particular guarantee or agreement provided by the bank or a third party. Deposits by certain entities, such as banks, financial institutions (Finanzinstitute), insurance companies, investment funds, the Federal Republic of Germany, the German federal states and municipalities, as well as liabilities arising from own acceptances (eigene Akzepte) and sola bills (Solawechsel) are not protected.

The deposit protection scheme must repay insured deposits in euro within seven working days after the BaFin has ascertained a compensation case for the bank concerned and without the requirement for depositors to specifically apply for repayment, except where they claim to be insured above the level of €100,000 in connection with specific life events.

Deposit protection schemes are financed by annual contributions of the participating banks. They must have “available financial means” proportionate to their potential liabilities and must reach a target level of such means of 0.8 % of the total covered deposits of their participating banks by July 3, 2024. The “financial means” must be contributed by the banks participating in the deposit protection scheme. The amount of contributions of each bank will be based upon the amount of its covered deposits and the degree of risk the bank is exposed to. Deposit protection schemes may also levy special contributions if required to settle compensation claims. There is no absolute limit on such special contributions.

Deposit protection schemes will be required to contribute to bank resolution costs where resolution tools are used. The contribution made by the deposit protection scheme is limited to the compensation it would have to pay if the affected bank had become subject to insolvency proceedings. Furthermore, deposit protection schemes under certain circumstances may provide funding to its participating banks to avoid their failure.

Under the German Investor Compensation Act, in the event that the BaFin ascertains a compensation case, Entschädigungseinrichtung deutscher Banken GmbH as our deposit protection scheme is also required to compensate 90 % of any creditor’s aggregate claims arising from securities transactions denominated in euro or in a currency of any other European Union member state up to an amount of the equivalent of €20,000. Claims arising from securities transactions include claims of securities account holders for the return of instruments owned by, and held or deposited for them in connection with securities transactions. Claims arising from securities transactions of certain entities, such as banks, financial institutions (Finanzinstitute), insurance companies, investment funds, the Federal Republic of Germany, the German federal states, municipalities and medium-sized and large corporations, are not protected.

## European Deposit Insurance Scheme

On November 24, 2015, the European Commission proposed a regulation to establish a European Deposit Insurance Scheme, or “EDIS” for bank deposits of all credit institutions which are members of any of the current national statutory deposit guarantee schemes of member states participating in the banking union (see “Overview” above). The Commission’s proposal envisages a progressive integration of existing national deposit guarantee schemes in three stages, from a re-insurance of national deposit guarantee schemes, to a co-insurance system, and then to the final stage, which would be reached in 2024, when EDIS would fully insure all relevant national deposit guarantee schemes in case of a bank failure. EDIS would be administered by the SRB in all stages jointly with participating national deposit guarantee schemes or, where a deposit guarantee scheme does not administer itself, by the national designated authority responsible for administering the respective participating deposit guarantee scheme. The proposal is currently being negotiated at the European Union level and the ultimate impact on us is uncertain.

## Voluntary Deposit Protection System

Liabilities to creditors that are not covered by a statutory compensation scheme may be covered by one of the various protection funds set up by the banking industry on a voluntary basis. We take part in the Deposit Protection Fund (Einlagensicherungsfonds) set up by the Association of German Banks (Bundesverband deutscher Banken e. V.). The Deposit Protection Fund covers liabilities to customers up to an amount equal to 20 % of the bank’s own funds (Eigenmittel) as further specified in the Deposit Protection Fund’s by-laws. This limit will be reduced to 15 % from January 1, 2020 onwards and to 8.75 % from January 1, 2025 onwards. Liabilities to other banks and other specified institutions, obligations of banks represented by instruments in bearer form and covered bonds in registered form (Namenspfandbriefe) are not covered. To the extent the Deposit Protection Fund makes payments to customers of a bank, it will be subrogated to their claims against the bank.

Banks that participate in the Deposit Protection Fund make annual contributions to the fund based on their liabilities to customers, and may be required to make special contributions up to an amount of 50 % of their annual contributions to the extent requested by the Deposit Protection Fund to enable it to fulfill its purpose. If one or more German banks are in financial difficulties, we may therefore participate in their restructuring even where we have no business relationship or strategic interest, in order to avoid making special contributions to the Deposit Protection Fund in case of an insolvency of such bank or banks, or we may be required to make such special contributions.

On February 17, 2017, the Association of German Banks published a press release announcing that it is going to reform the Deposit Protection Fund. First, from October 1, 2017, “bank-like” clients (certain investment firms and financial institutions) as well as federal, regional and local governments would no longer be covered by the Deposit Protection Fund, but individuals, businesses, insurance companies and semi-governmental agencies, such as pension schemes for certain professions, would remain protected. Second, also from October 1, 2017, promissory notes (Schuldscheindarlehen) and registered bonds (Namensschuldverschreibungen) would no longer be covered by the Deposit Protection Fund, unless held by individuals or foundations and subject to grandfathering provisions. Third, from January 1, 2020, deposits with a term of over 18 months would no longer be protected, unless held by individuals or foundations and again subject to grandfathering provisions. The reform needs to be ratified by the Delegates’ Assembly (Delegiertenversammlung) of the Association of German Banks which is meeting on April 5, 2017.

## Further Regulation and Supervision in the European Economic Area

Since 1989 the European Union has enacted a number of regulations and directives to create a single European Union-wide market with almost no internal barriers on banking and financial services. The Agreement on the European Economic Area extends this single market to Iceland, Liechtenstein and Norway. Within this market our branches generally operate under the so-called “European Passport”. Under the European Passport, our branches are subject to regulation and supervision primarily by the ECB and the BaFin. Similarly, we also provide cross-border services in the European Economic Area under the “European Passport” directly without intermediation of branches. To the extent that activities are carried out within its jurisdiction, the authorities of the host country supervise the conduct of such activities. This includes, for example, rules on treating clients fairly and rules governing a bank’s conduct in the securities market.

On November 24, 2010, the European Union enacted regulations to further integrate the existing national supervisory authorities into a European System of Financial Supervision. A European Systemic Risk Board (“ESRB”) was established and the independent advisory committees to the European Commission for banks, insurance companies and securities markets which had existed since 2004 were transformed into new European authorities, the ESAs: the EBA, the ESMA and the European Insurance and Occupational Pensions Authority (“EIOPA”).

The ESRB is responsible for the macro-prudential oversight of the financial system within the European Union. It collects and analyzes in particular all relevant information to identify systemic risks and issue warnings and recommendations for remedial action as appropriate. The secretariat of the ESRB is supported by the ECB. The tasks of the EBA, EIOPA, and ESMA are to further integrate and harmonize the work of the relevant national supervisory authorities and to ensure a consistent application of European Union law. To that effect they shall in particular develop technical standards for supervision, and help develop regulatory standards, which will become effective if the European Commission endorses them. They shall also issue guidelines and recommendations for supervisory practices and coordinate the work of competent supervisory authorities in emergency situations where the orderly functioning or integrity of the financial markets or the stability of the financial system in the European Union is jeopardized (see “Banking Legislation” above). In such case, the EBA and the other new authorities may give instructions to competent supervisory authorities and, in certain circumstances, directly to banks and other financial institutions, to take remedial measures.

## Regulation and Supervision in the United States

Our operations are subject to extensive federal and state banking, securities and derivatives regulation and supervision in the United States. We engage in U.S. banking activities directly through our New York branch. We also control U.S. banking organization subsidiaries, including DB USA Corporation, Deutsche Bank Trust Corporation and Deutsche Bank Trust Company Americas (“DBTCA”), and U.S. broker-dealers, such as Deutsche Bank Securities Inc., U.S. nondeposit trust companies and nonbanking subsidiaries.

In 2010, the United States enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), which provides a broad framework for significant regulatory changes that extend to almost every area of U.S. financial regulation. While rulemaking in respect of many of the provisions of the Dodd-Frank Act has already taken place, full implementation of the Dodd-Frank Act will require further detailed rulemaking and uncertainty remains about



the final details, timing and impact of many of the rules. In addition, the substance and impact of the Dodd-Frank Act may be affected by changes in the U.S. political landscape.

The Dodd-Frank Act provisions known as the “Volcker Rule” limit the ability of banking entities and their affiliates to engage as principal in certain types of proprietary trading unrelated to serving clients and to sponsor or invest in private equity or hedge funds or similar funds (“covered funds”), subject to certain exclusions and exemptions. In the case of non-U.S. banking entities such as Deutsche Bank AG, these exemptions permit certain activities conducted outside the United States, provided that certain criteria are satisfied. The Volcker Rule also limits the ability of banking entities and their affiliates to enter into certain transactions with covered funds with which they or their affiliates have certain relationships. On December 10, 2013, U.S. regulators released the final version of the regulations implementing the Volcker Rule. Also on that date, the Federal Reserve Board extended the end of the conformance period for the Volcker Rule until July 21, 2015 (with the possibility of two one-year extensions under certain circumstances), by which time financial institutions subject to the rule, such as us, had to bring their activities and investments into compliance and implement a specific compliance program. The Federal Reserve Board has extended the Volcker Rule’s general conformance period for investments in and relationships with covered funds and certain foreign funds that were in place on or prior to December 31, 2013 until July 21, 2017. This extension of the conformance period does not apply to the Volcker Rule’s prohibitions on proprietary trading or to any investments in and relationships with covered funds made or entered into after December 31, 2013.

The Dodd-Frank Act also provides regulators with tools to provide greater capital, leverage and liquidity requirements and other prudential standards, particularly for financial institutions that pose significant systemic risk. U.S. regulators are also able to restrict the size and growth of systemically significant non-bank financial companies and large interconnected bank holding companies. U.S. regulators are also required to impose bright-line debt-to-equity ratio limits on financial companies that the Financial Stability Oversight Council determines pose a grave threat to financial stability if it determines that the imposition of such limits is necessary to minimize the risk.

With respect to prudential standards, on February 18, 2014, the Federal Reserve Board adopted rules that set forth how the U.S. operations of certain foreign banking organizations (“FBOs”), such as Deutsche Bank, are required to be structured in the U.S., as well as the enhanced prudential standards that apply to our U.S. operations (the “FBO Rules”).

Under the FBO Rules, by July 1, 2016, a large FBO with U.S.\$ 50 billion or more in U.S. non-branch assets, such as us, was required to establish or designate a separately capitalized top-tier U.S. intermediate holding company (“IHC”) that would hold substantially all of the FBO’s ownership interests in its U.S. subsidiaries. On July 1, 2016, we designated DB USA Corporation as our IHC and, as of that date, DB USA Corporation became subject, on a consolidated basis, to the risk-based capital requirements under the U.S. Basel 3 capital framework, capital planning and stress testing requirements (on a phased-in basis), U.S. liquidity buffer requirements and other enhanced prudential standards comparable to those applicable to top-tier U.S. bank holding companies of a similar size. The Federal Reserve Board has the authority to examine DB USA Corporation and any of its subsidiaries, as well as our New York branch. U.S. leverage requirements applicable to the IHC will take effect beginning in January 2018. An FBO’s U.S. branches and agencies will not be held beneath an IHC; however, the U.S. branches and agencies of the FBO (and in certain cases, the entire U.S. operations of the FBO) will be subject to certain liquidity requirements, as well as other specific enhanced prudential standards, such as risk management and, under certain circumstances, asset maintenance requirements. Additionally, the FBO Rules place requirements on the FBO itself related to the adequacy and reporting of the FBO’s home country capital and stress testing regime. On March 4, 2016, the Federal Reserve Board issued a re-proposal of its requirements relating to single counterparty credit limits that would apply to an FBO’s combined U.S. operations and its IHC. The re-proposal is still under consideration by the Federal Reserve Board. In addition, the Federal Reserve Board is still considering an “early remediation” framework under which the Federal Reserve Board would implement prescribed restrictions and penalties against the FBO and its U.S. operations, such as restrictions on the ability of the FBO and its U.S. operations to make discretionary compensation payments to certain of its officers and directors, if the FBO and/or its U.S. operations do not meet certain risk-based capital, leverage, liquidity, stress testing or other risk management requirements, and would authorize the termination of U.S. operations under certain circumstances.

Title I of the Dodd-Frank Act and the implementing regulations issued by the Federal Reserve Board and the Federal Deposit Insurance Corporation ("FDIC") require each bank holding company with assets of U.S.\$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the "Title I US Resolution Plan"). For foreign-based companies subject to these resolution planning requirements such as Deutsche Bank AG, the Title I US Resolution Plan only relates to subsidiaries, branches, agencies and businesses that are domiciled in or whose activities are carried out in whole or in material part in the United States. Deutsche Bank AG filed its last Title I US Resolution Plan in July 2015 and was not required to file a Title I US Resolution Plan in 2016. In addition to the Title I US Resolution Plan, in 2014, DBTCA, one of our insured depository institutions ("IDIs") in the United States, became subject to the FDIC's final rule requiring IDIs with total assets of U.S.\$ 50 billion or more to submit periodically to the FDIC a plan for resolution in the event of failure (the "IDI Plan" and, together with the Title I US Resolution Plan, the "US Resolution Plan") under the Federal Deposit Insurance Act (the "IDI Rule"). In 2014, Deutsche Bank AG expanded its Title I US Resolution Plan to also be responsive to the IDI Rule requirements. In September 2015, DBTCA prepared and submitted a separate IDI Plan and was not required to file an IDI Plan in 2016. Our next US Resolution Plan is currently expected to be due on July 1, 2017.

The core elements of the US Resolution Plan are Material Entities ("MEs"), Core Business Lines ("CBLs"), Critical Operations ("COs") and, for purposes of the IDI Plan, Critical Services. The US Resolution Plan lays out the resolution strategy for each ME, defined as those entities significant to the activities of a CO or CBL and demonstrates how each ME, CBL and CO, as applicable, can be resolved in a rapid and orderly manner and without systemic impact on U.S. financial stability. The US Resolution Plan also discusses the strategy for continuing Critical Services in resolution. Key factors addressed in the US Resolution Plan include how to ensure:

- Continued access to services from other U.S. and non-U.S. legal entities as well as from third parties such as payment servicers, exchanges and key vendors;
- Availability of funding from both external and internal sources;
- Retention of key employees during resolution; and
- Efficient and coordinated close-out of cross-border contracts.

The US Resolution Plan is drafted in coordination with the U.S. businesses and infrastructure groups so that it accurately reflects the business, critical infrastructure and key interconnections.

Our other U.S. bank holding company subsidiary, Deutsche Bank Trust Corporation, is subject to risk-based and leverage capital requirements, liquidity requirements, and other enhanced prudential standards applicable to large U.S. bank holding companies. Deutsche Bank Trust Corporation also became subject to capital planning and stress testing requirements on June 30, 2014. On June 29, 2016, the Federal Reserve Board publicly indicated that it had objected to Deutsche Bank Trust Corporation's 2016 capital plan submission due to weaknesses in its capital planning processes. Deutsche Bank Trust Corporation's stressed Common Equity Tier 1 capital ratio was forecast by the Federal Reserve Board to fall to as low as 30.1 % under the supervisory severely adverse scenario. This hypothetical stressed ratio would be substantially above the minimum required ratio of 4.5 %. Stress testing results are based on hypothetical adverse scenarios and should not be viewed or interpreted as forecasts of expected outcomes or capital adequacy or of the actual financial condition of Deutsche Bank Trust Corporation. Deutsche Bank Trust Corporation will submit its 2017 capital plan, incorporating enhancements to its processes, on April 5, 2017. The Federal Reserve has indicated that this capital plan will be judged publicly only on a quantitative basis. DB USA Corporation will provide its first capital plan submission to the Federal Reserve Board in April 2017; however, the results of its first submission will not be made public by the Federal Reserve Board. Deutsche Bank Trust Corporation will remain subject to the capital planning and stress-testing requirements and certain enhanced prudential standards until corresponding requirements applicable to DB USA Corporation become fully effective in January 2018.

In September 2014, the Federal Reserve Board and other U.S. regulators approved a final rule implementing liquidity coverage ratio ("LCR") requirements for large U.S. banking holding companies and certain of their subsidiary depository institutions that are generally consistent with the Basel Committee's revised Basel 3 liquidity standards. The LCR requirement is meant to ensure that an organization maintains sufficient high-quality liquid assets to withstand a 30-

days stress scenario. Deutsche Bank Trust Corporation, as a U.S. bank holding company with total assets of U.S.\$ 50 billion or more that is not an advanced approaches bank holding company, became subject to a modified, less stringent version of the LCR beginning in January 2016. Since DB USA Corporation is a U.S. bank holding company that had more than U.S.\$ 10 billion in foreign exposure as of December 31, 2016, it will become subject to the full LCR on April 1, 2017. At the same time, Deutsche Bank Trust Company Americas, an indirect insured depository institution subsidiary of DB USA Corporation with more than U.S.\$ 10 billion in total consolidated assets, will also become subject to the full LCR. Once DB USA Corporation becomes subject to the full LCR on April 1, 2017, Deutsche Bank Trust Corporation will no longer be subject to a standalone LCR requirement. On June 1, 2016, the Federal Reserve Board and other U.S. regulators proposed rules implementing the second element of the Basel 3 liquidity framework, the net stable funding ratio (“NSFR”), which measures whether an institution maintains sufficiently stable amounts of longer-term funding. Under the proposed rules, DB USA Corporation and Deutsche Bank Trust Company Americas would be subject to the full NSFR on January 1, 2018.

On December 15, 2016, the Federal Reserve Board adopted final rules that implement a U.S. version of the FSB’s TLAC standard in the United States. The final rules require, among other things, the U.S. IHCs of non-U.S. G-SIBs, including DB USA Corporation, to maintain a minimum amount of TLAC, and separately require them to maintain a minimum amount of long-term debt. Under the final rules, the required amounts of minimum internal TLAC and the ability of the IHC to issue long-term debt externally varies depending on the G-SIB’s planned resolution strategy. Our current expectation is that DB USA Corporation would be considered a “non-resolution covered IHC”, which means that it is intended, under the planned resolution strategy of its G-SIB parent (Deutsche Bank AG), to continue to operate outside of resolution proceedings while the G-SIB parent is resolved under a single-point of entry resolution strategy. The final rules require a “non-resolution covered IHC” to maintain, by 2019, (i) internal minimum TLAC of at least 16 % of its risk-weighted assets, 6 % of its Basel 3 leverage ratio denominator and 8 % of its average total consolidated assets, (ii) internal eligible long-term debt of at least 6 % of its risk-weighted assets, 2.5 % of its Basel 3 leverage ratio denominator and 3.5 % of its average total consolidated assets. Eligible long-term debt instruments would be required to meet certain criteria, including issuance to a foreign company that controls directly or indirectly the covered IHC or a foreign affiliate (a non-U.S. entity that is wholly owned, directly or indirectly, by the non-U.S. G-SIB)) and the inclusion of a contractual trigger allowing for, in limited circumstances, the immediate conversion or exchange of some or all of the instrument into Common Equity Tier 1 upon an order by the Federal Reserve Board. Internal TLAC requirements could be satisfied with a combination of eligible long-term debt instruments and Tier 1 capital. DB USA Corporation will also face restrictions on its discretionary bonus payments and capital distributions if it fails to maintain a TLAC buffer consisting of common equity tier 1 capital equal to 2.5 % of risk-weighted assets above the minimum TLAC requirement. The final rules also prohibit or limit DB USA Corporation’s ability to engage in certain types of financial transactions.

Furthermore, the Dodd-Frank Act provides for an extensive framework for the regulation of over-the-counter (“OTC”) derivatives, including mandatory clearing, exchange trading and transaction reporting of certain OTC derivatives, as well as rules regarding the registration of, and capital, margin and business conduct standards for, swap dealers, security-based swap dealers, major swap participants and major security-based swap participants. The Commodity Futures Trading Commission (“CFTC”) adopted final rules in 2016 that will require additional interest rate swaps to be cleared, with a phased implementation schedule ending in October 2018. In December 2016, also pursuant to the Dodd-Frank Act, the CFTC re-proposed regulations to impose position limits on certain commodities and economically equivalent swaps, futures and options. This proposal has not yet been finalized. The Securities and Exchange Commission (“SEC”) has also finalized rules regarding registration, business conduct standards and trade acknowledgement and verification requirements for security-based swap dealers and major security-based swap participants, although these rules will not come into effect until the SEC completes further security-based swap rulemakings. Finally, the U.S. Prudential Regulators and the CFTC have adopted final rules establishing margin requirements for non-cleared swaps and security-based swaps. The final margin rules follow a phased implementation schedule, with certain initial margin and variation margin requirements in effect as of September 2016, additional variation margin requirements coming into effect in March 2017, and additional initial margin requirements phased in on an annual basis from September 2017 through September 2020, with the relevant compliance dates depending in each case on the transactional volume of the parties and their affiliates.

The Dodd-Frank Act also requires broader regulation of hedge funds and private equity funds, as well as credit rating agencies, and imposes new requirements with respect to securitization activities. In October 2014, federal regulatory agencies issued final rules to implement the credit risk retention requirements of Section 941 of the Dodd-Frank Act, which generally require securitizers of different types of asset-backed securitizations, including transactions backed by residential mortgages, commercial mortgages, and commercial, credit card and auto loans, to retain at least five percent of the credit risk of the assets being securitized, with an exemption for securitizations that are wholly composed of “qualified residential mortgages.” The regulations took effect on February 23, 2015. Compliance was required with respect to new securitization transactions backed by residential mortgages beginning December 24, 2015 and with respect to new securitization transactions backed by other types of assets beginning December 24, 2016. We continue to evaluate the final rules and assess their impact on our securitization activities.

The Dodd-Frank Act also establishes a new regulatory framework and enhanced regulation for several other areas, including but not limited to the following. Under the Dodd-Frank Act and implementing regulations, a new regime for the orderly liquidation of systemically significant financial companies is established, which authorizes assessments on financial institutions that have U.S.\$ 50 billion or more in consolidated assets to repay outstanding debts owed to the Treasury in connection with a liquidation of a systemically significant financial company under the new insolvency regime. In addition, the Dodd-Frank Act requires U.S. regulatory agencies to prescribe regulations with respect to incentive-based compensation at financial institutions in order to prevent inappropriate behavior that could lead to a material financial loss. Other provisions require issuers with securities listed on U.S. stock exchanges, which may include foreign private issuers such as us, to establish a “clawback” policy to recoup previously awarded executive compensation in the event of an accounting restatement; in May 2016, the SEC re-proposed rules to implement this provision of the Dodd-Frank Act that would cover foreign private issuers. The Dodd-Frank Act also grants the SEC discretionary rule-making authority to impose a new fiduciary standard on brokers, dealers and investment advisers, and expands the extraterritorial jurisdiction of U.S. courts over actions brought by the SEC or the United States with respect to violations of the antifraud provisions of the Securities Act of 1933, the Securities Exchange Act of 1934 and the Investment Advisers Act of 1940.

Implementation of the Dodd-Frank Act and related final regulations will result in additional costs and could limit or restrict the way we conduct our business. Although uncertainty remains about many of the details, impact and timing of these reforms and any potential changes to the Dodd-Frank Act or new rules, we expect that there will be significant costs and may be significant limitations on our businesses resulting from these regulatory initiatives.

## Regulatory Authorities

We, as well as our wholly owned subsidiaries DB USA Corporation and Deutsche Bank Trust Corporation, are bank holding companies under the U.S. Bank Holding Company Act of 1956, as amended (the “Bank Holding Company Act”), by virtue of, among other things, our and their ownership of DBTCA. As bank holding companies, we and they have elected to become financial holding companies. As a result, we and our U.S. operations are subject to regulation, supervision and examination by the Federal Reserve Board as our U.S. “umbrella supervisor”.

DBTCA is a New York state-chartered bank whose deposits are insured by the FDIC to the extent permitted by law. DBTCA is subject to regulation, supervision and examination by the Federal Reserve Board and the New York State Department of Financial Services and to relevant FDIC regulation. In addition, DBTCA is also subject to regulation by the Consumer Financial Protection Bureau in relation to its retail products and services offered to its customers. Deutsche Bank Trust Company Delaware is a Delaware state-chartered bank which is subject to regulation, supervision and examination by the FDIC and the Office of the State Bank Commissioner of Delaware. Deutsche Bank’s New York branch is supervised by the Federal Reserve Board and the New York State Department of Financial Services. Deutsche Bank’s federally chartered nondeposit trust companies are subject to regulation, supervision and examination by the Office of the Comptroller of the Currency. We and our subsidiaries are also subject to regulation, supervision and examination by state banking regulators of certain states in which they conduct banking operations.

## Restrictions on Activities

As described below, federal and state banking laws and regulations restrict our ability to engage, directly or indirectly through subsidiaries, in activities in the United States. We are required to obtain the prior approval of the Federal Reserve Board before directly or indirectly acquiring the ownership or control of more than 5 % of any class of voting shares of U.S. banks, certain other depository institutions, and bank or depository institution holding companies. Under applicable U.S. federal banking law, our U.S. banking operations are also restricted from engaging in certain “tying” arrangements involving products and services.

Our two U.S. FDIC-insured bank subsidiaries, as well as our New York branch, are subject to requirements and restrictions under federal and state law, including requirements to maintain reserves against deposits, restrictions on the types and amounts of loans that may be made and the interest that may be charged thereon, and limitations on the types of investments that may be made and the types of services that may be offered.

In addition to the business of banking, and managing or controlling banks, so long as we are a financial holding company under U.S. law, we may also engage in nonbanking activities in the United States that are financial in nature, or incidental or complementary to such financial activity, including securities, merchant banking, insurance and other financial activities, subject to certain limitations on the conduct of such activities and to prior regulatory approval in some cases. As a non-U.S. bank, Deutsche Bank AG and our non-U.S. subsidiaries are generally authorized under U.S. law and regulations to acquire a non-U.S. company engaged in nonfinancial activities as long as that company's U.S. operations do not exceed certain thresholds and certain other conditions are met. On January 14, 2014, the Federal Reserve Board sought comment on the appropriateness of further restrictions on the physical commodity and merchant banking activities conducted by financial holding companies under several provisions of the Bank Holding Company Act in order to address various prudential considerations, including the potential risks of such activities to the safety and soundness of financial holding companies and financial stability more broadly. In September 2016, the Federal Reserve Board proposed a rule that would limit the commodities activities of financial holding companies by, among other things, imposing additional capital charges in relation to activities involving environmentally hazardous commodities, tightening quantitative limits on certain commodities activities and establishing new public reporting requirements.

Our status as a financial holding company, and our resulting ability to engage in a broader range of nonbanking activities are dependent on Deutsche Bank AG, DB USA Corporation, Deutsche Bank Trust Corporation and our two insured U.S. depository institutions meeting certain requirements under the Bank Holding Company Act and upon our insured U.S. depository institutions meeting certain requirements under the Community Reinvestment Act. The Federal Reserve Board's and other U.S. regulators' “well capitalized” standards are generally based on specified quantitative thresholds set at levels above the minimum requirements to be considered “adequately capitalized.” For our two insured depository institution subsidiaries, Deutsche Bank Trust Company Americas and Deutsche Bank Trust Company Delaware, the well-capitalized thresholds under the U.S. Basel 3 framework are a Common Equity Tier 1 capital ratio of 6.5 %, a Tier 1 capital ratio of 8 %, a Total capital ratio of 10 %, and a U.S. leverage ratio of 5 %. For bank holding companies, including Deutsche Bank AG, DB USA Corporation and Deutsche Bank Trust Corporation, the well-capitalized thresholds are a Tier 1 capital ratio of 6 % and a Total capital ratio of 10 %, both of which are calculated for Deutsche Bank AG under its home country standards.

State-chartered banks (such as DBTCA) and state-licensed branches and agencies of foreign banks (such as our New York branch) may not, with certain exceptions that require prior regulatory approval, engage as a principal in any type of activity not permissible for their federally chartered or licensed counterparts. In addition, DBTCA and Deutsche Bank Trust Company Delaware are subject to their respective state banking laws pertaining to legal lending limits and permissible investments and activities. Likewise, the United States federal banking laws also subject state branches and agencies to the same single-borrower lending limits that apply to federal branches or agencies, which are substantially similar to the lending limits applicable to national banks. These single-borrower lending limits are based on the worldwide capital of the entire foreign bank (i.e., Deutsche Bank AG in the case of the New York branch).



The Federal Reserve Board may terminate the activities of any U.S. office of a foreign bank if it determines that the foreign bank is not subject to comprehensive supervision on a consolidated basis in its home country or that there is reasonable cause to believe that such foreign bank or its affiliate has violated the law or engaged in an unsafe or unsound banking practice in the United States or, for a foreign bank that presents a risk to the stability of the United States financial system, the home country of the foreign bank has not adopted, or made demonstrable progress toward adopting, an appropriate system of financial regulation to mitigate such risk.

The Dodd-Frank Act removed a longstanding prohibition on the payment of interest on demand deposits by our FDIC-insured bank subsidiaries and our New York branch. In addition, the lending limits applicable to our FDIC-insured state-chartered bank subsidiaries take into account credit exposures arising from derivative transactions, and the lending limits applicable to our New York branch take into account both credit exposures arising from derivative transactions as well as securities borrowing and lending transactions and repurchase and reverse repurchase agreements with counterparties.

Also, under the so-called swap “push-out” provisions of the Dodd-Frank Act, certain structured finance derivatives activities of FDIC-insured banks and U.S. branch offices of foreign banks (including our New York branch) are restricted, which may necessitate a restructuring of how we conduct certain of our derivatives activities. We and other U.S. banking organizations and FBOs were required to comply with the “push-out” provisions by July 2015.

In addition, the regulations which the Consumer Financial Protection Bureau may adopt could affect the nature of the consumer activities which a bank (including our FDIC-insured bank subsidiaries and our New York branch) may conduct, and may impose restrictions and limitations on the conduct of such activities.

There are various qualitative and quantitative restrictions on the extent to which we and our nonbank subsidiaries can borrow or otherwise obtain credit from our U.S. banking subsidiaries or engage in certain other transactions involving those subsidiaries. In general, these transactions must be on terms that would ordinarily be offered to unaffiliated entities, must be secured by designated amounts of specified collateral and are subject to volume limitations. These restrictions also apply to certain transactions of our New York branch with our U.S. broker-dealers and certain of our other affiliates. Credit exposure arising from derivative transactions, securities borrowing and lending transactions, and repurchase/reverse repurchase agreements is subject to these collateral and volume limitations.

A major focus of U.S. governmental policy relating to financial institutions is aimed at preventing money laundering and terrorist financing and compliance with economic sanctions in respect of designated countries or activities. Failure of an institution to have policies and procedures and controls in place to prevent, detect and report money laundering and terrorist financing could in some cases have serious legal, financial and reputational consequences for the institution.

## New York Branch

The New York branch of Deutsche Bank AG is licensed by the Superintendent of the New York State Department of Financial Services to conduct a commercial banking business and is required to maintain eligible high-quality assets with banks in the State of New York (up to a maximum of U.S.\$ 100 million of assets pledged so long as the New York branch remains “well-rated” by the Superintendent of Financial Services). Should our New York branch cease to be “well-rated”, we may need to maintain substantial additional amounts of eligible assets. The Superintendent of Financial Services may also establish asset maintenance requirements for branches of foreign banks. In addition, the Federal Reserve Board is authorized to establish asset maintenance requirements for our New York branch under certain conditions, pursuant to the FBO Rules. Currently, no such requirements have been imposed upon our New York branch.



The New York State Banking Law authorizes the Superintendent of Financial Services to take possession of the business and property of a New York branch of a foreign bank under certain circumstances, generally involving violation of law, conduct of business in an unsafe manner, impairment of capital, suspension of payment of obligations, or initiation of liquidation proceedings against the foreign bank at its domicile or elsewhere. In liquidating or dealing with a branch's business after taking possession of a branch, only the claims of depositors and other creditors which arose out of transactions with a branch are to be accepted by the Superintendent of Financial Services for payment out of the business and property of the foreign bank in the State of New York, without prejudice to the rights of the holders of such claims to be satisfied out of other assets of the foreign bank. After such claims are paid, the Superintendent of Financial Services will turn over the remaining assets, if any, to the foreign bank or its duly appointed liquidator or receiver.

## Deutsche Bank Trust Company Americas

The Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA") provides for extensive regulation of depository institutions (such as DBTCA and its direct and indirect parent companies), including requiring federal banking regulators to take "prompt corrective action" with respect to FDIC-insured banks that do not meet minimum capital requirements. As an insured bank's capital level declines and the bank falls into lower categories (or if it is placed in a lower category by the discretionary action of its supervisor), greater limits are placed on its activities and federal banking regulators are authorized (and, in many cases, required) to take increasingly more stringent supervisory actions, which could ultimately include the appointment of a conservator or receiver for the bank (even if it is solvent). In addition, FDICIA generally prohibits an FDIC-insured bank from making any capital distribution (including payment of a dividend) or payment of a management fee to its holding company if the bank would thereafter be undercapitalized. If an insured bank becomes "undercapitalized", it is required to submit to federal regulators a capital restoration plan guaranteed by the bank's holding company. Since the enactment of FDICIA, both of our U.S. insured banks have maintained capital above the "well capitalized" standards, the highest capital category under applicable regulations.

DBTCA, like other FDIC-insured banks, is required to pay assessments to the FDIC for deposit insurance under the FDIC's Deposit Insurance Fund (calculated using the FDIC's risk-based assessment system). The minimum reserve ratio for the Deposit Insurance Fund was increased under the Dodd-Frank Act from 1.15 % to 1.35 %, with the target of 1.35 % to be reached by 2020 and with the incremental cost charged to banks with more than U.S.\$ 10 billion in assets. In addition, the FDIC has set the designated reserve ratio at 2 % as a long-term goal. This shift has had financial implications for all FDIC-insured banks, including DBTCA. In order to achieve the 1.35 % goal, in March 2016, the FDIC adopted a rule imposing an additional surcharge of 4.5 % per \$ 100 of the quarterly assessments (after making certain adjustments) of insured depository institutions with total consolidated assets of U.S.\$ 10 billion or more, including DBTCA. The surcharge took effect on July 1, 2016, and the FDIC expects it to remain in place for two years. The surcharge has increased costs for DBTCA and may be material to the results of operation of DBTCA. The FDIC's standard maximum deposit insurance amount per customer at an insured depository institution is U.S.\$ 250,000.

In June 2016, the FDIC updated its 2015 guidance on brokered deposits, providing information regarding identifying, accepting and reporting brokered deposits. To the extent that the FDIC's guidance expands the definition of deposits that constitute brokered deposits, the guidance could have implications for regulatory reporting, the LCR, the NSFR, deposit insurance assessments and other regulatory requirements.

## Other

In the United States, our U.S.-registered broker-dealers are regulated by the SEC. Broker-dealers are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices among broker-dealers, use and safekeeping of customers' funds and securities, capital structure, recordkeeping, the financing of customers' purchases and the conduct of directors, officers and employees.

Our principal U.S. SEC-registered broker-dealer subsidiary, Deutsche Bank Securities Inc., is a member of the New York Stock Exchange and is regulated by the Financial Industry Regulatory Authority, Inc. ("FINRA") and the individual state securities authorities in the states in which it operates. The U.S. government agencies and self-regulatory organizations, as well as state securities authorities in the United States having jurisdiction over our U.S. broker-dealer affiliates, are empowered to conduct administrative proceedings that can result in censure, fine, the issuance of cease-and-desist orders or the suspension or expulsion of a broker-dealer or its directors, officers or employees. Deutsche Bank Securities Inc. is also registered with and regulated by the SEC as an investment adviser, and by the CFTC and the National Futures Association as a futures commission merchant and commodity pool operator.

Under the Dodd-Frank Act, with certain exceptions, our entities that are swap dealers, security-based swap dealers, major swap participants or major security-based swap participants are registered or will be required to register with the SEC or CFTC, or both. Currently, Deutsche Bank AG is provisionally registered as a swap dealer. At a future date, we will be required to register one or more subsidiaries as security-based swap dealers with the SEC and may be required to register additional subsidiaries as swap dealers with the CFTC and certain subsidiaries as CFTC-regulated major swap participants and/or SEC-regulated major security-based swap participants. Registration, including provisional registration, as swap dealers, security-based swap dealers, major swap participants or major security-based swap participants subjects us to requirements as to capital, margin, business conduct and recordkeeping, among other requirements.

## Organizational Structure

We operate our business along the structure of our six corporate divisions. Deutsche Bank AG is the direct or indirect holding company for our subsidiaries. The following table sets forth the significant subsidiaries we own, directly or indirectly, as of December 31, 2016. We used the three-part test set out in Section 1-02 (w) of Regulation S-X under the U.S. Securities Exchange Act of 1934 to determine significance. We do not have any other subsidiaries we believe are material based on other, less quantifiable, factors.

We own 100 % of the equity and voting interests in these subsidiaries. These subsidiaries prepare financial statements as of December 31, 2016 and are included in our consolidated financial statements. Their principal countries of operation are the same as their countries of incorporation.

Subsidiary	Place of Incorporation
DB USA Corporation <sup>1</sup>	Delaware, United States
Deutsche Bank Americas Holding Corporation <sup>2</sup>	Delaware, United States
German American Capital Corporation <sup>3</sup>	Delaware, United States
DB U.S. Financial Markets Holding Corporation <sup>4</sup>	Delaware, United States
Deutsche Bank Securities Inc. <sup>5</sup>	Delaware, United States
DB Structured Products Inc. <sup>6</sup>	Delaware, United States
Deutsche Bank Trust Corporation <sup>7</sup>	New York, United States
Deutsche Bank Trust Company Americas <sup>8</sup>	New York, United States
Deutsche Bank Luxembourg S.A. <sup>9</sup>	Luxembourg
Deutsche Bank Privat- und Geschäftskunden Aktiengesellschaft <sup>10</sup>	Frankfurt am Main, Germany
DB Finanz-Holding GmbH <sup>11</sup>	Frankfurt am Main, Germany
Deutsche Postbank AG <sup>12</sup>	Bonn, Germany
DWS Holding & Service GmbH <sup>13</sup>	Frankfurt am Main, Germany

<sup>1</sup> DB USA Corporation is the top-level holding company for our subsidiaries in the United States.

<sup>2</sup> Deutsche Bank Americas Holding Corporation is a second tier holding company for subsidiaries in the United States.

<sup>3</sup> German American Capital Corporation is engaged in purchasing and holding loans from financial institutions, trading and securitization of mortgage whole loans and mortgage securities, and providing collateralized financing to counterparties.

<sup>4</sup> DB U.S. Financial Markets Holding Corporation is a second tier holding company for subsidiaries in the United States.

<sup>5</sup> Deutsche Bank Securities Inc. is a U.S. company registered as a broker dealer and investment advisor with the Securities and Exchange Commission and as a futures commission merchant with the Commodities Futures Trading Commission.

<sup>6</sup> DB Structured Products, Inc. is a U.S. subsidiary that has ceased engaging in new business and has surrendered the licenses it holds in respect of mortgage-related activities.

<sup>7</sup> Deutsche Bank Trust Corporation is a bank holding company under Federal Reserve Board regulations.

<sup>8</sup> Deutsche Bank Trust Company Americas is a New York State-chartered bank and member of the Federal Reserve System. It originates loans and other forms of credit, accepts deposits, arranges financings and provides numerous other commercial banking and financial services.

<sup>9</sup> The company's primary business model comprises loan business with international clients (Corporate & Investment Banking), where the bank acts globally as lending office and as risk transfer hub for the Credit Portfolio Strategies Group of Deutsche Bank, as well as structured finance activities covering long-term infrastructure projects and high quality investment goods (Global Markets). Furthermore, the bank offers tailor-made solutions with a wide range of products and services to their Wealth Management clients.

<sup>10</sup> The company serves private individuals, affluent clients as well as small and medium sized corporate clients with banking products.

<sup>11</sup> The company holds the majority stake in Deutsche Postbank AG (remainder is held at Deutsche Bank AG) and in DWS Holding & Service GmbH.

<sup>12</sup> The business activities of this company comprise retail banking, business with corporate customers, money and capital markets activities as well as home savings loans.

<sup>13</sup> The business activities of this company comprise acquisition, management, coordination and sale of investments especially in investment companies both nationally and internationally for its own account as well as rendering services for general and administrative functions for the investments and other comparable companies. Minority interests of below 1 % exist.

## Property and Equipment

As of December 31, 2016, we operated in 62 countries out of 2,656 branches around the world, of which 67 % were in Germany. We lease a majority of our offices and branches under long-term agreements.

We continue to review our property requirements worldwide taking into account cost containment measures as well as growth initiatives in selected businesses. Please see Note 24 "Property and Equipment" to the consolidated financial statements for further information.

## Information Required by Industry Guide 3

Please see pages S-1 through S-15 of the Supplemental Financial Information, which pages are incorporated by reference herein, for information required by SEC Industry Guide 3.

## Item 4A: Unresolved Staff Comments

We have not received written comments from the Securities and Exchange Commission regarding our periodic reports under the Exchange Act, as of any day 180 days or more before the end of the fiscal year to which this annual report relates, which remain unresolved.

## Item 5: Operating and Financial Review and Prospects

### Overview

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes to them included in “Item 18: Financial Statements” of this document, on which we have based this discussion and analysis.

We have prepared our consolidated financial statements in accordance with IFRS as issued by the International Accounting Standards Board (“IASB”) and as endorsed by the European Union (“EU”).

### Significant Accounting Policies and Critical Accounting Estimates

Our significant accounting policies are essential to understanding our reported results of operations and financial condition. Certain of these accounting policies require critical accounting estimates that involve complex and subjective judgments and the use of assumptions, some of which may be for matters that are inherently uncertain and susceptible to change. Such critical accounting estimates could change from period to period and have a material impact on our financial condition, changes in financial condition or results of operations. Critical accounting estimates could also involve estimates where management could have reasonably used another estimate in the current accounting period. Actual results may differ from these estimates if conditions or underlying circumstances were to change. See Note 1 “Significant Accounting Policies and Critical Accounting Estimates” to the consolidated financial statements for a discussion on our significant accounting policies and critical accounting estimates.

We have identified the following significant accounting policies that involve critical accounting estimates:

- the impairment of associates
- the impairment of financial assets available for sale
- the determination of fair value
- the recognition of trade date profit
- the impairment of loans and provisions for off-balance sheet positions
- the impairment of goodwill and other intangibles
- the recognition and measurement of deferred tax assets
- the accounting for legal and regulatory contingencies and uncertain tax positions

## Recently Adopted Accounting Pronouncements and New Accounting Pronouncements

See Note 2 “Recently Adopted and New Accounting Pronouncements” to the consolidated financial statements for a discussion on our recently adopted and new accounting pronouncements.

## Operating Results

You should read the following discussion and analysis in conjunction with our consolidated financial statements.

### Executive Summary

Please see “Management Report: Operating and Financial Review: Executive Summary” on pages 36 through 38 of the Annual Report 2016.

### Trends and Uncertainties

For insight into the trends impacting our performance please see the “Management Report: Operating and Financial Review” section of the Annual Report 2016. Key risks and uncertainties for the Bank are discussed in “Item 3: Key Information – Risk Factors”.

The Bank’s future performance and the implementation of our strategic goals could be influenced by a number of uncertainties. Challenges may arise from sustained market volatility, increasing competitive pressures, weakness of global, regional and national economic conditions and political instability in key markets.

In addition, regulatory, tax and supervisory requirements continue to evolve. Regulatory changes have and may continue to increase our costs, restrict our operations, or require structural change, which could put pressure on our capital position. In addition, we are involved in litigation, tax examinations, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, especially in the U.S. Such matters are subject to many uncertainties.

While we seek to achieve efficiencies in our operations, the results of our operational restructuring and the realization of planned savings are dependent on the successful and timely implementation of our updated strategy measures. The benefits, costs and timeframe of the implementation of our strategy could be adversely affected by unforeseen difficulties in the implementation process as well as factors beyond our control, such as negative market developments.

In accordance with our strategy update announced in March 2017, going forward, our Global Markets division (GM) will be merged with our existing Corporate & Investment Banking (CIB) to create a single integrated Corporate & Investment Bank division (CIB). In accordance with this decision, our current GM business segments Debt Sales & Trading and Equity Sales & Trading will be combined with our existing CIB businesses Corporate Finance and Transaction Banking to form part of the reconfigured business division CIB.

The risks to the outlook for our Corporate Finance and Transaction Banking businesses include further loosening of monetary policy in key markets, volatile market conditions, an increase in political risk from upcoming national elections in Europe and uncertainty around the exit process of the UK from the European Union. Furthermore, we expect disparities in regional growth rates to have a mixed impact on CIB, and Corporate Finance in particular, with stronger U.S. growth counterbalanced by a slowdown in Europe and China.

Risks to our Debt Sales & Trading and Equity Sales & Trading businesses’ outlook include exposure of global macroeconomic growth to political developments in Europe, including the exit process of the UK from the European Union, the

evolution of central bank policies and ongoing regulatory developments. Challenges, including event risks and a slow-down in client activity, may also impact financial markets.

Going forward, PW&CC together with the integrated Postbank will form the business division Private & Commercial Bank (PCB). To realize the efficiencies and other benefits that we seek from this, we will need to effectively implement this integration, after having pursued the operational separation of Postbank from Deutsche Bank under our prior strategy. This integration, like the implementation of other elements of our updated strategy, could be adversely affected by unforeseen difficulties in the implementation process as well as factors beyond our control, such as negative market developments.

Uncertainties to the outlook for Private, Wealth & Commercial Clients (PW&CC) related businesses include slower economic growth in our main operating countries and higher than expected volatility in equity and credit markets, which could adversely affect investor risk appetite and asset flow, as well as decline in interest rates globally. In addition, fierce competition, tighter regulatory requirements as well as delays in the execution of our strategic projects could negatively impact both our revenue generating capacity and our cost base.

A continued low interest rate environment and unfavorable macroeconomic developments as well as increased competition in Postbank's (PB) home market could adversely impact our revenue generating capacity while further evolving regulatory requirements may lead to a weaker performance in terms of cost efficiency.

Macroeconomic developments, such as increasingly divergent monetary policy between the U.S. and the rest of the world, uncertain political outlook including the UK exit process from the European Union, emerging market volatility, fierce competition and the changing regulatory environment could negatively impact the future performance of Deutsche Asset Management (Deutsche AM) related business. Furthermore, the negative market perceptions concerning Deutsche Bank and market rumors surrounding the future of Deutsche AM exacerbated net asset outflows in the division in 2016. While we have seen positive flows early in 2017, we expect another challenging year for the industry and Deutsche AM.

Performance in Consolidation & Adjustments is primarily impacted by valuation and timing differences from different accounting methods used for management reporting and IFRS, plus unallocated items. We still expect volatility from these items in our future results.

Our effective tax rate was impacted primarily by non-tax deductible goodwill impairment and litigation charges. The effective tax rate in future periods may be influenced by the occurrence of similar events, the resolution of tax examinations and investigations, or changes in tax laws and interpretative guidance, such as changes in applicable U.S. tax laws resulting from a potential U.S. tax reform currently being contemplated.

## Results of Operations

Please see "Management Report: Operating and Financial Review: Results of Operations" on pages 47 to 73 of the Annual Report 2016 and our discussion of Non-GAAP financial measures in the Supplementary Financial Information on pages 467 to 472.



## Financial Position

Please see “Management Report: Operating and Financial Review: Financial Position” on pages 73 to 75 of the Annual Report 2016.

## Liquidity and Capital Resources

For a detailed discussion of our liquidity risk management, see “Management Report: Risk Report: Liquidity Risk” beginning on page 128 of the Annual Report 2016.

For a detailed discussion of our capital management, see “Management Report: Risk Report: Capital Management” on beginning on page 106 of the Annual Report 2016.

## Post-Employment Benefit Plans

Please see “Management Report: Employees: Post-Employment Benefit Plans” on page 253 of the Annual Report 2016.

## Off-Balance Sheet Arrangements

For information on the nature, purpose and extent of our off-balance sheet arrangements, please see Note 41 “Structured Entities” to the consolidated financial statements. For further information on off-balance sheet arrangements, including allowances for off-balance sheet positions, please refer to “Management Report: Risk Report: Asset Quality: Allowance for Credit Losses” on pages 342 to 343 of the Annual Report 2016 and Note 21 “Allowance for Credit Losses” to the consolidated financial statements. For information on irrevocable lending commitments and contingent liabilities with respect to third parties, please see Note 31 “Credit related Commitments” to the consolidated financial statements.

## Tabular Disclosure of Contractual Obligations

Please see “Management Report: Operating and Financial Review: Tabular Disclosure of Contractual Obligations” on page 77 of the Annual Report 2016.

## Research and Development, Patents and Licenses

Not applicable.

## Item 6: Directors, Senior Management and Employees

### Directors and Senior Management

In accordance with the German Stock Corporation Act (Aktiengesetz), we have a Management Board (Vorstand) and a Supervisory Board (Aufsichtsrat). The German Stock Corporation Act prohibits simultaneous membership on both the Management Board and the Supervisory Board. The members of the Management Board are the executive officers of our company. The Management Board is responsible for managing our company and representing us in dealings with third parties. The Supervisory Board oversees the Management Board, appoints and removes its members and determines their remuneration and other compensation components, including pension benefits. According to German law, our Supervisory Board represents us in dealings with members of the Management Board. Therefore, no members of the Management Board may enter into any agreement with us without the prior consent of our Supervisory Board.

German law does not require the members of the Management Board nor the members of the Supervisory Board to own any of our shares to be qualified. In addition, German law has no requirement that members of the Management Board retire based on an age limit. However, age limits for members of the Management Board are defined contractually. Age limits also exist for the members of the Supervisory Board according to the Terms of Reference (Geschäftsordnung) for our Supervisory Board. There is a maximum age limit of 70 years for members of the Supervisory Board. In exceptional cases, a Supervisory Board member can be elected or appointed for a period that extends at the latest until the end of the fourth Ordinary General Meeting that takes place after he/she has turned the age of 70.

The Supervisory Board may not make management decisions. However, German law and our Articles of Association (Satzung) require the Management Board to obtain the approval of the Supervisory Board for certain actions. The most important of these actions are:

- granting general powers of attorney (Generalvollmachten). A general power of attorney authorizes its holder to represent the company in substantially all legal matters without limitation to the affairs of a specific office;
- acquisitions and disposals (including transactions carried out by a subsidiary) of real estate when the value of the object exceeds 1 % of our regulatory banking capital (haftendes Eigenkapital);
- granting of credits and the acquisition of participations in other companies, where the German Banking Act requires approval by the Supervisory Board. In particular, the German Banking Act (Kreditwesengesetz) requires the approval of the Supervisory Board if we grant a loan (to the extent legally permissible) to a member of the Management Board or the Supervisory Board or one of our employees who holds a procuration (Prokura) or general power of attorney; and
- acquisitions and disposals (including transactions carried out by a subsidiary) of other participations, insofar as the object involves more than 2 % of our regulatory banking capital. The Supervisory Board must be informed without delay of any acquisition or disposal of such participations involving more than 1 % of our regulatory banking capital.

The Management Board must submit regular reports or ad-hoc reports, as the case may be, to the Supervisory Board on our current operations and future business planning as well as on our risk situation. The Supervisory Board may also request special reports from the Management Board at any time.

With respect to voting powers, a member of the Supervisory Board or the Management Board may not vote on resolutions open to a vote at a board meeting if the proposed resolution concerns:

- a legal transaction between us and the member; or
- commencement, settlement or completion of legal proceedings between us and the member.

A member of the Supervisory Board or the Management Board may not directly or indirectly exercise voting rights on resolutions open to a vote at a shareholders' meeting (Hauptversammlung, which we refer to as the General Meeting) if the proposed resolution concerns:

- ratification of the member's acts;
- a discharge of liability of the member; or
- enforcement of a claim against the member by us.

## Supervisory Board and Management Board

In carrying out their duties, members of both the Management Board and Supervisory Board must exercise the standard of care of a prudent and diligent business person, and they are liable to us for damages if they fail to do so.

The liability of the members of the Management Board or the Supervisory Board under the German Stock Corporation Act for breach of their fiduciary duties is to the company rather than individual shareholders. However, individual shareholders that hold at least 1 % or €100,000 of the subscribed capital and are granted standing by the court may also invoke such liability to the company. The underlying concept is that all shareholders should benefit equally from amounts received under this liability by adding such amounts to the company's assets rather than disbursing them to plaintiff shareholders. We may waive the right to claim damages or settle these claims if at least three years have passed since the alleged breach and if the shareholders approve the waiver or settlement at the General Meeting with a simple majority of the votes cast, and provided that opposing shareholders do not hold, in the aggregate, one tenth or more of our share capital and do not have their opposition formally noted in the minutes maintained by a German notary.

## Supervisory Board

Our Articles of Association require our Supervisory Board to have twenty members. In the event that the number of members on our Supervisory Board falls below twenty, the Supervisory Board maintains its authority to pass resolutions so long as at least ten members participate in the passing of a resolution, either in person or by submitting their votes in writing. If the number of members remains below twenty for more than three months or falls below ten, upon application to a competent court, the court must appoint replacement members to serve on the board until official appointments are made.

The German Co-Determination Act of 1976 (Mitbestimmungsgesetz) requires that the shareholders elect half of the members of the supervisory board of large German companies, such as Deutsche Bank, and that employees in Germany elect the other half. None of the current members of either of our boards were selected pursuant to any arrangement or understandings with major shareholders, customers or others.

Each member of the Supervisory Board generally serves for a fixed term of approximately five years. For the election of shareholder representatives, the General Meeting may establish that the terms of office of up to five members may begin or end on differing dates. Pursuant to German law, the term expires at the latest at the end of the Annual General Meeting that approves and ratifies such member's actions in the fourth fiscal year after the year in which the Supervisory Board member was elected. Supervisory Board members may also be re-elected. The shareholders may, by a majority of the votes cast in a General Meeting, remove any member of the Supervisory Board they have elected in a General Meeting. The employees may remove any member they have elected by a vote of three-quarters of the employee votes cast.

The members of the Supervisory Board elect the chairperson and the deputy chairperson of the Supervisory Board. Traditionally, the chairperson is a representative of the shareholders, and the deputy chairperson is a representative of the employees. At least half of the members of the Supervisory Board must be present at a meeting or must have submitted their vote in writing to constitute a quorum. In general, approval by a simple majority of the members of the Supervisory Board present and voting is required to pass a resolution. In the case of a deadlock, the resolution is put to a second vote. In the case of a second deadlock, the chairperson has the deciding vote.

For additional information on our Supervisory Board, including a table providing the names of and biographical information for the current members, see “Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Supervisory Board” on pages 450 to 455 of the Annual Report 2016.

## Standing Committees

For information on the standing committees of our Supervisory Board, please see “Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Standing Committees” on pages 455 to 459 of the Annual Report 2016.

The business address of the members of the Supervisory Board is the same as our business address, Taunusanlage 12, 60325 Frankfurt am Main, Germany.

## Management Board

Our Articles of Association require the Management Board to have at least three members. Our Management Board currently has eleven members. The Supervisory Board has also appointed a Chairman of the Management Board.

The Supervisory Board appoints the members of the Management Board for a maximum term of five years and oversees them. They may be re-appointed or have their term extended for one or more terms of up to a maximum of five years each. The Supervisory Board may remove a member of the Management Board prior to the expiration of his or her term for good cause.

Pursuant to our Articles of Association, two members of the Management Board, or one member of the Management Board together with a holder of procuration, may represent us for legal purposes. A holder of procuration is an attorney-in-fact who holds a legally defined power under German law, which cannot be restricted with respect to third parties. However, pursuant to German law, the Management Board itself must resolve on certain matters as a whole and may not delegate the decision to one or more individual members. In particular, it may not delegate the determination of our business and risk strategies, and the coordinating or controlling responsibilities. The Management Board is required to ensure that shareholders are treated on an equal basis and receive equal information. The Management Board is also responsible for ensuring our proper business organization, which includes appropriate and effective risk management as well as compliance with legal requirements and internal guidelines, and for taking the necessary measures to ensure that adequate internal guidelines are developed and implemented.

Other selected responsibilities of the Management Board in accordance with the Terms of Reference for the Management Board and/or German law are:

- appointing key personnel at the level directly below the Management Board;
- making decisions regarding significant credit exposures or other risks which have not been delegated to individual risk management units;
- acquisition and disposal of equity investments, including capital measures in all cases in which (i) the law or our Articles of Association require approval by the Supervisory Board, or (ii) the equivalent of € 100 million is exceeded;
- acquisition and disposal of real estate – directly or by separate legal entities – in all cases in which: (i) the law or our Articles of Association require approval by the Supervisory Board, or (ii) the real estate’s equivalent exceeds € 100 million;

- individual vendor or intra Group-outsourcings (or material changes to those outsourcings) in all cases in which the equivalent of € 100 million is exceeded on an annual basis or include the delegation of core organizational duties of the Management Board;
- calling shareholders' meetings;
- filing petitions to set aside shareholders' resolutions;
- preparing and executing shareholders' resolutions; and
- reporting to the Supervisory Board.

For additional information on our Management Board, including the names of and biographical information for the current members, see "Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Management Board" on pages 445 to 450 of the Annual Report 2016. The Terms of Reference of the Management Board are published on our website [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm).

## Board Practices of the Management Board

The Terms of Reference for the Management Board are in accordance with the Supervisory Board resolution of May 18, 2016. These Terms of Reference provide that the members of the Management Board have the collective responsibility for managing Deutsche Bank. Notwithstanding this principle, the allocation of functional responsibilities to the individual members of the Management Board and their substitution (in case of temporary absence) are set out in the business allocation plan for the Management Board in accordance with the Supervisory Board resolution of February 1, 2017. The allocation of functional responsibilities does not exempt any member of the Management Board from collective responsibility for the management of the business. The members of the Management Board have primary responsibility for the proper performance and/or delegation of their duties and the clear allocation of accountabilities and responsibilities within the area of own functional responsibility ("Ressort").

Members of the Management Board are bound to the corporate interest of Deutsche Bank. No member of the Management Board may pursue personal interests in his/her decisions or use business opportunities intended for the company for himself/herself. As permitted by German law, individual members of the Management Board may exercise Deutsche Bank Group-external mandates, honorary offices or special assignments. In order to effectively prevent any conflicts of interest, the members of the Management Board may accept such activities only upon the approval of the other members of the Management Board and the Chairman's Committee of the Supervisory Board. Management Board members generally do not accept the chair of supervisory boards of Group-external companies.

Section 161 of the German Stock Corporation Act requires that the management board and supervisory board of any German stock exchange-listed company declare annually that the company complies with the recommendations of the German Corporate Governance Code or, if not, which recommendations the company does not comply with ("comply or explain"). These recommendations go beyond the requirements of the German Stock Corporation Act. The Management Board and Supervisory Board issued a new Declaration of Conformity in accordance with Section 161 of the German Stock Corporation Act on October 27, 2016, which is available on our internet website at [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm) under the heading "Declaration of Conformity pursuant to § 161 German Stock Corporation Act (AktG), Oct 2016".

For information on the Management Board's terms of office, please see "Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Management Board" on pages 445 to 450 of the Annual Report 2016. For details of the Management Board's service contracts providing benefits upon termination, please see "Compensation Report: Pension and Transitional Benefits" and "Compensation Report: Other Benefits upon Premature Termination" on page 217 of the Management Report of the Annual Report 2016.

## Compensation

For information on the compensation of the members of our Management Board, see “Management Report: Compensation Report: Management Board Compensation Report” on pages 202 to 231 of the Annual Report 2016.

For information on the compensation of the members of our Employees, see “Management Report: Compensation Report: Employee Compensation Report” on pages 232 to 246 of the Annual Report 2016.

For information on the compensation of the members of our Supervisory Board, see “Management Report: Compensation Report: Compensation System for Supervisory Board Members” on pages 247 to 249 of the Annual Report 2016.

## Employees

For information on our employees, see “Management Report: Employees” on pages 252 to 256 of the Annual Report 2016.

## Share Ownership

For the share ownership of the Management Board, see “Management Report: Compensation Report: Management Board Share Ownership” on page 220 of the Annual Report 2016.

For the share ownership of the members of the Supervisory Board, see “Corporate Governance Statement/Corporate Governance Report: Reporting and Transparency: Directors’ Share Ownership” on page 460 of the Annual Report 2016.

For a description of our employee share programs, please see Note 36 “Employee Benefits” to the consolidated financial statements.

## Item 7: Major Shareholders and Related Party Transactions

### Major Shareholders

On December 31, 2016, our issued share capital amounted to €3,530,939,215 divided into 1,379,273,131 no par value ordinary registered shares.

On December 31, 2016, we had 598,122 registered shareholders. 774,642,642 of our shares were registered in the names of 586,559 shareholders resident in Germany, representing 56.16 % of our share capital. 244,805,604 of our shares were registered in the names of 710 shareholders resident in the United States, representing 17.75 % of our share capital.



The German Securities Trading Act (Wertpapierhandelsgesetz) requires investors in publicly-traded corporations whose investments reach certain thresholds to notify both the corporation and the BaFin of such change within four trading days. The minimum disclosure threshold is 3 % of the corporation's issued voting share capital.

Paramount Services Holdings Ltd., British Virgin Islands, has notified us that as of August 20, 2015 it held 3.05 % of our shares. We have received no further notification by Paramount Services Holdings Ltd., British Virgin Islands, through March 10, 2017.

Supreme Universal Holdings Ltd., Cayman Islands, has notified us that as of August 20, 2015 it held 3.05 % of our shares. We have received no further notification by Supreme Universal Holdings Ltd., Cayman Islands, through March 10, 2017.

BlackRock, Inc., Wilmington, DE, has notified us that as of March 1, 2017 it held 5.95 % of our shares. We have received no further notification by BlackRock, Inc., Wilmington, DE, through March 10, 2017.

Hainan Jiaoguan Holding Co., Ltd., City of Haikou, has notified us that as of February 15, 2017 it held 3.04 % of our shares. We have received no further notification by Hainan Jiaoguan Holding Co., Ltd., City of Haikou, through March 10, 2017.

We are neither directly nor indirectly owned nor controlled by any other corporation, by any government or by any other natural or legal person severally or jointly.

Pursuant to German law and our Articles of Association, to the extent that we may have major shareholders at any time, we may not give them different voting rights from any of our other shareholders.

We are aware of no arrangements which may at a subsequent date result in a change in control of our company.

## Related Party Transactions

We have business relationships with a number of the companies in which we own significant equity interests. We also have business relationships with a number of companies where members of our Management Board also hold positions on boards of directors. Our business relationships with these companies cover many of the financial services we provide to our clients generally. For more detailed information, refer to Note 39 "Related Party Transactions" to the consolidated financial statements.

We conduct our business with these companies on terms equivalent to those that would prevail if we did not have equity holdings in them or management members in common, and we have conducted business with these companies on that basis in 2016 and prior years. None of these transactions is or was material to us.

Among our business with related party companies in 2016, there have been and currently are loans, guarantees and commitments, which totaled €364 million (including loans amounting to €212 million) as of December 31, 2016, compared to €789 million (including loans amounting to €309 million) as of December 31, 2015.

All these credit exposures

- were made in the ordinary course of business,
- were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons, and
- did not involve more than the normal risk of collectability or present other unfavorable features compared to loans to nonrelated parties at their initiation.

## Related Party Impaired Loans

In addition to our other shareholdings, we hold acquired equity interests in some of our clients arising from our efforts to protect our then-outstanding lending exposures to them.

Impaired loans to related parties which may exhibit more than normal risk of collectability or present other unfavorable features compared to performing loans to related parties decreased by €3 million to €0 million, from December 31, 2015. The following table presents an overview of the impaired loans we hold of some of our related parties as of December 31, 2016.

in € m.	Amount outstanding as of December 31, 2016	Largest amount outstanding January 1, to December 31, 2016	Provision for loan losses in 2016 <sup>1</sup>	Allowance for loan losses as of December 31, 2016 <sup>1</sup>	Nature of the loan and transaction in which incurred
Customer A	0	1	0	0	Uncollateralized shareholder loan bearing interest at 7.5 % per annum. The loan is held at contractual terms but interest is accreted at the effective interest rate applied to the carrying amount.
Customer B	0	2	0	0	Consisting of a claim from a collateralized real estate leasing finance unpaid at maturity, bearing interest at 6.62 % per annum. The exposure was past due and payable, interest is accreted at the effective interest rate applied to the carrying amount. After the sale of the real estate (the group's collateral) and a partly repayment of the exposure the remaining amount was written off in 2016.
<b>Total</b>	<b>0</b>	<b>n/m<sup>2</sup></b>	<b>0</b>	<b>0</b>	

<sup>1</sup> The allowance for loan losses is calculated by subtracting the net present value of future expected cash flows from the current outstanding. The year-end balance of the loan loss allowance is in most cases lower than the amount of provision for credit losses required for the recognition due to unwinding effects based upon passage of time which are recognized in interest income.

<sup>2</sup> Simply adding the largest amounts outstanding of the individual borrowers during the reporting period to arrive at an aggregate outstanding is not applicable as it would imply the assumption that the largest outstandings for all borrowers occurred simultaneously.

In the above table, customer A is an unconsolidated subsidiary of ours and customer B is an investment held at equity. Impaired loans to all related party customers have been carried forward from the previous year end.

We have not disclosed the names of the related party customers described above because we have concluded that such disclosure would violate applicable privacy laws, such as customer confidentiality and data protection laws, and those customers have not waived application of these privacy laws. A legal opinion regarding the applicable privacy laws is filed as Exhibit 14.1 hereto.

## Interests of Experts and Counsel

Not required because this document is filed as an annual report.

## Item 8: Financial Information

### Consolidated Statements and Other Financial Information

#### Consolidated Financial Statements

The Financial Statements of this Annual Report on Form 20-F consist of the Consolidated Financial Statements including Notes 1 to 46 thereto, which are set forth as Part 2 of the Annual Report 2016, and, as described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates” thereto in the third paragraph under “Basis of Accounting”, certain parts of the Management Report set forth as Part 1 of the Annual Report 2016. Such Consolidated Financial Statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their “Report of Independent Registered Public Accounting Firm” included on page 441 of the Annual Report 2016.

#### Legal Proceedings

**General.** We and our subsidiaries operate in a legal and regulatory environment that exposes us to significant litigation risks. As a result, we are involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. Please refer to Note 30 “Provisions” to the Consolidated Financial Statements for descriptions of certain significant legal proceedings. Additional legal proceedings that may have, or have had in the recent past, significant effects on our financial position or profitability are described below.

**Charter/BMY Matter.** On December 8, 2014, the United States Department of Justice (“DOJ”) filed a civil complaint against, among others, Deutsche Bank, seeking to recover more than U.S.\$ 190 million in taxes, penalties, and interest owed by a third party relating to two transactions that occurred between March and May 2000. The DOJ’s complaint arises out of Deutsche Bank’s March 2000 acquisition of Charter Corp. (“Charter”) and its subsequent sale in May 2000 of Charter to an unrelated entity, BMY Statutory Trust (the “Trust”). Charter’s primary asset, both at the time of purchase by Deutsche Bank and sale to the Trust, was appreciated Bristol-Myers Squibb Company (“BMY”) stock. When the BMY stock was sold by the Trust, the Trust offset its gain with a loss from an unrelated transaction. The Internal Revenue Service subsequently disallowed the loss on audit exposing the BMY gain to taxation. The IRS assessed additional tax, penalties and interest against the Trust, which have not been paid. Relying on certain theories, including fraudulent conveyance, the DOJ sought to recoup from Deutsche Bank the taxes, plus penalties and interest, owed by the Trust. Deutsche Bank and the DOJ agreed to a final settlement of the case, and the Court dismissed the case with prejudice on January 4, 2017. Under the terms of the settlement, Deutsche Bank agreed to pay U.S.\$ 95 million.

**Contestation of the General Meeting’s Resolution Not to Pay a Dividend for the 2015 Fiscal Year.** In May 2016, our General Meeting resolved that no dividend was to be paid to our shareholders for the 2015 fiscal year. Some shareholders filed a lawsuit with the Frankfurt am Main District Court (Landgericht), contesting (amongst others) the resolution on the grounds that we were required by law to pay a minimum dividend in an amount equal to 4% of our share capital. In December 2016, the district court ruled in favor of the plaintiffs. We initially appealed the court’s decision. However, consistent with our updated strategy, we intend to withdraw the appeal, as this decision is concerned, whereupon the contested resolution will become void. Our Management Board intends to propose to the annual General Meeting in May 2017 to resolve the payment of a dividend of approximately € 400 million from our distributable profit for 2016 which amount contains a component reflecting the distributable profit carried forward from 2015 of approximately € 165 million.

**CO<sub>2</sub> Emission Rights.** The Frankfurt am Main Office of Public Prosecution (the “OPP”) is investigating alleged value-added tax (VAT) fraud in connection with the trading of CO<sub>2</sub> emission rights by certain trading firms, some of which also engaged in trading activity with Deutsche Bank. The OPP alleges that certain employees of Deutsche Bank knew that their counterparties were part of a fraudulent scheme to avoid VAT on transactions in CO<sub>2</sub> emission rights, and it searched Deutsche Bank’s head office and London branch in April 2010 and issued various requests for documents. In December 2012, the OPP widened the scope of its investigation and again searched Deutsche Bank’s head office. It alleges that certain employees deleted e-mails of suspects shortly before the 2010 search and failed to issue a suspicious activity report under the Anti-Money Laundering Act which, according to the OPP, was required. It also alleges that Deutsche Bank filed an incorrect VAT return for 2009 and incorrect monthly returns for September 2009 to February 2010. Deutsche Bank is cooperating with the OPP. On June 13, 2016, the Frankfurt District Court sentenced seven former Deutsche Bank employees for VAT evasion and for aiding and abetting VAT evasion in connection with their involvement in CO<sub>2</sub> emissions trading. Appeals are pending with respect to some of such former employees. The investigation by the OPP with respect to other employees is continuing.

The insolvency administrators of several German traders who sold emission certificates to Deutsche Bank in 2009/2010 are trying to refute the transactions as a voidable preference under German insolvency law and, in some cases, have started civil litigation. There is only one court decision so far, under which the Frankfurt District Court dismissed the relevant insolvency administrator’s claim in full. The appeal against the decision is pending. In 2015, five insolvent English companies, which are alleged to have been involved in VAT fraud in connection with trading CO<sub>2</sub> emission rights in the UK, and their respective liquidators, started civil proceedings in London against four defendants including Deutsche Bank AG claiming that the defendants dishonestly assisted directors of the insolvent companies in breaching duties, and alternatively that the defendants were party to carrying on the companies’ business with fraudulent intent (giving rise to a claim under Section 213 of the Insolvency Act 1986). Deutsche Bank is defending the claim and the proceedings are at an early stage.

**Deutsche Bank Shareholder Litigation.** Deutsche Bank and certain of its current and former officers and management board members are the subject of two purported class actions, filed in the United States District Court for the Southern District of New York, asserting claims under the federal securities laws on behalf of persons who purchased or otherwise acquired securities of Deutsche Bank on a United States exchange or pursuant to other transactions within the United States between April 15, 2013 and April 29, 2016. Plaintiffs allege that Deutsche Bank’s SEC Annual Reports on Form 20-F for the years 2012, 2013, 2014 and 2015 were materially false and misleading in failing to disclose (i) serious and systemic failings in controls against financing terrorism, money laundering, aiding organizations subject to international sanctions and committing financial crime and (ii) that the Bank’s internal control over financial reporting and its disclosure controls and procedures were not effective. The court consolidated the two actions and on October 4, 2016 appointed a lead plaintiff and lead counsel. On December 16, 2016, plaintiffs filed a consolidated amended complaint, expanding the proposed class period to January 31, 2013 through July 26, 2016, and adding several additional defendants. On February 21, 2017, Deutsche Bank moved to dismiss the consolidated amended complaint.

**EVAF Matter.** RREEF European Value Added Fund I, L.P. (the “Fund”) is a fund managed by Deutsche Bank’s subsidiary, Deutsche Alternative Asset Management (UK) Limited (the “Manager”). On September 4, 2015, the Fund (acting through a committee of independent advisers of the General Partner of the Fund, which is also a Deutsche Bank subsidiary) filed in the English High Court a claim against the Manager alleging that the Manager’s decision to make a German real estate investment had been grossly negligent and had caused the Fund losses of at least € 158.9 million plus interest, for which the Manager was liable in damages. On January 25, 2017, the Fund and the Manager reached a settlement of the proceedings. The settlement amount is already fully reflected in existing litigation provisions and has been paid in the first quarter of 2017.

**High Frequency Trading/Dark Pool Trading.** On December 16, 2016, the United States Securities and Exchange Commission (“SEC”), the State of New York Office of the Attorney General (“NYAG”), and the U.S. Financial Industry Regulatory Authority (“FINRA”) announced settlements with the Bank relating to the Bank’s electronic order routing, its alternative trading system (“ATS” or “Dark Pool”) SuperX, and related disclosures. The SEC and NYAG settlements primarily involve a first-generation order routing algorithm used by the Bank prior to 2014, while the FINRA settlement primarily involves disclosure concerning certain functionality available to customers utilizing SuperX. The Bank admitted the allegations made by the SEC and NYAG, but neither admitted nor denied FINRA’s allegations. In connection with the resolution of all three matters, the Bank agreed to pay a total of U.S.\$ 40.25 million.

**ISDAFIX.** Deutsche Bank has received requests for information from certain regulatory authorities concerning the setting of ISDAFIX benchmarks, which provide average mid-market rates for fixed interest rate swaps. The Bank is cooperating with these requests. In addition, the Bank has been named as a defendant in five putative class actions that were consolidated in the United States District Court for the Southern District of New York asserting antitrust, fraud, and other claims relating to an alleged conspiracy to manipulate the U.S. dollar ISDAFIX benchmark. On April 8, 2016, Deutsche Bank settled the class actions for U.S.\$ 50 million, which is subject to final court approval. The settlement was preliminarily approved by the court on May 11, 2016.

**Monte Dei Paschi.** In February 2013 Banca Monte Dei Paschi Di Siena (“MPS”) issued civil proceedings in Italy against Deutsche Bank alleging that Deutsche Bank assisted former MPS senior management in an accounting fraud on MPS, by undertaking repo transactions with MPS and “Santorini”, a wholly owned SPV of MPS, which helped MPS defer losses on a previous transaction undertaken with Deutsche Bank. Subsequently, in July 2013, the Fondazione Monte Dei Paschi, MPS’ largest shareholder, also commenced civil proceedings in Italy for damages based on substantially the same facts. In December 2013, Deutsche Bank reached an agreement with MPS to settle the civil proceedings and the transactions were unwound at a discount for MPS. The civil proceedings by the Fondazione Monte Dei Paschi, in which damages of between €220 million and €381 million are claimed, remain pending. The Fondazione’s separate claim filed in July 2014 against their former administrators and a syndicate of 12 banks including DB S.p.A. for €286 million has resumed before the Florence Court.

A criminal investigation was launched by the Siena Public Prosecutor into the transactions and certain unrelated transactions entered into by MPS with other parties. Such investigation was moved in summer 2014 from Siena to the Milan Public Prosecutors as a result of a change in the alleged charges being investigated. On February 16, 2016, the Milan Public Prosecutors issued a request of committal to trial against Deutsche Bank AG and six current and former employees. The committal process concluded with a hearing on October 1, 2016, during which the Milan court committed all defendants in the criminal proceedings to trial. Deutsche Bank’s potential exposure is for administrative liability under Italian Legislative Decree n. 231/2001 and for civil vicarious liability as an employer of current and former DB employees who are being criminally prosecuted. Trial commenced on December 15, 2016 and is ongoing. Deutsche Bank continues to cooperate and update its regulators.

**Parmalat Litigation.** Following the bankruptcy of the Italian company Parmalat, prosecutors in Parma conducted a criminal investigation against various bank employees, including employees of Deutsche Bank, and brought charges of fraudulent bankruptcy against a number of Deutsche Bank employees and others. The trial commenced in September 2009 and is ongoing, although it is in its final stages and is anticipated will conclude in the course of 2017.

Certain retail bondholders and shareholders have alleged civil liability against Deutsche Bank in connection with the above-mentioned criminal proceedings. Deutsche Bank has made a formal settlement offer to those retail investors who have asserted claims against Deutsche Bank. This offer has been accepted by some of the retail investors. The outstanding claims will be heard during the criminal trial process.

**Pas-de-Calais Habitat.** On May 31, 2012, Pas-de-Calais Habitat (“PDCH”), a public housing office, initiated proceedings before the Paris Commercial Court against Deutsche Bank in relation to four swap contracts entered into in 2006, restructured on March 19, 2007 and January 18, 2008 and subsequently restructured in 2009 and on June 15, 2010. PDCH asks the Court to declare the March 19, 2007 and January 18, 2008 swap contracts null and void, or terminated, or to grant damages to PDCH in an amount of approximately €170 million on the grounds, inter alia, that Deutsche

Bank committed fraudulent and deceitful acts, manipulated the LIBOR and EURIBOR rates which are used as a basis for calculating the sums due by PDCH under the swap contracts and breached its obligations to warn, advise and inform PDCH. A decision on the merits is not expected until the third quarter of 2017 at the earliest.

**Pension Plan Assets.** The Group sponsors a number of post-employment benefit plans on behalf of its employees. In Germany, the pension assets that fund the obligations under these pension plans are held by Benefit Trust GmbH. The German tax authorities are challenging the tax treatment of certain income received by Benefit Trust GmbH in the years 2010 to 2013 with respect to its pension plan assets. For the year 2010 Benefit Trust GmbH paid the amount of tax and interest assessed of € 160 million to the tax authorities and is seeking a refund of the amounts paid in litigation with the relevant lower fiscal court. For 2011 to 2013 the matter is stayed pending the outcome of the 2010 tax litigation. The amount of tax and interest under dispute for years 2011 to 2013, which also has been paid to the tax authorities, amounts to € 456 million. Any decision by the lower fiscal court is potentially subject to appeal by either party and thus a resolution of the matter may not take place for a number of years.

**Sebastian Holdings Litigation.** Litigation with Sebastian Holdings Inc. ("SHI") in respect of claims arising from FX trading activities concluded in the UK Commercial Court in November 2013 when the court awarded Deutsche Bank approximately U.S.\$ 236 million plus interest and dismissed all of SHI's claims. On January 27, 2016, the New York court dismissed substantially similar claims by SHI against Deutsche Bank when it granted Deutsche Bank's motion for summary judgment based on the UK Commercial Court's judgment. The New York court also denied SHI's motion for leave to file an amended complaint. SHI has appealed the New York court's decisions.

**Vestia.** In December 2016, Stichting Vestia, a Dutch housing association, commenced proceedings against Deutsche Bank in England. The proceedings relate to derivatives entered into between Stichting Vestia and Deutsche Bank between 2005 and 2012. Stichting Vestia alleges that certain of the transactions entered into by it with Deutsche Bank should be set aside on the grounds that they were not within its capacity and/or were induced by the bribery of Vestia's treasurer by an intermediary involved in those transactions. The sums claimed by Stichting Vestia are made up of different elements, some of which have not yet been quantified. The quantum of the claims as articulated at this stage ranges between €717 million and €834 million, plus compound interest. Deutsche Bank is defending the claim.

## Dividend Policy

Consistent with our updated strategy, we do not intend to pay more than the minimum dividend required by German law for the fiscal years until and including 2016. Accordingly, the Management Board intends to propose to the annual General Meeting in May 2017 to resolve the payment of a dividend per share of €0.19 out of the distributable profit for 2016, reflecting the pay out of the distributable profit carried forward from 2015 of approximately € 165 million and a dividend per share of €0.11 from the remaining distributable profit for 2016. For the fiscal year 2017, the Management Board intends to propose at least a minimum dividend per share of €0.11 (paid after the annual General Meeting in 2018). Historically, however, we have paid dividends at higher levels, including dividends per share of €0.75 for 2014, and intend to pay competitive dividends above the minimum amount no later than for 2018 (paid after the annual General Meeting in 2019). However, we cannot assure investors that we will pay dividends as for 2014 or previous years, or at any other level, or at all, in any future period. If the company is not profitable, we may not pay dividends at all.

Furthermore, if Deutsche Bank AG fails to meet the regulatory capital adequacy requirements under CRR/CRD 4 (including individually imposed capital requirements (so-called "Pillar 2" requirements) and the combined buffer requirement), it may be prohibited from making, and the ECB or the BaFin may suspend or limit, the payment of dividends. In addition, the ECB expects banks to meet "Pillar 2" guidance. If Deutsche Bank AG operates or expects to operate below "Pillar 2" guidance, the ECB will review the reasons why the Bank's capital level has fallen or is expected to fall and may take appropriate and proportionate measures in connection with such shortfall. Any such measures might have an impact on Deutsche Bank AG's willingness or ability to pay dividends. For further information on regulatory capital adequacy requirements and the powers of Deutsche Bank AG's regulators to suspend dividend payments, see "Item 4: Information on the Company – Regulation and Supervision – Capital Adequacy Requirements" and "– Investigative and Enforcement Powers."



Under German law, Deutsche Bank AG's dividends are based on the unconsolidated results of Deutsche Bank AG as prepared in accordance with German accounting rules. Deutsche Bank AG's Management Board, which prepares the annual financial statements of Deutsche Bank AG on an unconsolidated basis, and its Supervisory Board, which reviews them, first allocate part of Deutsche Bank AG's annual surplus (if any) to Deutsche Bank AG's statutory reserves and to any losses carried forward, as it is legally required to do. They then allocate the remainder between other revenue reserves (or retained earnings) and balance sheet profit. They may allocate up to one-half of this remainder to other revenue reserves, and must allocate at least one-half to balance sheet profit. A profit distribution from balance sheet profit is only permitted to the extent that the balance sheet profit plus distributable earnings exceeds potential dividend blocking items, which consist of deferred tax assets, self-developed software and unrealized gains on plan assets, all net of respective deferred tax liabilities.

Deutsche Bank AG then distributes the full amount of the balance sheet profit not subject to dividend blocking of Deutsche Bank AG if the Annual General Meeting so resolves. The Annual General Meeting may resolve a non-cash distribution instead of, or in addition to, a cash dividend. However, Deutsche Bank AG is not legally required to distribute its balance sheet profit to its shareholders to the extent that it has issued participatory rights (Genussrechte) or granted a silent participation (stille Gesellschaft) that accord their holders the right to a portion of Deutsche Bank AG's distributable profit.

Should the annual General Meeting resolve to carry forward profits or to allocate profits to the reserves, pursuant to German corporate law, shareholders may contest the resolution of the General Meeting if such carrying forward or allocation is not, on the basis of a reasonable commercial assessment, deemed necessary to ensure the viability or economic resilience of the company and the shareholders do not receive a minimum dividend in the amount equal to 4 % of the share capital. On these grounds, shareholders challenged the resolution of the 2016 annual General Meeting not to pay a dividend for 2015. Consistent with our updated strategy, the Management Board intends to propose to the annual General Meeting in May 2017 to resolve the payment of a dividend of approximately €400 million, reflecting the pay out of the distributable profit carried forward from 2015 of approximately €165 million and a dividend per share of €0.11 from the remaining distributable profit for 2016. For more information on the shareholder challenge referred to above, see "Legal Proceedings – Contestation of the General Meeting's Resolution Not to Pay a Dividend for the 2015 Fiscal Year".

Deutsche Bank AG declares dividends by resolution of the Annual General Meeting and pays them (if any) once a year. Dividends approved at a General Meeting are payable on the third business day after that meeting, unless a later date has been determined at that meeting or by the Articles of Association. In accordance with the German Stock Corporation Act, the record date for determining which holders of Deutsche Bank AG's ordinary shares are entitled to the payment of dividends, if any, or other distributions whether cash, stock or property, is the date of the General Meeting at which such dividends or other distributions are declared.

## Significant Changes

Except as otherwise stated in this document, there have been no significant changes subsequent to December 31, 2016.

## Item 9: The Offer and Listing

### Offer and Listing Details and Markets

Our share capital consists of ordinary shares issued in registered form without par value. Under German law, shares without par value are deemed to have a "nominal" value equal to the total amount of share capital divided by the number of shares. Our shares have a nominal value of €2.56 per share.

The principal trading market for our shares is the Frankfurt Stock Exchange. Our shares are also traded on the six other German stock exchanges (Berlin, Duesseldorf, Hamburg, Hanover, Munich and Stuttgart), on the Eurex and the New York Stock Exchange.

We maintain a share register in Frankfurt am Main and, for the purposes of trading our shares on the New York Stock Exchange, a share register in New York.

All shares on German stock exchanges trade in euros, and all shares on the New York Stock Exchange trade in U.S. dollars. The following table sets forth, for the calendar periods indicated, high, low and period-end prices for our shares as reported by the Frankfurt Stock Exchange and the New York Stock Exchange.

	Price per share (Xetra) <sup>1</sup>			Price per share (NYSE) <sup>2</sup>		
	High (in €)	Low (in €)	Period-end (in €)	High (in U.S.\$)	Low (in U.S.\$)	Period-end (in U.S.\$)
Monthly 2017:						
February	19.20	17.62	18.60	20.68	18.81	19.69
January	19.97	17.11	18.39	20.93	18.28	19.91
Monthly 2016:						
December	18.64	14.42	17.25	19.30	15.67	18.10
November	15.47	12.00	14.86	16.67	13.33	15.80
October	13.74	11.46	13.16	14.74	12.60	14.39
September	13.84	9.90	11.57	15.43	11.19	13.09
Quarterly 2016:						
Fourth Quarter	18.64	11.46	17.25	19.30	12.60	18.10
Third Quarter	13.84	9.90	11.57	15.43	11.19	13.09
Second Quarter	17.54	12.05	12.33	19.70	13.40	13.73
First Quarter	22.10	13.03	14.95	23.62	14.79	16.94
Quarterly 2015:						
Fourth Quarter	27.98	20.69	22.53	30.82	22.83	24.15
Third Quarter	32.31	22.95	24.07	35.37	26.05	26.96
Second Quarter	33.42	26.60	26.95	36.20	29.62	30.16
First Quarter	32.90	23.48	32.36	35.49	27.81	34.73
Annual:						
2016	22.10	9.90	17.25	23.62	11.19	18.10
2015	33.42	20.69	22.53	36.20	22.83	24.15
2014	38.15	22.66	24.99	54.48	29.35	30.02
2013	36.94	28.05	33.07	52.92	38.18	48.24
2012	37.68	21.09	31.43	52.53	27.05	44.29

Note: Data is based on Bloomberg.

<sup>1</sup> Historical share prices have been adjusted on June 5, 2014 with retroactive effect to reflect the capital increase by multiplying a correcting factor of 0.9538.

<sup>2</sup> Historical share prices are not adjusted for the capital increase in June 2014.

For a discussion of the possible effects of fluctuations in the exchange rate between the euro and the U.S. dollar on the price of our shares, see “Item 3: Key Information – Exchange Rate and Currency Information.”

You should not rely on our past share performance as a guide to our future share performance.

## Plan of Distribution

Not required because this document is filed as an annual report.

## Selling Shareholders

Not required because this document is filed as an annual report.

## Dilution

Not required because this document is filed as an annual report.

## Expenses of the Issue

Not required because this document is filed as an annual report.

## Item 10: Additional Information

### Share Capital

Not required because this document is filed as an annual report.

## Memorandum and Articles of Association

The following is a summary of certain information relating to certain provisions of our Articles of Association, our share capital and German law. This summary is not complete and is qualified by reference to our Articles of Association and German law in effect at the date of this filing. Copies of our Articles of Association are publicly available at the Commercial Register (Handelregister) in Frankfurt am Main, and an English translation is filed as Exhibit 1.1 to this Annual Report.

### Our Business Objectives

Section 2 of our Articles of Association sets out the objectives of our business:

- to transact all aspects of banking business;
- to provide financial and other services; and
- to promote international economic relations.

Our Articles of Association permit us to pursue these objectives directly or through subsidiaries and affiliated companies.

Our Articles of Association also provide that, to the extent permitted by law, we may transact all business and take all steps that appear likely to promote our business objectives. In particular, we may:

- acquire and dispose of real estate;
- establish branches in Germany and abroad;
- acquire, administer and dispose of participations in other enterprises; and
- conclude intercompany agreements (Unternehmensverträge).

### Supervisory Board and Management Board

For more information on our Supervisory Board and Management Board, see “Item 6: Directors, Senior Management and Employees.”

## Voting Rights and Shareholders' Meetings

Each of our shares entitles its registered holder to one vote at our General Meeting. Our Annual General Meeting takes place within the first eight months of our fiscal year. Pursuant to our Articles of Association, we may hold the meeting in Frankfurt am Main, Düsseldorf or any other German city with over 500,000 inhabitants. Unless a shorter period is permitted by law, we must give the notice convening the General Meeting at least 30 days before the last day on which shareholders can register their attendance of the General Meeting (which is the fifth day immediately preceding that General Meeting). We are required to include details regarding the shareholder attendance registration process and the issuance of admission cards in our invitation to the General Meeting.

The Management Board or the Supervisory Board may also call an extraordinary General Meeting. Shareholders holding in the aggregate at least 5 % of the nominal value of our share capital may also request that such a meeting be called.

According to our Articles of Association our shares are issued in the form of registered shares. For purposes of registration in the share register, all shareholders are required to notify us of the number of shares they hold and, in the case of natural persons, of their name, address and date of birth and, in the case of legal persons, of their registered name, business address and registered domicile. Both being registered in our share register and the timely registration for attendance of the General Meeting constitute prerequisite conditions for any shareholder's attendance and exercise of voting rights at the General Meeting. Shareholders may register their attendance of a General Meeting with the Management Board (or as otherwise designated in the invitation) by written notice or electronically, no later than the fifth day immediately preceding the date of that General Meeting. Any shareholders who have failed to comply with certain notification requirements summarized under "Notification Requirements" below are precluded from exercising any rights attached to their shares, including voting rights.

Under German law, upon our request a registered shareholder must inform us whether that shareholder owns the shares registered in its name or whether that shareholder holds the shares for any other person as a nominee shareholder. Both the nominee shareholder and the person for whom the shares are held have an obligation to provide the same personal data as required for registration in the share register with respect to the person for whom the shares are held. For so long as a registered shareholder does not provide the requested information as to its holding of the shares or, in the case of nominee shareholding, the required information about the person for whom the shares are held has not been provided, the shares held by the registered shareholder carry no voting rights.

Shareholders may appoint proxies to represent them at General Meetings. As a matter of German law, a proxy relating to voting rights granted by shares may be revoked at any time.

As a foreign private issuer, we are not required to file a proxy statement under U.S. securities law. The proxy voting process for our shareholders in the United States is substantially similar to the process for publicly held companies incorporated in the United States.

The Annual General Meeting normally adopts resolutions on the following matters:

- appropriation of distributable balance sheet profits (Bilanzgewinn) from the preceding fiscal year;
- formal ratification of the acts (Entlastung) of the members of the Management Board and the members of the Supervisory Board in the preceding fiscal year; and
- appointment of independent auditors for the current fiscal year.

A simple majority of votes cast is generally sufficient to approve a measure, except in cases where a greater majority is otherwise required by our Articles of Association or by law. Under the German Stock Corporation Act and the German Transformation Act (Umwandlungsgesetz), certain resolutions of fundamental importance require a majority of at least 75 % of the share capital represented at the General Meeting adopting the resolution, in addition to a majority of the votes cast. Such resolutions include the following matters, among others:

- amendments to our Articles of Association changing our business objectives;
- capital increases that exclude subscription rights;
- capital reductions;
- creation of authorized or conditional capital;
- our dissolution;
- “transformations” under the German Transformation Act such as mergers, spin-offs and changes in our legal form;
- transfer of all our assets;
- integration of another company; and
- intercompany agreements (in particular, domination and profit-transfer agreements).

Under certain circumstances, such as when a resolution violates our Articles of Association or the German Stock Corporation Act, shareholders may file a shareholder action with the appropriate Regional Court (Landgericht) in Germany to set aside resolutions adopted at the General Meeting.

Under German law, the rights of shareholders as a group can be changed by amendment of the company's articles of association. Any amendment of our Articles of Association requires a resolution of the General Meeting. The authority to amend our Articles of Association, insofar as such amendments merely relate to the wording, such as changes of the share capital as a result of the issuance of shares from authorized capital, has been assigned to our Supervisory Board by our Articles of Association. Pursuant to our Articles of Association, the resolutions of the General Meeting are taken by a simple majority of votes and, insofar as a majority of capital stock is required, by a simple majority of capital stock, except where law or our Articles of Association determine otherwise. The rights of individual shareholders can only be changed with their consent. Amendments to the Articles of Association become effective upon their registration in the Commercial Register.

## Share Register

We maintain a share register with Link Markets Services GmbH and our New York transfer agent, pursuant to an agency agreement between us and Link Markets Services GmbH and a sub-agency agreement between Link Markets Services GmbH and the New York transfer agent.

Our share register will be open for inspection by shareholders during normal business hours at our offices at Taunusanlage 12, 60325 Frankfurt am Main, Germany. The share register generally contains each shareholder's surname, first name, date of birth, address and the number or the quantity of our shares held. Shareholders may prevent their personal information from appearing in the share register by holding their securities through a bank or custodian. Although the shareholder would remain the beneficial owner of the securities, only the bank's or custodian's name would appear in the share register.

## Dividend Rights

For a summary of our dividend policy and legal basis for dividends under German law, see “Item 8: Financial Information – Dividend Policy.”

## Increases in Share Capital

German law and our Articles of Association permit us to increase our share capital in any of three ways:

- Resolution by our General Meeting authorizing the issuance of new shares.
- Resolution by our General Meeting authorizing the Management Board, subject to the approval of the Supervisory Board, to issue new shares up to a specified amount (no more than 50 % of existing share capital) within a specified period, which may not exceed five years. This is referred to as authorized capital (genehmigtes Kapital).
- Resolution by our General Meeting authorizing the issuance of new shares up to a specified amount (no more than 50 % of existing share capital) for specific purposes, such as for employee stock options, for use as consideration in

a merger or to issue to holders of convertible bonds or other convertible securities. This is referred to as conditional capital (bedingtes Kapital).

The issuance of new ordinary shares by resolution of the General Meeting requires the simple majority of the votes cast and of the share capital represented at the General Meeting. Resolutions of the General Meeting concerning the creation of authorized or conditional capital require the simple majority of the votes cast and a majority of at least 75 % of the share capital represented at the General Meeting.

## Liquidation Rights

The German Stock Corporation Act requires that if we are liquidated, any liquidation proceeds remaining after the payment of all our liabilities will be distributed to our shareholders in proportion to their shareholdings.

## Preemptive Rights

In principle, holders of our shares have preemptive rights allowing them to subscribe any shares, bonds convertible into, or attached warrants to subscribe for, our shares or participatory certificates we issue. Such preemptive rights exist in proportion to the number of shares currently held by the shareholder. Preemptive rights of shareholders may be excluded with respect to any capital increase, however, as part of the resolution by the General Meeting on such capital increase. Such a resolution by the General Meeting on a capital increase that excludes the shareholders' preemptive rights with respect thereto requires both a majority of the votes cast and a majority of at least 75 % of the share capital represented at the General Meeting. A resolution to exclude preemptive rights requires that the proposed exclusion is expressly disclosed in the agenda to the General Meeting and that the Management Board presents the reasons for the exclusion to the shareholders in a written report. Under the German Stock Corporation Act, preemptive rights may in particular be excluded with respect to capital increases not exceeding 10 % of the existing share capital with an issue price payable in cash not significantly below the stock exchange price at the time of issuance. In addition, shareholders may, in a resolution by the General Meeting on authorized capital, authorize the Management Board to exclude the preemptive rights with respect to newly issued shares from authorized capital in specific circumstances set forth in the resolution.

Shareholders are generally permitted to transfer their preemptive rights. Preemptive rights may be traded on one or more German stock exchanges for a limited number of days prior to the final day the preemptive rights can be exercised.

## Notices and Reports

We publish notices pertaining to our shares and the General Meeting in the electronic German Federal Gazette (Bundesanzeiger) and, when so required, in at least one national newspaper designated for exchange notices.

We send our New York transfer agent, through publication or otherwise, a copy of each of our notices pertaining to any General Meeting, any adjourned General Meeting or our actions with respect to any cash or other distributions or the offering of any rights. We provide such notices in the form given or to be given to our shareholders. Our New York transfer agent is requested to arrange for the mailing of such notices to all shareholders registered in the New York registry.

We will make all notices we send to shareholders available at our principal office for inspection by shareholders. Link Markets Services GmbH and our New York transfer agent will send copies of all notices pertaining to General Meetings to all registered shareholders. Link Markets Services GmbH and our New York transfer agent will send copies of other notices or information material, such as quarterly reports or shareholder letters, to those registered shareholders who have requested to receive such notices or information material.



## Charges of Transfer Agents

We pay Link Markets Services GmbH and our New York transfer agent customary fees for their services as transfer agents and registrars. Our shareholders will not be required to pay Link Markets Services GmbH or our New York transfer agent any fees or charges in connection with their transfers of shares in the share register. Our shareholders will also not be required to pay any fees in connection with the conversion of dividends from euros to U.S. dollars.

## Liability of Transfer Agents

Neither Link Markets Services GmbH nor our New York transfer agent will be liable to shareholders if prevented or delayed by law, or any circumstances beyond their control, from performing their obligations as transfer agents and registrars.

## Notification Requirements

### Disclosure of Interests in a Listed Stock Corporation

#### Disclosure Obligations under the German Securities Trading Act

Deutsche Bank AG, as a listed company, and its shareholders are subject to the shareholding disclosure obligations under the German Securities Trading Act (Wertpapierhandelsgesetz). Pursuant to the German Securities Trading Act, any shareholder whose voting interest in a listed company like Deutsche Bank AG, through acquisition, sale or by other means, reaches, exceeds or falls below a 3 %, 5 %, 10 %, 15 %, 20 %, 25 %, 30 %, 50 % or 75 % threshold must notify us and the BaFin of its current aggregate voting interest in writing and without undue delay, but at the latest within four trading days. In connection with this requirement, the German Securities Trading Act contains various provisions regarding the attribution of voting rights to the person who actually controls the voting rights attached to the shares.

Furthermore, the voting rights attached to a third party's shares are attributed to a shareholder if the shareholder coordinates its conduct concerning the listed company with the third party (so-called "acting in concert") either through an agreement or other means. Acting in concert is deemed to exist if the parties coordinate their voting at the listed company's general meeting or, outside the general meeting, coordinate their actions with the goal of significantly and permanently modifying the listed company's corporate strategy. Each party's voting rights are attributed to each of the other parties acting in concert.

Shareholders failing to comply with their notification obligations are prevented from exercising any rights attached to their shares (including voting rights and the right to receive dividends) until they have complied with the notification requirements. If the failure to comply with the notification obligations specifically relates to the size of the voting interest in the Deutsche Bank AG and is the result of wilful or grossly negligent conduct, the suspension of shareholder rights is – subject to certain exceptions in case of an incorrect notification deviating no more than 10 % from the actual percentage of voting rights – extended by a six-month period commencing upon the submission of the required notification.

Except for the 3 % threshold, similar notification obligations exist for reaching, exceeding or falling below the thresholds described above when a person holds, directly or indirectly, certain instruments other than shares. This applies to instruments which grant upon maturity an unconditional right to acquire existing voting shares of Deutsche Bank AG, a discretionary right to acquire such shares, as well as to instruments that refer to such shares and have an economic effect similar to that of the aforementioned instruments, irrespective of whether such instruments are physically or cash-settled. These instruments include, for example, transferable securities, options, futures contracts and swaps. Voting rights to be attributed to a person based on any such instrument will generally be aggregated with the person's other voting rights deriving from shares or other instruments.

Notice must be given without undue delay, but within four trading days at the latest. The notice period commences as soon as the person obliged to notify knows, or, under the circumstances should know, that his or her voting rights reach, exceed or fall below any of the abovementioned relevant thresholds, but in any event no later than two trading days after reaching, exceeding or falling below the threshold. Only in case that the voting rights reach, exceed or fall below any of the thresholds as a result of an event affecting all voting rights, the notice period might commence at a later stage. Deutsche Bank AG must publish the foregoing notifications without undue delay, but no later than within three trading days after their receipt, and report such publication to the BaFin. Furthermore, the Deutsche Bank AG must publish a notification in case of any increase or decrease of the total number of voting rights without undue delay, but within two trading days at the latest, and such notification must be reported to the BaFin and forwarded to the German Company Register (Unternehmensregister). An exception applies where the increase of the total number of voting rights is due to the issue of new shares from conditional capital. In this case, Deutsche Bank AG must publish the increase at the end of the month in which it occurred. However, such increase must also be notified without undue delay, but within two trading days at the latest, where any other increase or decrease of the total number of voting rights triggers the aforementioned notification requirement.

Non-compliance with the disclosure requirements regarding shareholdings and holdings of other instruments may result in a significant fine imposed by the BaFin. In addition, the BaFin publishes, on its website, sanctions imposed and measures taken indicating the person or entity responsible and the nature of the breach (so-called “naming and shaming”).

Shareholders whose voting rights reach or exceed thresholds of 10 % of the voting rights in a listed company, or higher thresholds, are obliged to inform the company within 20 trading days of the purpose of their investment and the origin of the funds used for such investment, unless the articles of association of the listed company provide otherwise. Our Articles of Association do not contain such a provision.

## Disclosure Obligations under the German Securities Acquisition and Takeover Act

Pursuant to the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz), any person whose voting interest reaches or exceeds 30 % of the voting shares of a listed stock corporation must, within seven calendar days, publish this fact (including the percentage of its voting rights) on the Internet and by means of an electronically operated financial information dissemination system. In addition, the person must subsequently make a mandatory public tender offer within four weeks to all shareholders of the listed company unless an exemption has been granted. The German Securities Acquisition and Takeover Act contains a number of provisions intended to ensure that shareholdings are attributed to those persons who actually control the voting rights attached to the shares. The provisions regarding coordinated conduct as part of the German Securities Acquisition and Takeover Act (so-called “acting in concert”) and the rules on the attribution of voting rights attached to shares of third parties are the same as the statutory securities trading provisions described above under “Disclosure Obligations under the German Securities Trading Act” except with respect to voting rights of shares underlying instruments whose holders are vested with the right to unilaterally acquire existing voting shares of the listed company or voting rights which may be acquired on the basis of instruments with similar economic effect. If a shareholder fails to provide notice on reaching or exceeding the 30 % threshold, or fails to make a public tender offer, the shareholder will be precluded from exercising any rights associated with its shares (including voting and dividend rights) until it has complied with the requirements under the German Securities Acquisition and Takeover Act. In addition, non-compliance with the disclosure requirement may result in a fine.

## Disclosure of Participations in a Credit Institution

The German Banking Act (Kreditwesengesetz) requires any person intending to acquire, alone or acting in concert with another person, a qualifying holding (bedeutende Beteiligung) in a credit or financial services institution to notify the BaFin and the Bundesbank without undue delay and in writing of the intended acquisition. A qualifying holding is a direct or indirect holding in an undertaking which represents 10 % or more of the capital or voting rights or which makes it possible to exercise a significant influence over the management of such undertaking. The required notice must

contain information demonstrating, among other things, the reliability of the person or, in the case of a corporation or other legal entity, the reliability of its directors and officers.

A person holding a qualifying holding shall also notify the BaFin and the Bundesbank without undue delay and in writing if he intends to increase the amount of the qualifying holding up to or beyond the thresholds of 20 %, 30 % or 50 % of the voting rights or capital or in such way that the institution comes under such person's control or if such person intends to reduce the participation below 10 % or below one of the other thresholds described above.

The BaFin will have to confirm the receipt of a complete notification within two working days in writing to the proposed acquirer. Within a period of 60 working days from the BaFin's written confirmation that a complete notification has been received (assessment period), the BaFin will review and, in accordance with Council Regulation (EU) No 1024/2013 of October 15, 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, forward the notification and a proposal for a decision whether or not to object to the acquisition to the ECB. The ECB will decide whether or not to object to the acquisition on the basis of the applicable assessment criteria. Within the assessment period the ECB may prohibit the intended acquisition in particular if there appears to be reason to assume that the acquirer or its directors and officers are not reliable or that the acquirer is not financially sound, that the participation would impair the effective supervision of the relevant credit institution, that a prospective managing director (Geschäftsleiter) is not reliable or not qualified, that money laundering or financing of terrorism has occurred or been attempted in connection with the intended acquisition, or that there would be an increased risk of such illegal acts as a result of the intended acquisition. During the assessment period the BaFin may request further information necessary for its or the ECB's assessment. Generally, such a request delays the expiration of the assessment period by up to 30 business days. If the information submitted is incomplete or incorrect the ECB may prohibit the intended acquisition.

If a person acquires a qualifying holding despite such prohibition or without making the required notification, the competent authority may prohibit the person from exercising the voting rights attached to the shares. In addition, non-compliance with the disclosure requirement may result in the imposition of a fine in accordance with statutory provisions. Moreover, the competent authority may order that any disposition of the shares requires its approval and may ultimately appoint a trustee to exercise the voting rights attached to the shares or to sell the shares to the extent they constitute a qualifying holding.

## Review of Acquisition of 25 % or more by the German Federal Ministry of Economics and Technology

Pursuant to the German Foreign Trade Act (Außenwirtschaftsgesetz) and the German Foreign Trade Regulation (Außenwirtschaftsverordnung), the direct or indirect acquisition of 25 % or more of the voting rights in a German company by investors from outside the European Union and the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) or by entities which are owned by 25 % or more by investors from outside the aforementioned region may be reviewed by the German Federal Ministry of Economics and Technology. If the Ministry determines that the acquisition poses a threat to the public policy or public security of Germany, it may impose conditions on or suspend the acquisition or require that it is unwound. The decision to review an acquisition must be made within three months following the conclusion of the contract or publication of the decision to launch a take-over bid or publication of the acquisition of control. The review must be completed within two months following receipt of the complete acquisition documents. No notification of the acquisition is required but the acquirer may seek pre-clearance of a proposed acquisition from the Federal Ministry of Economics and Technology.

## EU Short Selling Regulation (ban on naked short selling)

Regulation (EU) No 236/2012 of the European Parliament and of the Council of March 14, 2012 on short selling and certain aspects of credit default swaps (the "EU Short Selling Regulation") came into force on November 1, 2012. The EU Short Selling Regulation, the regulations adopted by the EU Commission implementing it, and the German act implementing the EU Short Selling Regulation replace the previously applicable German federal provisions governing

the ban on naked short selling of shares and certain debt securities. (Short sales are sales of securities that the seller does not own, with the intention of buying back an identical security at a later point in time in order to be able to deliver the security. A short sale is “naked” when the seller has not borrowed the securities at the time of the short sale, or ensured they can be borrowed.) Under the EU Short Selling Regulation, short sales of shares are permitted only under certain conditions. Significant net short positions in shares must be reported to the BaFin and, if a certain threshold is exceeded, they must also be publicly disclosed. Net short positions are calculated by netting the long and short positions held by a natural or legal person in the issued capital of the company concerned. The details are set forth in the EU Short Selling Regulation and the regulations adopted by the EU Commission implementing it. In certain situations described in greater detail in the EU Short Selling Regulation, the BaFin is permitted to limit short selling and comparable transactions.

## Disclosure of Transactions of Managers

Art. 19 of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014 on market abuse (the “EU Market Abuse Regulation”) requires persons with management responsibilities (“Managers”) in a listed company like Deutsche Bank AG to notify the company and the BaFin of their own transactions in shares of the company or financial instruments based thereon, in particular derivatives. Such notifications must be made promptly and no later than three business days after the date of the transaction. The notification obligation also applies to persons who are closely associated with a Manager. The obligation does not apply if the aggregate annual transactions by a Manager or persons with whom he or she is closely associated do not, individually, exceed an amount of € 5,000.00 through the end of a calendar year. The BaFin may decide to increase this threshold up to € 20,000.00.

Deutsche Bank AG is required to promptly publish any notification received but in any case no later than three business days after the transaction. The publication must be made in a manner which enables fast access to this information on a non-discriminatory basis in accordance with the implementing standards published by the European Securities and Markets Authority. Furthermore, Deutsche Bank AG must without undue delay notify the BaFin and forward the notification to the Company Register (Unternehmensregister). For the purposes of the EU Market Abuse Regulation, the following persons are deemed to be a Manager: members of management, administrative or supervisory bodies of Deutsche Bank AG as well as senior executives who are not such members but who have regular access to inside information relating directly or indirectly to the Company and who have power to take managerial decisions affecting the future developments and business prospects of the Company. The following persons are deemed to be closely associated with a Manager: spouses, registered civil partners (eingetragene Lebenspartner), dependent children and other relatives who at the time of the transaction requiring notification have lived in the same household with the Manager for at least one year. Legal entities for which the aforementioned persons have management responsibilities are also subject to the notification requirement. The aforementioned provisions also apply to legal entities, companies and institutions directly or indirectly controlled by a Manager or by a person closely associated with a Manager, which have been founded to the benefit of such a person, or whose economic interests correspond to a considerable extent to those of such a person. Non-compliance with the notification requirements may result in a fine.

## Material Contracts

In the usual course of our business, we enter into numerous contracts with various other entities. We have not, however, entered into any material contracts outside the ordinary course of our business within the past two years.

## Exchange Controls

As in other member states of the European Union, regulations issued by the competent European Union authorities to comply with United Nations resolutions have caused freeze orders on assets of certain legal and natural persons designated in such regulations. In addition, the European Union maintained a wide range of autonomous economic and

financial sanctions on Iran. While all nuclear-related economic and financial EU sanctions against Iran were repealed on January 16, 2016, some restrictions remain in force.

With some exceptions, corporations or individuals residing in Germany are required to report to the Bundesbank any payment received from, or made to or for the account of, a nonresident corporation or individual that exceeds € 12,500 (or the equivalent in a foreign currency). This reporting requirement is for statistical purposes.

Subject to the above-mentioned exceptions, there are currently no German laws, decrees or regulations that would prevent the transfer of capital or remittance of dividends or other payments to our shareholders who are not residents or citizens of Germany.

There are also no restrictions under German law or our Articles of Association concerning the right of nonresident or foreign shareholders to hold our shares or to exercise any applicable voting rights. Where the investment reaches or exceeds certain thresholds, however, certain reporting obligations apply and the investment may become subject to review by the BaFin, the European Central Bank and other competent authorities. For more information see “Item 10: Additional Information – Notification Requirements”.

## Taxation

The following is a summary of material German and United States federal income tax consequences of the ownership and disposition of shares for a resident of the United States for purposes of the income tax convention between the United States and Germany (the “Treaty”) who is fully eligible for benefits under the Treaty. A U.S. resident will generally be entitled to Treaty benefits if it is:

- the beneficial owner of shares (and of the dividends paid with respect to the shares);
- an individual resident of the United States, a U.S. corporation, or a partnership, estate or trust to the extent its income is subject to taxation in the United States in its hands or in the hands of its partners or beneficiaries;
- not also a resident of Germany for German tax purposes; and
- not subject to “anti-treaty shopping” articles under German domestic law or the Treaty that apply in limited circumstances.

The Treaty benefits discussed below generally are not available to shareholders who hold shares in connection with the conduct of business through a permanent establishment in Germany. The summary does not discuss the treatment of those shareholders.

The summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to any particular shareholder, including tax considerations that arise from rules of general application or that are generally assumed to be known by shareholders. In particular, the summary deals only with shareholders that will hold shares as capital assets and does not address the tax treatment of shareholders that are subject to special rules, such as fiduciaries of pension, profit-sharing or other employee benefit plans, banks, insurance companies, dealers in securities or currencies, persons that hold shares as a position in a straddle, conversion transaction, synthetic security or other integrated financial transaction, persons that elect mark-to-market treatment, persons that own, directly or indirectly, 10 % or more of our voting stock, persons that hold shares through a partnership or hybrid entity and persons whose “functional currency” is not the U.S. dollar. The summary is based on German and U.S. laws, treaties and regulatory interpretations, including in the United States current and proposed U.S. Treasury regulations as of the date hereof, all of which are subject to change (possibly with retroactive effect).

Shareholders should consult their own advisors regarding the tax consequences of the ownership and disposition of shares in light of their particular circumstances, including the effect of any state, local or other national laws.

## Taxation of Dividends

Dividends that we pay are subject to German withholding tax at an aggregate rate of 26.375 % (consisting of a 25 % withholding tax and a 1.375 % surcharge). Under the Treaty, a U.S. resident will be entitled to receive a refund from the German tax authorities of 11.375 in respect of a declared dividend of 100. For example, for a declared dividend of 100, a U.S. resident initially will receive 73.625 and may claim a refund from the German tax authorities of 11.375 and, therefore, receive a total cash payment of 85 (i.e., 85 % of the declared dividend). For U.S. tax purposes, a U.S. resident will be deemed to have received total dividends of 100. The gross amount of dividends that a U.S. resident receives (which includes amounts withheld in respect of German withholding tax) generally will be subject to U.S. federal income taxation as foreign source dividend income, and will not be eligible for the dividends received deduction generally allowed to U.S. corporations. German withholding tax at the 15 % rate provided under the Treaty will be treated as a foreign income tax that, subject to generally applicable limitations under U.S. tax law, is eligible for credit against a U.S. resident's U.S. federal income tax liability or, at its election, may be deducted in computing taxable income. Thus, for a declared dividend of 100, a U.S. resident will be deemed to have paid German taxes of 15. A U.S. resident cannot claim credits for German taxes that would have been refunded to it if it had filed a claim for refund. Foreign tax credits will not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions. The creditability of foreign withholding taxes may be limited in certain situations, including where the burden of foreign taxes is separated inappropriately from the related foreign income.

Subject to certain exceptions for short-term and hedged positions, "qualified dividends" received by certain non-corporate U.S. shareholders will generally be subject to taxation in the United States at a lower rate than other ordinary income. Dividends received will be qualified dividends if we (i) are eligible for the benefits of a comprehensive income tax treaty with the United States that the U.S. Internal Revenue Service ("IRS") has approved for purposes of the qualified dividend rules and (ii) were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a passive foreign investment company ("PFIC"). The Treaty has been approved for purposes of the qualified dividend rules, and we believe we qualify for benefits under the Treaty. The determination of whether we are a PFIC must be made annually and is dependent on the particular facts and circumstances at the time. It requires an analysis of our income and valuation of our assets, including goodwill and other intangible assets. Based on our audited financial statements and relevant market and shareholder data, we believe that we were not a PFIC for U.S. federal income tax purposes with respect to our taxable years ended December 31, 2015 or December 31, 2016. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market and shareholder data, we do not currently anticipate becoming a PFIC for our taxable year ending December 31, 2017, or for the foreseeable future. However, the PFIC rules are complex and their application to financial services companies is unclear. Each U.S. shareholder should consult its own tax advisor regarding the potential applicability of the PFIC regime to us and its implications for their particular circumstances.

If a U.S. resident receives a dividend paid in euros, it will recognize income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If dividends are converted into U.S. dollars on the date of receipt, a U.S. resident generally should not be required to recognize foreign currency gain or loss in respect of the dividend income but may be required to recognize foreign currency gain or loss on the receipt of a refund in respect of German withholding tax to the extent the U.S. dollar value of the refund differs from the U.S. dollar equivalent of that amount on the date of receipt of the underlying dividend.



## Refund Procedures

To claim a refund, a U.S. resident must submit, within four years from the end of the calendar year in which the dividend is received, a claim for refund to the German tax authorities together with the original bank voucher (or certified copy thereof) issued by the paying entity documenting the tax withheld. For dividends received after 2011, the claim for refund must be accompanied by a withholding tax certificate (Kapitalertragsteuerbescheinigung) on an officially prescribed form and issued by the institution that withheld the tax.

Claims for refunds are made on a special German claim for refund form (Form E-USA), which must be filed with the German tax authorities: Bundeszentralamt für Steuern, An der Kuppel 1, D-53225 Bonn, Germany. The German claim for refund forms may be obtained inter alia from the German tax authorities at the same address where the applications are filed or can be downloaded from the homepage of the Bundeszentralamt für Steuern ([www.bzst.bund.de](http://www.bzst.bund.de)). A U.S. resident must also submit to the German tax authorities a certification (on IRS Form 6166) with respect to its last filed U.S. federal income tax return. Requests for IRS Form 6166 are made on IRS Form 8802, which requires payment of a user fee. IRS Form 8802 and its instructions can be obtained from the IRS website at [www.irs.gov](http://www.irs.gov). Instead of the individual refund procedure described above, a U.S. resident may use an IT-supported quick-refund procedure ("Datenträgerverfahren – DTV"/"Data Medium Procedure – DMP"). If the U.S. resident's bank or broker elects to participate in the DMP, it will perform administrative functions necessary to claim the Treaty refund for the beneficiaries. The refund beneficiaries must provide specified information to the DMP participant and confirm to the DMP participant that they meet the conditions of the Treaty provisions and that they authorize the DMP participant to file applications and receive notices and payments on their behalf.

The refund beneficiaries also must provide a "certification of filing a tax return" on IRS Form 6166 with the DMP participant. In addition, if the individual refund procedure requires a withholding tax certificate (see above), such certificate is generally also necessary under the DMP.

The German tax authorities reserve the right to audit the entitlement to tax refunds for several years following their payment pursuant to the Treaty in individual cases. The DMP participant must assist with the audit by providing the necessary details or by forwarding the queries to the respective refund beneficiaries/shareholders.

The German tax authorities will issue refunds denominated in euros. In the case of shares held through banks or brokers participating in the Depository Trust Company, the refunds will be issued to the Depository Trust Company, which will convert the refunds to U.S. dollars. The resulting amounts will be paid to banks or brokers for the account of holders.

If a U.S. resident holds its shares through a bank or broker who elects to participate in the DMP, it could take at least three weeks for it to receive a refund after a combined claim for refund has been filed with the German tax authorities. If a U.S. resident files a claim for refund directly with the German tax authorities, it could take at least eight months for it to receive a refund. The length of time between filing a claim for refund and receipt of that refund is uncertain and we can give no assurances as to when any refund will be received.

## Taxation of Capital Gains

Under the Treaty, a U.S. resident will not be subject to German capital gains tax in respect of a sale or other disposition of shares. For U.S. federal income tax purposes, a U.S. holder will recognize capital gain or loss on the sale or other disposition of shares in an amount equal to the difference between such holder's tax basis in the shares and the U.S. dollar value of the amount realized from their sale or other disposition. Such gain or loss will be capital gain or loss and will be long-term capital gain or loss if the shares were held for more than one year. The net amount of long-term capital gain realized by an individual generally is subject to taxation at a lower rate than ordinary income. Any such gain generally would be treated as income arising from sources within the United States; any such loss would generally be allocated against U.S. source income. The ability to offset capital losses against ordinary income is subject to limitations.

Shareholders whose shares are held in an account with a German bank or financial services institution (including a German branch of a non-German bank or financial services institution) are urged to consult their own advisors. This summary does not discuss their particular tax situation.

## United States Information Reporting and Backup Withholding

Dividends and payments of the proceeds on a sale of shares, paid within the United States or through certain U.S.-related financial intermediaries are subject to information reporting and may be subject to backup withholding unless the U.S. resident (i) is a corporation (other than an S corporation) or other exempt recipient or (ii) provides a taxpayer identification number and certifies (on IRS Form W-9) that no loss of exemption from backup withholding has occurred. Shareholders that are not U.S. persons generally are not subject to information reporting or backup withholding.

However, a non-U.S. person may be required to provide a certification (generally on IRS Form W-8BEN or W-8BEN-E) of its non-U.S. status in connection with payments received in the United States or through a U.S.-related financial intermediary.

Backup withholding tax is not an additional tax, and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a holder's U.S. federal income tax liability, provided the required information is furnished to the IRS.

Shareholders may be subject to other U.S. information reporting requirements. Shareholders should consult their own advisors regarding the application of U.S. information reporting rules in light of their particular circumstances.

## German Gift and Inheritance Taxes

Under the current estate, inheritance and gift tax treaty between the United States and Germany (the "Estate Tax Treaty"), a transfer of shares generally will not be subject to German gift or inheritance tax so long as the donor or decedent, and the heir, donee or other beneficiary, were not domiciled in Germany for purposes of the Estate Tax Treaty at the time the gift was made, or at the time of the decedent's death, and the shares were not held in connection with a permanent establishment or fixed base in Germany.

The Estate Tax Treaty provides a credit against U.S. federal estate and gift tax liability for the amount of inheritance and gift tax paid in Germany, subject to certain limitations, where shares are subject to German inheritance or gift tax and United States federal estate or gift tax.

## Other German Taxes

There are currently no German net wealth, transfer, stamp or other similar taxes that would apply to a U.S. resident as a result of the receipt, purchase, ownership or sale of shares.

## Dividends and Paying Agents

Not required because this document is filed as an annual report.

## Statement by Experts

Not required because this document is filed as an annual report.

## Documents on Display

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, we file reports and other information with the Securities and Exchange Commission. You may inspect and copy these materials, including this document and its exhibits, at the Commission's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of the materials from the Public Reference Room at prescribed rates. You may obtain information on the operation of the Commission's Public Reference Room by calling the Commission in the United States at 1-800-SEC-0330. Our Securities and Exchange Commission filings are also available over the Internet at the Securities and Exchange Commission's website at [www.sec.gov](http://www.sec.gov) under File Number 001-15242.

## Subsidiary Information

Not applicable.

## Item 11: Quantitative and Qualitative Disclosures about Credit, Market and Other Risk

For Quantitative and Qualitative Disclosures about Credit, Market and Other Risk, please see "Management Report: Risk Report" beginning on page 88 of the Annual Report 2016.

Please see pages S-1 through S-15 of the Supplemental Financial Information, which pages are incorporated by reference herein, for information required by SEC Industry Guide 3.

## Item 12: Description of Securities other than Equity Securities

Not required because this document is filed as an annual report and our ordinary shares are not represented by American Depositary Receipts.

## PART II

### Item 13: Defaults, Dividend Arrearages and Delinquencies

Not applicable.

### Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

### Item 15: Controls and Procedures

#### Disclosure Controls and Procedures

An evaluation was carried out under the supervision and with the participation of our management, including our Chairman and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of December 31, 2016. There are, as described below, inherent limitations to the effectiveness of any control system, including disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon such evaluation, our Chairman and Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures were effective as of December 31, 2016.

#### Management's Annual Report on Internal Control over Financial Reporting

Management of Deutsche Bank Aktiengesellschaft, together with its consolidated subsidiaries, is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed under the supervision of our principal executive officer and our principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the firm's financial statements for external reporting purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and as endorsed by the European Union. As of December 31, 2016, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the

framework established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the assessment performed, management has determined that our internal control over financial reporting as of December 31, 2016 was effective based on the COSO framework (2013).

KPMG AG Wirtschaftsprüfungsgesellschaft, the registered public accounting firm that audited the financial statements included in this document, has issued a report on our internal control over financial reporting, which is set forth below.

## Report of Independent Registered Public Accounting Firm

To the Supervisory Board of Deutsche Bank Aktiengesellschaft:

We have audited Deutsche Bank Aktiengesellschaft's (the "Company" or "Deutsche Bank") internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying 'Management's Annual Report on Internal Control over Financial Reporting'. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Deutsche Bank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Deutsche Bank Aktiengesellschaft and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and the related notes, and the specific disclosures described in Note 1 to the consolidated financial statements as being part of the financial statements and our report dated March 15, 2017 expressed an unqualified opinion on those consolidated financial statements.

Frankfurt am Main, Germany

March 15, 2017

KPMG AG

Wirtschaftsprüfungsgesellschaft

## Change in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation referred to above that occurred during the year ended December 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. As such, disclosure controls and procedures or systems for internal control over financial reporting may not prevent all error and all fraud. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and any design may not succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

## Item 16A: Audit Committee Financial Expert

Please see “Corporate Governance Statement/Corporate Governance Report: Auditing and Controlling: Audit Committee Financial Expert” on page 461 of the Annual Report 2016.

## Item 16B: Code of Ethics

Please see “Corporate Governance Statement/Corporate Governance Report: Values and Leadership Principles of Deutsche Bank AG and Deutsche Bank Group: Code of Business Conduct and Ethics” on pages 461 and 462 of the Annual Report 2016.



## Item 16C: Principal Accountant Fees and Services

Please see “Management Report: Corporate Governance Statement/Corporate Governance Report: Auditing and Controlling: Principal Accountant Fees and Services” on pages 462 and 463 of the Annual Report 2016.

## Item 16D: Exemptions from the Listing Standards for Audit Committees

Our common shares are listed on the New York Stock Exchange, the corporate governance rules of which require a foreign private issuer such as us to have an audit committee that satisfies the requirements of Rule 10A-3 under the U.S. Securities Exchange Act of 1934. These requirements include a requirement that the audit committee be composed of members that are “independent” of the issuer, as defined in the Rule, subject to certain exemptions, including an exemption for employees who are not executive officers of the issuer if the employees are elected or named to the board of directors or audit committee pursuant to the issuer’s governing law or documents, an employee collective bargaining or similar agreement or other home country legal or listing requirements. The German Co-Determination Act of 1976 (Mitbestimmungsgesetz) requires that the shareholders elect half of the members of the supervisory board of large German companies, such as us, and that employees in Germany elect the other half. Employee-elected members are typically themselves employees or representatives of labor unions representing employees. Pursuant to law and practice, committees of the Supervisory Board are typically composed of both shareholder- and employee-elected members. Of the current members of our Audit Committee, three – Henriette Mark, Gabriele Platscher and Bernd Rose – are current employees of Deutsche Bank who have been elected as Supervisory Board members by the employees. None of them is an executive officer. Accordingly, their service on the Audit Committee is permissible pursuant to the exemption from the independence requirements provided for by paragraph (b)(1)(iv)(C) of the Rule. We do not believe the reliance on such exemption would materially adversely affect the ability of the Audit Committee to act independently and to satisfy the other requirements of the Rule.

## Item 16E: Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In 2016, we repurchased a total of 18,121,461 shares, none of which via derivatives, for group purposes pursuant to share buybacks authorized by the General Meeting. During the period from January 1, 2016 until the 2016 Annual General Meeting on May 19, 2016, we repurchased 17,244,807, none of which via derivatives, of our ordinary shares pursuant to the authorization granted by the Annual General Meeting on May 21, 2015, at an average price of €15.37 and for a total consideration of €265 million. This authorization was replaced by a new authorization to buy back shares approved by the Annual General Meeting on May 19, 2016. Under the new authorization, up to 137,927,313 shares may be repurchased through April 30, 2021. Of these, 68,963,656 shares may be purchased by using derivatives. During the period from the 2016 Annual General Meeting until December 31, 2016, we repurchased 876,654 shares at an average price of €11.99 and for a total consideration of €10.5 million (excluding option premium). At December 31, 2016, the number of shares held in Treasury from buybacks totaled 0 shares. This figure stems from 296,192 shares at the beginning of the year, plus 18.1 million shares from buybacks in 2016, less 18.4 million shares which were used to fulfill delivery obligations in the course of share-based compensation of employees. We did not cancel any shares in 2016.

In addition to these share buybacks for group purposes, pursuant to a shareholder authorization approved at our 2013 Annual General Meeting, we are authorized to buy and sell, for the purpose of securities trading, our ordinary shares through April 30, 2018, provided that the net number of shares held for this purpose at the close of any trading day may not exceed 5 % of our share capital on that day. The gross volume of these securities trading transactions is often large, and even the net amount of such repurchases or sales may, in a given month, be large, though over longer periods of time such transactions tend to offset and are in any event constrained by the 5 % of share capital limit. These securities trading transactions consist predominantly of transactions on major non-U.S. securities exchanges. We also enter into derivative contracts with respect to our shares.

The following table sets forth, for each month in 2016 and for the year as a whole, the total gross number of our shares repurchased by us and our affiliated purchasers (pursuant to both activities described above), the total gross number of shares sold, the net number of shares purchased or sold, the average price paid per share (based on the gross shares repurchased), the number of shares that were purchased for group purposes mentioned above and the maximum number of shares that at that date remained eligible for purchase under such programs.

#### Issuer Purchases of Equity Securities in 2016

Month	Total number of shares purchased	Total number of shares sold	Net number of shares purchased or (sold)	Average price paid per share (in €)	Number of shares purchased for group purposes (incl. derivatives)	Maximum number of shares that may yet be purchased under plans or programs
January	21,045,601	16,552,753	4,492,848	17.96	4,500,236	117,271,157
February	78,584,689	71,108,556	7,476,133	15.10	12,744,571	112,770,921
March	28,392,091	28,439,194	(47,103)	16.99	0	100,026,350
April	17,842,650	17,915,789	(73,139)	15.70	0	100,026,350
May	21,455,636	21,448,838	6,798	14.93	0	137,927,313
June	29,435,225	29,393,826	41,399	13.76	0	137,927,313
July	16,394,760	16,136,537	258,223	12.56	240,000	137,687,313
August	19,181,659	31,030,182	(11,848,523)	12.13	550,654	137,136,659
September	22,232,594	22,487,477	(254,883)	11.73	0	137,136,659
October	44,327,399	44,243,965	83,434	12.92	86,000	137,050,659
November	14,236,130	14,481,044	(244,914)	13.91	0	137,050,659
December	41,941,028	42,002,723	(61,695)	17.67	0	137,050,659
<b>Total 2016</b>	<b>355,069,462</b>	<b>355,240,884</b>	<b>203,442</b>	<b>14.82</b>	<b>18,121,461</b>	<b>137,050,659</b>

At December 31, 2016, our issued share capital consisted of 1,379,273,131 ordinary shares, of which 1,379,069,689 were outstanding and 203,442 were held by us in treasury.

## Item 16F: Change in Registrant's Certifying Accountant

Not applicable.

## Item 16G: Corporate Governance

Our common shares are listed on the New York Stock Exchange, as well as on all seven German stock exchanges. Set forth below is a description of the significant ways in which our corporate governance practices differ from those applicable to U.S. domestic companies under the New York Stock Exchange's listing standards as set forth in its Listed Company Manual (the "NYSE Manual").

**The Legal Framework.** Corporate governance principles for German stock corporations (Aktiengesellschaften) are set forth in the German Stock Corporation Act (Aktiengesetz), the German Co-Determination Act of 1976 (Mitbestimmungsgesetz) and the German Corporate Governance Code (Deutscher Corporate Governance Kodex, referred to as the Code).

**The Two-Tier Board System of a German Stock Corporation.** The German Stock Corporation Act provides for a clear separation of management and oversight functions. It therefore requires German stock corporations to have both a supervisory board (Aufsichtsrat) and a management board (Vorstand). These boards are separate; no individual may be a member of both. Both the members of the management board and the members of the supervisory board must exercise the standard of care of a diligent business person to the company. In complying with this standard of care they are required to take into account a broad range of considerations, including the interests of the company and those of its shareholders, employees and creditors.

The management board is responsible for managing the company and representing the company in its dealings with third parties. The management board is also required to ensure appropriate risk management within the corporation and to establish an internal monitoring system. The members of the management board, including its chairperson or speaker, are regarded as peers and share a collective responsibility for all management decisions.

The supervisory board appoints and removes the members of the management board. It also may appoint a chairperson of the management board. Although it is not permitted to make management decisions, the supervisory board has comprehensive monitoring functions with respect to the activities of the management board, including advising the management board and participating in decisions of fundamental importance to the company. To ensure that these monitoring functions are carried out properly, the management board must, among other things, regularly report to the supervisory board with regard to current business operations and business planning, including any deviation of actual developments from concrete and material targets previously presented to the supervisory board. The supervisory board may also request special reports from the management board at any time. Transactions of fundamental importance to the company, such as major strategic decisions or other actions that may have a fundamental impact on the company's assets and liabilities, financial condition or results of operations, may be subject to the consent of the supervisory board. Pursuant to our Articles of Association (Satzung), such transactions include the granting of powers of attorney without limitation to the affairs of a specific office, major acquisitions or disposals of real estate or participations in companies and granting of loans and acquiring participations if the German Banking Act (Kreditwesengesetz) requires approval by the Supervisory Board.

Pursuant to the German Co-Determination Act, our Supervisory Board consists of representatives elected by the shareholders and representatives elected by the employees in Germany. Based on the total number of Deutsche Bank employees in Germany these employees have the right to elect one-half of the total of twenty Supervisory Board members. The chairperson of the Supervisory Board of Deutsche Bank is a shareholder representative who has the deciding vote in the event of a tie.

This two-tier board system contrasts with the unitary board of directors envisaged by the relevant laws of all U.S. states and the New York Stock Exchange listing standards for U.S. companies.

German companies which have their shares listed on a stock exchange must report each year on the company's corporate governance in their annual report to shareholders.

**The Recommendations of the Code.** The Code was issued in 2002 by a commission composed of German corporate governance experts appointed by the German Federal Ministry of Justice in 2001. The Code was last amended in May 2015 and, as a general rule, will be reviewed annually and amended if necessary to reflect international corporate governance developments. The Code describes and summarizes the basic mandatory statutory corporate governance principles found in the provisions of German law. In addition, it contains supplemental recommendations and suggestions for standards on responsible corporate governance intended to reflect generally accepted best practice.

The Code addresses six core areas of corporate governance. These are (1) shareholders and shareholders' meetings, (2) the cooperation between the management board and the supervisory board, (3) the management board, (4) the supervisory board, (5) transparency and (6) financial reporting and audits.

The Code contains three types of provisions. First, the Code describes and summarizes the existing statutory, i.e., legally binding, corporate governance framework set forth in the German Stock Corporation Act and in other German laws. Those laws – and not the incomplete and abbreviated summaries of them reflected in the Code – must be complied with. The second type of provisions is recommendations. While these are not legally binding, Section 161 of the German Stock Corporation Act requires that any German exchange-listed company declare annually that the company complies with the recommendations of the Code or, if not, which recommendations the company does not comply with (“comply or explain”). The third type of Code provisions comprises suggestions which companies may choose not to comply with without disclosure. The Code contains a significant number of such suggestions, covering almost all of the core areas of corporate governance it addresses.

In their last Declaration of Conformity of October 27, 2016, the Management Board and the Supervisory Board of Deutsche Bank stated that, since the last Declaration of Conformity issued on October 28, 2015, they have acted and will act in the future in conformity with the recommendations of the Code, with certain specified exceptions. The Declaration of Conformity is available on Deutsche Bank's internet website at [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm).

**Supervisory Board Committees.** The supervisory board may form committees. The German Co-Determination Act requires that the supervisory board form a mediation committee to propose candidates for the management board in the event that the two-thirds majority of the members of the supervisory board needed to appoint members of the management board is not met.

The German Stock Corporation Act specifically mentions the possibility to establish an “audit committee” to handle issues of accounting and risk management, compliance, auditor independence, the engagement and compensation of outside auditors appointed by the shareholders' meeting and the determination of auditing focal points. The Code recommends establishing such an “audit committee”. Since 2007 the Code also recommends establishing a “nomination committee” comprised only of shareholder-elected supervisory board members to prepare the supervisory board's proposals for the election or appointment of new shareholder representatives to the supervisory board. The Code also includes suggestions on the subjects that may be handled by supervisory board committees, including corporate strategy, compensation of the members of the management board, investments and financing. Under the German Stock Corporation Act, any supervisory board committee must regularly report to the supervisory board. Sections 25d (7) to (12) of the German Banking Act require, depending on size and complexity of the respective credit institution, the establishment of supervisory board committees with specific tasks to be performed as follows: risk committee (Section 25d (8)), audit committee (Section 25d (9)), nomination committee (with different tasks and composition requirements than under the Code) (Section 25d (11)) and compensation control committee (Section 25d (12)).

The Supervisory Board of Deutsche Bank has established a Chairman's Committee (Präsidialausschuss) which is responsible for conclusion, amendment and termination of employment and pension contracts in consideration of the plenary Supervisory Board's sole authority to decide on the remuneration of the members of the Management Board, a Nomination Committee (Nominierungsausschuss), an Audit Committee (Prüfungsausschuss), a Risk Committee (Risikoausschuss), an Integrity Committee (Integritätsausschuss), a Compensation Control Committee (Vergütungskontrollausschuss) and the required Mediation Committee (Vermittlungsausschuss). The functions of a nominating/corporate governance committee and of a compensation committee required by the NYSE Manual for U.S. companies listed on the NYSE are therefore performed by the Supervisory Board or one of its committees, in particular the Chairman's Committee, the Compensation Control Committee and the Mediation Committee.

**Independent Board Members.** The NYSE Manual requires that a majority of the members of the board of directors of a NYSE listed U.S. company and each member of its nominating/corporate governance, compensation and audit committees be “independent” according to strict criteria and that the board of directors determines that such member has no material direct or indirect relationship with the company.

As a foreign private issuer, Deutsche Bank is not subject to these requirements. However, its audit committee must meet the more lenient independence requirement of Rule 10A-3 under the Securities Exchange Act of 1934. German corporate law does not require an affirmative independence determination, meaning that the Supervisory Board need not make affirmative findings that audit committee members are independent. However, the German Stock Corporation Act requires that at least one member of the supervisory board or, if an audit committee is established, such audit committee, must be independent and have expertise in accounting and audit matters, unless all members have been appointed before May 29, 2009. Moreover, both the German Stock Corporation Act and the Code contain several rules, recommendations and suggestions to ensure the supervisory board’s independent advice to, and supervision of, the management board. As noted above, no member of the management board may serve on the supervisory board (and vice versa). Supervisory board members will not be bound by directions or instructions from third parties. Any advisory, service or similar contract between a member of the supervisory board and the company is subject to the supervisory board’s approval. A similar requirement applies to loans granted by the company to a supervisory board member or other persons, such as certain members of a supervisory board member’s family. In addition, the German Stock Corporation Act prohibits a person who within the last two years was a member of the management board from becoming a member of the supervisory board of the same company unless he or she is elected upon the proposal of shareholders holding more than 25 % of the voting rights of the company.

The Code also recommends that each member of the supervisory board inform the supervisory board of any conflicts of interest which may result from a consulting or directorship function with clients, suppliers, lenders or other business partners of the stock corporation. In the case of material conflicts of interest or ongoing conflicts, the Code recommends that the mandate of the Supervisory Board member be removed by the shareholders’ meeting. The Code further recommends that any conflicts of interest that have occurred be reported by the supervisory board at the annual general meeting, together with the action taken, and that potential conflicts of interest also be taken into account in the nomination process for the election of supervisory board members.

**Audit Committee Procedures.** Pursuant to the NYSE Manual the audit committee of a U.S. company listed on the NYSE must have a written charter addressing its purpose, an annual performance evaluation, and the review of an auditor’s report describing internal quality control issues and procedures and all relationships between the auditor and the company. The Audit Committee of Deutsche Bank operates under written terms of reference and reviews the efficiency of its activities regularly.

**Disclosure of Corporate Governance Guidelines.** Deutsche Bank discloses its Articles of Association, the Terms of Reference of its Management Board, its Supervisory Board, the Chairman’s Committee, the Audit Committee, the Risk Committee, the Integrity Committee, the Compensation Control Committee and the Nomination Committee, its Declaration of Conformity under the Code and other documents pertaining to its corporate governance on its internet website at [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm).

## Item 16H: Mine Safety Disclosure

Not applicable.

## Disclosures Under Iran Threat Reduction and Syria Human Rights Act of 2012

Under Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) of the U.S. Securities Exchange Act of 1934, as amended, an issuer of securities registered under the Securities Exchange Act of 1934 is required to disclose in its periodic reports filed under the Securities Exchange Act of 1934 certain of its activities and those of its affiliates relating to Iran and to other persons sanctioned by the U.S. under programs relating to terrorism and proliferation of weapons of mass destruction that occurred during the period covered by the report. We describe below a number of potentially disclosable activities of Deutsche Bank AG and its affiliates. Disclosure is generally required regardless of whether the activities, transactions or dealings were conducted in compliance with applicable law. Under the Joint Comprehensive Plan of Action (JCPoA) which has been concluded on July 14, 2015 between the permanent members of the UN Security Council and Germany on the one hand and Iran on the other, Implementation Day has occurred on January 16, 2016. Any changes starting from Implementation Day have no consequences for the reporting obligations that apply for Deutsche Bank. Deutsche Bank will also report transactions in which other Iranian persons or entities listed on OFAC sanctions lists were involved, whether or not they are directly or indirectly owned or controlled by the Iranian government.

**Legacy Financing Arrangements.** Despite having ceased entering into new business in or with Iran in 2007, we continue to be engaged as lender, sponsoring bank and/or facility agent or arranger in several long-term financing agreements relating to the construction or acquisition of plant or equipment for the petroleum and petrochemical industries, under which Iranian entities were the direct or indirect borrowers. Before 2007, as part of banking consortia, we entered into a number of financing arrangements, two of which remained outstanding as of December 31, 2016, with the National Petrochemical Company (NPC). The latest final maturity under these loan facilities is in 2019. These loan facilities were guaranteed by national export credit agencies representing two European governments. In principle, the obligations of the borrowers under these loan facilities are secured by assignments of receivables from oil and oil products exported by NPC and/or its trading subsidiaries to buyers, mostly in Asia. These delivery obligations, however, were waived for the period covered by this report, because of the sanctions environment at that time. For some of these arrangements, we act as escrow agent, holding escrow accounts for the Iranian borrowers mentioned above, into which receivables are, in principle, paid by the buyers of the oil and oil products. During the period covered by this report, no such receivables were paid to the said escrow accounts. Such accounts are pledged in favor of the relevant banking consortium. We have no involvement in the contractual arrangements related to, or in the physical settlement of, the oil and oil product exports mentioned above. Until Implementation Day Iranian entities in whose names the escrow accounts have been held were not permitted to draw on such accounts, either because they were sanctioned parties or, where this was not the case, because of our business decision to not allow access to such accounts in light of the overall sanctions environment in the past. Following Implementation Day, such accounts were no longer blocked, but there was no activity in the accounts during the remainder of 2016.

As a remainder from a previously existing financing related to National Iranian Oil Company (NIOC), which was fully paid back in 2012, we still hold an account for NIOC (which was previously used as an escrow account in the context of the respective financing) with a balance in EUR. Until Implementation Day NIOC was, however, not permitted to draw on this account given it was a sanctioned entity. Following Implementation Day, this account was no longer blocked, but there was no activity in the account during the remainder of 2016.

During 2016, approximately €41.0 million was paid into accounts of the borrower. We, in our role as agent, distributed to the participants in the banking consortia approximately €44.0 million including portions attributable to us totaling approximately €6.6 million.



We generated revenues in 2016 of approximately €0.4 million in respect of these financing arrangements, of which approximately €0.3 million consisted of escrow account revenues, €0.05 million consisted of loan interest revenues and €0.05 million consisted of fee revenues. The net profits were less than these amounts.

In one financing arrangement, we are not ourselves a lender but act rather as agent for a lender, a state-owned development bank. In this capacity, we received fees from the Iranian borrower of approximately €4,000.

As of December 31, 2016, we have an undrawn commitment of approximately €1.3 million under one of the financing agreements referred to above. Due to the export credit agency coverage, this remainder cannot be cancelled without German government approval, for which we have applied but which we have not yet received. We do not intend to make further disbursements upon this undrawn commitment.

Our portion of the outstanding principal amount of the remaining loan facilities amounted to approximately €11 million as of December 31, 2016. We intend to continue pursuing repayment and fulfilling our administrative role under these agreements, but we currently do not intend to engage in any new extensions of credit to these or other Iranian entities.

**Legacy Contractual Obligations Related to Guarantees and Letters of Credit.** Prior to 2007, we provided guarantees to a number of Iranian entities. In almost all of these cases, we issued counter-indemnities in support of guarantees issued by Iranian banks because the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. In 2007, we made a decision to discontinue issuing new guarantees to Iranian or Iran-related beneficiaries. The pre-existing guarantees stipulate that they must be either extended or honored if we receive such a demand and we are legally not able to terminate these guarantees. In 2016, in order not to pay under the guarantees, we extended two guarantees for a total amount of approximately €3.9 million for which we paid guarantee commission amounting to approximately €168,000. Even though we exited, where possible, many of these guarantees, guarantees with an aggregate face amount of approximately €7.6 million are still outstanding as of year-end 2016. The gross revenues from this business in 2016 were approximately €27,000 and the net profit we derived from these activities was less than this amount.

We also have outstanding legacy guarantees in relation to a Syrian bank sanctioned by the U.S. under its non-proliferation program. The aggregate face amount of these legacy guarantees was approximately €10.0 million as of December 31, 2016, the gross revenues received from non-Syrian parties for these guarantees were approximately €92,000 in 2016 and the net profit we derived from these activities was less than this amount.

We still intend to exit these guarantee arrangements.

**Payments Executed.** After the Implementation Day of the JCPoA on January 16, 2016, Deutsche Bank reviewed its existing approach regarding the processing of payments related to Iran in particular with a view to the reconnection of certain Iranian banks in the EU to the European Payment System Target2 and the expectation expressed by the Bundesbank to allow the execution of payments. As a result, Deutsche Bank introduced the following process for payments related to the Iran starting in April 2016:

In principle, the overall restrictive policy of the Bank on Iran remains unchanged. As a limited exception, transactions can be executed if the following provisions are met simultaneously:

- The Bank executes incoming and outgoing payments on behalf of its own clients only (financial institutions are not included).
- Payments must be denominated in Euros.
- Clients need to submit to the bank a specific client declaration.
- Incoming payments need generally to come through Iranian banks not sanctioned by the EU.
- Outgoing payments need to go through Iranian banks connected to Target2 and not sanctioned by the EU.
- All relevant transactions will be subject to enhanced due diligence.

**Incoming Payments.** In 2016, we received less than 700 payments adding up to approximately €290 million in favor of non-Iranian clients of which some payments ultimately originated from Iranian persons and entities and others were merely channeled through Iranian intermediary banks not subject to EU sanctions or U.S. secondary sanctions since Implementation Day of the JCPoA. Before Implementation Day, such payments were made with the involvement of the competent authorities. Revenues for these incoming payments were less than €5,000. These figures include relevant payments in favor of clients of our subsidiary Postbank as well as transactions by order of Iranian Embassy-related offices and in favor of our non-Iranian clients.

We expect that we will continue to execute such transactions in the future.

**Outgoing Payments.** In 2016, we executed less than 110 payments adding up to approximately €51 million; again, some payments were executed in favor of Iranian persons and entities and others were merely channeled through Iranian intermediary banks that are not subject to EU sanctions or U.S. secondary sanctions. Revenues for these outgoing payments were less than €1,000. These figures include relevant payments originated by clients of our subsidiary Postbank as well as transactions in favor of Iranian Embassy-related offices.

We expect that we will continue to execute such transactions in the future.

**Operations of Iranian Bank Branches and Subsidiaries in Germany and/or France.** Several Iranian banks, including Bank Melli Iran, Bank Saderat, Bank Tejarat and Europäisch-Iranische Handelsbank, have branches or offices in Germany and/or France, even though their funds and other economic resources were frozen under European law. As part of the payment clearing system in Germany and other European countries, when these branches or offices needed to make payments in Germany or Europe to cover their day-to-day operations such as rent, taxes, insurance premia and salaries for their remaining staff, or for any other kind of banking-related operations necessary to wind down their legacy trade business, the German Bundesbank and French banks accepted fund transfers from these Iranian banks and disbursed them to the applicable payees holding accounts with us. Until the reconnection of the relevant Iranian banks to Target2, German payments were processed via the agreed procedure with the Bundesbank. Afterwards, the relevant Iranian banks could process their payments via Target2 directly.

In 2016, we received approximately €25 million in such disbursements in approximately 1,200 transactions, and the gross revenues derived from these payments were less than €6,000. Relevant transactions of our subsidiary Postbank are included in these figures.

We expect that we will continue to execute such transactions in the future.

**Maintaining of Accounts for Iranian Consulates and Embassies.** In 2016, Iranian embassies and consulates in Germany held accounts with us as well as with Postbank. The purpose of these accounts is the funding of day-to-day operational costs of the embassies and consulates, such as salaries, rent and electricity. In 2016, the total volume of outgoing payments from these accounts was approximately €8.2 million. The payments were made with the involvement of the competent authorities until Implementation Day in January 2016. From these activities, we derived gross revenues of approximately €18,000 and net profits which were less than this amount. The relevant German Government has requested that we provide these services to enable the Government of Iran to conduct its diplomatic relations.

**Activities of Entities in Which We Have Interests.** Section 13(r) requires us to provide the specified disclosure with respect to ourselves and our “affiliates”, as defined in Exchange Act Rule 12b-2. Although we have minority equity interests in certain entities that could arguably result in these entities being deemed “affiliates”, we do not have the authority or the legal ability to acquire in every instance the information from these entities that would be necessary to determine whether they are engaged in any disclosable activities under Section 13(r). In some cases, legally independent entities are not permitted to disclose the details of their activities to us because of German privacy and data protection laws or the applicable banking laws and regulations. In such cases, voluntary disclosure of such details could violate such legal and/or regulatory requirements and subject the relevant entities to criminal prosecution or regulatory investigations.

## PART III

### Item 17: Financial Statements

Not applicable.

### Item 18: Financial Statements

The Financial Statements of this Annual Report on Form 20-F consist of the Consolidated Financial Statements including Notes 1 to 46 thereto, which are set forth as Part 2 of the Annual Report 2016, and, as described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates” thereto in the third paragraph under “Basis of Accounting”, certain parts of the Management Report set forth as Part 1 of the Annual Report 2016. Such Consolidated Financial Statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their “Report of Independent Registered Public Accounting Firm” included on page 441 of the Annual Report 2016.

### Item 19: Exhibits

We have filed the following documents as exhibits to this document.

Exhibit number	Description of Exhibit
1.1	English translation of the Articles of Association of Deutsche Bank AG, furnished as Exhibit 99.4 to our Report on Form 6-K dated July 30, 2015 and incorporated by reference herein.
2.1	The total amount of long-term debt securities of us or our subsidiaries authorized under any instrument does not exceed 10 percent of the total assets of our Group on a consolidated basis. We hereby agree to furnish to the Commission, upon its request, a copy of any instrument defining the rights of holders of long-term debt of us or of our subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.
4.1	Equity Plan Rules 2012, furnished as Exhibit 4.4 to our 2011 Annual Report on Form 20-F and incorporated by reference herein.
4.2	Equity Plan Rules 2013, furnished as Exhibit 4.4 to our 2012 Annual Report on Form 20-F and incorporated by reference herein.
4.3	Equity Plan Rules 2014, furnished as Exhibit 4.5 to our 2013 Annual Report on Form 20-F and incorporated by reference herein.
4.4	Equity Plan Rules 2015, furnished as Exhibit 4.5 to our 2014 Annual Report on Form 20-F and incorporated by reference herein.
4.5	Equity Plan Rules 2016, furnished as Exhibit 4.6 to our 2015 Annual Report on Form 20-F and incorporated by reference herein.
4.6	Equity Plan Rules 2017.
4.7	Key Retention Plan Equity Plan Rules 2016.
7.1	Statement re Computation of Ratio of Earnings to Fixed Charges of Deutsche Bank AG for the periods ended December 31, 2016, 2015, 2014, 2013 and 2012 (also incorporated as Exhibit 12.14 to Registration Statement No. 333-206013 of Deutsche Bank AG).
8.1	List of Subsidiaries.
12.1	Principal Executive Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
12.2	Principal Financial Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
13.1	Chief Executive Officer Certification Required by 18 U.S.C. Section 1350.
13.2	Chief Financial Officer Certification Required by 18 U.S.C. Section 1350.
14.1	Legal Opinion regarding confidentiality of related party customers.
15.1	Consent of KPMG AG Wirtschaftsprüfungsgesellschaft.

## Signatures

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: March 20, 2017  
Deutsche Bank Aktiengesellschaft

/s/ \_\_\_\_\_ JOHN CRYAN

John Cryan  
Chairman of the Management Board

/s/ \_\_\_\_\_ MARCUS SCHENCK

Marcus Schenck  
Member of the Management Board  
Chief Financial Officer

Deutsche Bank

# Annual Report 2016



[Page intentionally left blank for SEC filing purposes]



1 –  
Management Report

36	Operating and Financial Review
78	Outlook
86	Risks and Opportunities
88	Risk Report
199	Compensation Report
250	Corporate Responsibility
252	Employees
257	Internal Control over Financial Reporting
261	Information pursuant to Section 315 (4) of the German Commercial Code and Explanatory Report
267	Corporate Governance Statement pursuant to Sections 289a and 315 (5) of the German Commercial Code

2 –  
Consolidated Financial Statements

269	Consolidated Statement of Income
270	Consolidated Statement of Comprehensive Income
271	Consolidated Balance Sheet
272	Consolidated Statement of Changes in Equity
274	Consolidated Statement of Cash Flows
275	Notes to the Consolidated Financial Statements
309	Notes to the Consolidated Income Statement
315	Notes to the Consolidated Balance Sheet
382	Additional Notes
441	Confirmations

3 –  
Corporate Governance Statement/Corporate Governance Report

445	Management Board and Supervisory Board
460	Reporting and Transparency
461	Related Party Transactions
461	Auditing and Controlling
464	Compliance with the German Corporate Governance Code

4 –  
Supplementary Information

467	Non-GAAP Financial Measures
473	Declaration of Backing
475	Imprint/Publications

[Pages 2-34 intentionally left blank for SEC filing purposes]

# 1.

## Management Report

36	Operating and Financial Review
36	Executive Summary
38	Deutsche Bank Group
47	Results of Operations
73	Financial Position
76	Liquidity and Capital Resources
78	Outlook
86	Risks and Opportunities
88	Risk Report
90	Risk and Capital Overview
94	Risk and Capital Framework
106	Risk and Capital Management
136	Risk and Capital Performance
199	Compensation Report
202	Management Board Compensation Report
232	Employee Compensation Report
247	Compensation System for Supervisory Board Members
250	Corporate Responsibility
252	Employees
257	Internal Control over Financial Reporting
261	Information pursuant to Section 315 (4) of the German Commercial Code and Explanatory Report
267	Corporate Governance Statement pursuant to Sections 289a and 315 (5) of the German Commercial Code

# Operating and Financial Review

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes to them. Our Operating and Financial Review includes qualitative and quantitative disclosures on Segmental Results of Operations and Entity Wide disclosures on Net Revenue Components as required by International Financial Reporting Standard (IFRS) 8, "Operating Segments". This information, which forms part of and is incorporated by reference into the financial statements of this report, is marked by a bracket in the margins throughout this Operating and Financial Review. For additional Business Segment disclosure under IFRS 8 please refer to Note 4 "Business Segments and Related Information" of the Consolidated Financial Statements.

## Executive Summary

### The Global Economy

Economic growth (in %)	2016	2015	Main driver
<b>Global Economy<sup>1</sup></b>	<b>3.0</b>	3.3	Global economic growth weakened in 2016 due to the slowdown in the industrialized countries. Growth in Emerging Markets remained unchanged.
Thereof:			
Industrialized countries <sup>1</sup>	1.6	2.1	High debt levels and an again disappointing global trade weighed on growth.
Thereof: Emerging markets <sup>1</sup>	4.1	4.1	The monetary policy stance of major central banks bolstered the economy.
<b>Eurozone Economy<sup>1</sup></b>	<b>1.7</b>	1.9	Low oil prices and extremely expansive monetary policy had a supporting effect, but falling inventories and negative net exports resulted in an overall growth weakening.
Thereof: German economy	1.9	1.7	Stronger consumption growth more than offset the dampening effect of net exports.
<b>U.S. Economy</b>	<b>1.6</b>	2.6	Weakest growth since 2011, with foreign trade, investments in machinery and equipment, and negative inventory cycle weighing on growth. Solid consumer growth stabilized.
<b>Japanese Economy<sup>1</sup></b>	<b>1.0</b>	1.2	Consumer spending picked up, but more than offset by weaker exports and investments.
<b>Asian Economy<sup>1, 2</sup></b>	<b>6.0</b>	6.1	Moderate growth continued, weighed by weak demand from the industrialized countries and China.
Thereof: Chinese Economy	6.7	6.9	Growth slowed again in China, with weaker momentum across all sectors. The government stabilized the situation with additional investments, and sought to limit risks.

Source: National authorities

<sup>1</sup> 2016 data is sourced from Deutsche Bank Research forecasts. <sup>2</sup> Excludes Japan.

### The Banking Industry

Lending to the private sector in the eurozone continued to experience very subdued growth in 2016. Corporate lending volumes stagnated as in the prior year, following an overall contraction of almost one-tenth in the three previous years. Lending to households saw moderate growth (roughly 2 % year-on-year), primarily due to the expansion in the mortgage business. On liabilities, the strong growth in corporate deposits continued (approximately 6 % p.a.), and inflows from household deposits climbed to almost 4 % despite minimal interest rates. Overall, the pace of growth picked up slightly for deposits, widening its lead over lending growth. Interest rates fell further. The slight increase in volumes was insufficient to offset the approximately 7 % year-on-year decline in margins, meaning that banks' net interest income is expected to continue falling somewhat following a temporary rise in 2014 and 2015.

In the lending business, Germany increased its lead over the eurozone in 2016 after loan growth was similarly anemic in both regions in the prior year. Corporate lending was up more than 2 % year on year thanks to a strong second half of 2016, while the figure for households was 3 %, primarily attributable to the solid growth in mortgage loans. Paradoxically, the growth in private-sector deposits accelerated to approximately 5 % despite the fact that interest rates remain below the European average. In fact the aggregate interest rate on corporate deposits dipped into negative territory for the first time in history. Nevertheless, this did not stop businesses from depositing an increasing amount of liquidity with

banks. The corporate sector in Germany proved to be unusual from a banking perspective in that it was a net saver, i.e. its deposits exceed lending volumes.

Lending in the U.S. initially picked up even further speed in 2016 from an already high starting level, before slowing somewhat in the fourth quarter of 2016. Overall, however, the traditional balance sheet business maintained a strong momentum, with retail lending rising some 5 % year on year and corporate lending up more than 8 %. The latter has eclipsed pre-crisis figures in nominal terms to hit a new all-time high, driven by a broad recovery based on both, commercial real estate and traditional corporate loans. The retail segment benefitted from the continuing upsurge in consumer loans as well as the turnaround in the mortgage business, which posted its first solid growth since the crisis. Private-sector deposits continued to grow extraordinarily fast and have recently gained even more speed (up approximately 8 % year-on-year). Their total volume has doubled since 2004.

Total outstanding loans in Japan continued to expand at more than 2 % year-on-year, while the inflow of deposits into the banking sector accelerated – the increase has hit 6 %, its highest level since statistics began in 2001.

In China, lending to households showed signs of overheating. Lending volumes have risen by 23 % year-on-year, primarily due to medium- and long-term loans. Their volume has doubled in only three and a half years, while the cumulative growth for the Chinese economy amounts to just 39 % in nominal terms since the end of 2012. By contrast, the increase in banks' corporate lending has recently slowed to a mere 8 % year-on-year. The banks are benefitting from the fact that the pace of growth on the funding side has recently accelerated, with private-sector deposits currently 14 % higher than at the end of 2015.

## Deutsche Bank Performance

2016 results were heavily impacted by decisive management action to improve and modernize the bank, by litigation charges and by market turbulence for Deutsche Bank. We made significant progress with the implementation of strategic decisions and took measures to further strengthen our control infrastructure. We also made considerable progress in our continued de-risking strategy and toward resolution of additional outstanding litigation matters. Negative news flow around our negotiations with the U.S. Department of Justice in October 2016 impacted our revenues and client balances. We believe that we proved our resilience in this challenging year however, as many of these clients returned, as we continued to make progress in implementation of our targets originally announced in October 2015, and we ended the year with strong capital and liquidity ratios.

Our Group Key Performance Indicators are as follows:

Group Key Performance Indicators	Status end of 2016	Status end of 2015
Net revenues	€30.0 bn	€33.5 bn
Income (loss) before income taxes	€(0.8) bn	€(6.1) bn
Net income (loss)	€(1.4) bn	€(6.8) bn
Post-tax return on average tangible shareholders' equity <sup>1</sup>	(2.7 %)	(12.3 %)
Post-tax return on average shareholders' equity <sup>1</sup>	(2.3 %)	(9.8 %)
Adjusted costs <sup>2</sup>	€24.7 bn	€26.5 bn
Cost/income ratio <sup>3</sup>	98.1 %	115.3 %
Risk-weighted assets (RWA) <sup>4</sup>	€357.5 bn	€396.7 bn
CRR/CRD 4 fully loaded Common Equity Tier 1 ratio <sup>5</sup>	11.8 % <sup>6</sup>	11.1 %
Fully loaded CRR/CRD 4 leverage ratio <sup>7</sup>	3.5 %	3.5 %

<sup>1</sup> Based on Net Income attributable to Deutsche Bank shareholders and additional equity components. For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of this report.

<sup>2</sup> Total noninterest expenses excluding impairment of goodwill and other intangible assets, litigation, policyholder benefits and claims and restructuring and severances. For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of the report.

<sup>3</sup> Total noninterest expenses as a percentage of total net interest income before provision for credit losses plus noninterest income.

<sup>4</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>5</sup> The CRR/CRD 4 fully loaded Common Equity Tier 1 ratio represents our calculation of our Common Equity Tier 1 ratio without taking into account the transitional provisions of CRR/CRD 4. Further detail on the calculation of this ratio is provided in the Risk Report.

<sup>6</sup> Reflects the Management Board's decision to propose a dividend per share of €0.19 paid out of the distributable profit for 2016 taking into consideration the expected shares to be issued before the Annual General Meeting in May 2017. The dividend contains the pay out of the distributable profit carried forward from 2015 of approximately €165 million and a dividend of €0.11 per share from the remaining distributable profit for 2016. Overall we expect to pay out a total dividend of approximately €400 million in 2017.

<sup>7</sup> Further detail on the calculation of this ratio is provided in the Risk Report.

Net revenues in 2016 were €30.0 billion, a decline of €3.5 billion from 2015. The decline was primarily driven by de-risking losses in NCOU and lower revenues in GM and CIB due to challenging market conditions, a low interest rate environment in Europe, negative market perceptions concerning Deutsche Bank and strategic execution. The decline was partly offset by a gain on sale of stakes in Hua Xia Bank Co. Ltd. in PW&CC and in VISA Europe Ltd. in Postbank and PW&CC.

Non interest expenses in 2016 were €29.4 billion, a decrease of 24 % from 2015. The reduction in noninterest expenses was mainly driven by lower impairment of goodwill and other intangible assets, litigation charges and performance related compensation. Impairment of goodwill and other intangible assets was € 1.3 billion in 2016, including € 1.0 billion related to the sale of Abbey Life, compared to € 5.8 billion in 2015. Litigation expenses in 2016 amounted to € 2.4 billion, a reduction of € 2.8 billion as compared to 2015. The decline in the noninterest expenses was partly offset by higher IT costs and an increase in policyholder benefits and claims.

The loss before income taxes was €810 million in 2016 compared to a loss before income taxes of €6.1 billion in 2015. The improvement of €5.3 billion in 2016 was mainly driven by a significantly lower impairment of goodwill and other intangibles as well as litigation charges. Net loss was € 1.4 billion in 2016, compared to a net loss of €6.8 billion in 2015.

Our CRR/CRD 4 fully loaded Common Equity Tier 1 ratio was 11.8 % at the end of 2016, up from 11.1 % at the end of 2015, resulting from de-risking activities and the benefit from asset disposals. The phase-in CET 1 ratio at the year end 2016 of 13.4 % is well above the required 10.76 %.

The ECB notified Deutsche Bank of its Supervisory Review and Evaluation Process (SREP) conclusions for 2017, setting Pillar 2 minimum requirements for the Common Equity Tier 1 (CET 1) ratio at 9.51 % on a CRR/CRD 4 phase-in basis, compared to which we recorded 12.76 % as of January 1, 2017. The SREP minimum requirements for 2017 is composed of a minimum Pillar 1 requirement of 4.5 %, an additional Pillar 2 requirement of 2.75 %, a capital conservation buffer of 1.25 %, a countercyclical buffer of currently 0.01 % and the G-SIB buffer of 1.0 %.

## Deutsche Bank Group

### Deutsche Bank: Our Organization

Headquartered in Frankfurt am Main, Germany, we are the largest bank in Germany and one of the largest financial institutions in Europe and the world, as measured by total assets of € 1,591 billion as of December 31, 2016. As of that date, we employed 99,744 people on a full-time equivalent basis and operated in 62 countries out of 2,656 branches worldwide, of which 67 % were in Germany. We offer a wide variety of investment, financial and related products and services to private individuals, corporate entities and institutional clients around the world.

As of December 31, 2016 we were organized into the following six corporate divisions:

- Global Markets (GM)
- Corporate & Investment Banking (CIB)
- Private, Wealth and Commercial Clients (PW&CC)
- Deutsche Asset Management (Deutsche AM)
- Postbank (PB)
- Non-Core Operations Unit (NCOU)

The six corporate divisions are supported by infrastructure functions. In addition, we have a regional management function that covers regional responsibilities worldwide. Prior periods presented throughout this report have been restated in order to reflect our new segmental structure that was announced at the end of 2015. In line with our targets originally announced in October 2015, the Non-Core Operations Unit (NCOU) will cease to exist as a separate corporate division of the Group from 2017 onwards.

We have operations or dealings with existing or potential customers in most countries in the world. These operations and dealings include:

- subsidiaries and branches in many countries;
- representative offices in many other countries; and
- one or more representatives assigned to serve customers in a large number of additional countries.

We have made the following significant capital expenditures or divestitures since January 1, 2014, that are not allocated to the capital expenditures or divestitures of corporate divisions below:

On October 26, 2016, Deutsche Bank entered into an agreement to sell its Mexican bank and broker dealer subsidiaries to InvestaBank S.A., Institución de Banca Múltiple. The transaction is a part of our targets originally announced in October 2015 and the Group's plan to rationalize its global footprint. Closing of the transaction is expected in the first half of 2017, subject to regulatory approvals and other customary conditions.

On August 26, 2016, Deutsche Bank entered into an agreement to sell Deutsche Bank S.A., its Argentine bank subsidiary, to Banco Comafi S.A. The transaction is a part of our targets originally announced in October 2015 and reflects the Group's plan to rationalize its global footprint. Closing of the transaction is expected in the first half of 2017, subject to regulatory approvals and other customary conditions.

## Management Structure

The Management Board has structured the Group as a matrix organization, comprising (i) Corporate Divisions, (ii) Infrastructure Functions and (iii) a Regional Management Function.

Pursuant to the German Stock Corporation Act, the Management Board is responsible for the executive management of Deutsche Bank. Its members are appointed and removed by the Supervisory Board, which is a separate corporate body. Our Management Board focuses on, among other topics, strategic management, corporate governance, resource allocation, risk management and risk control, and is assisted by functional committees.

Within each corporate division and region, coordination and management functions are handled by operating committees and executive committees, which help ensure that the implementation of the strategy of individual business divisions and the plans for the development of infrastructure areas are aligned to our global business objectives.

## Corporate Divisions

### Global Markets Corporate Division (GM)

#### Corporate Division Overview

At the start of 2016, we split our former Corporate Banking and Securities (CB&S) corporate division into two: a new corporate division, Global Markets and our business unit Corporate Finance, which is now part of our Corporate & Investment Banking corporate division. The Global Markets business offers financial products worldwide including trading and hedging services to institutions and corporate clients.

In Global Markets, Deutsche Bank made the following significant divestitures since January 1, 2014:

In June 2015, Markit Ltd. a provider of financial information services conducted a secondary public offering. As part of this offering, Markit also re-purchased own shares from a number of selling shareholders including Deutsche Bank. We offered and sold approximately 4 million of the 5.8 million shares (2.7 %) we held in Markit.



In December 2014, we completed the sale of 75 % of a U.S.\$ 2.5 billion portfolio of U.S. special situation commercial real estate loans to a fund managed by the Texas Pacific Group. Deutsche Bank retains a 25 % stake in the portfolio and continues to originate and acquire new loans in the US special situations commercial real estate market.

In June 2014, Markit Ltd. initiated its listing on NASDAQ Stock Market via a sale of shares from existing shareholders. As part of this listing, we offered and sold 5.8 million of the 11.6 million shares (5.7 %) we held in Markit.

### Products and Services

The Global Markets business combines sales, trading and structuring of a wide range of financial markets' products, including bonds, equities and equity-linked products, exchange-traded and over-the-counter derivatives, foreign exchange, money market instruments, and structured products. Coverage of institutional clients is provided by the Institutional Client Group and Equity Sales, while Research provides analysis of markets, products and trading strategies for clients.

All our trading activities are covered by our risk management procedures and controls which are described in detail in the Risk Report.

### Distribution Channels and Marketing

As part of our targets originally announced in October 2015, we are re-focusing and rationalizing our client coverage model so as to keep clients at the core of our business. We are exiting client relationships where returns are too low or risks are too high while also strengthening our client on-boarding and KYC procedures.

## Corporate & Investment Banking Division (CIB)

### Corporate Division Overview

Corporate & Investment Banking (CIB) brings together Deutsche Bank's commercial banking, corporate finance, and transaction banking expertise under one common corporate division. It consists of our Corporate Finance and Global Transaction Banking businesses. CIB advises and executes on the multiple financial requirements of our corporate and institutional clients.

In Corporate & Investment Banking, we made no significant capital expenditures or divestitures since January 1, 2014.

### Products and Services

Corporate Finance is responsible for mergers and acquisitions (M&A) as well as debt and equity advisory and origination. Regional and industry-focused coverage teams ensure the delivery of the entire range of financial products and services to our corporate and institutional clients.

Advisory extends to public takeovers, defense advisory, mergers and divestitures, dual track sales processes, business portfolio reviews and acquisition searches, competitor strategies and analyses, balance sheet optimization and corporate governance.

Debt Origination brings the Bank's regional treasury suite client coverage, together with debt origination, structuring, syndication and issuance and loan portfolio products.

Equity Origination provides primary equity products including IPOs, follow-on offerings, rights issues, block trades, accelerated bookbuilding and convertible and exchangeable bonds.

With revenues of € 4.5 billion, Global Transaction Banking (GTB) is a leading global provider of cash management, trade finance and securities services, delivering the full range of commercial banking products and services for both corporate clients and financial institutions worldwide.

Trade Finance offers local expertise, a range of international trade products and services (including financing), custom made solutions for structured trade and the latest technology across our international network so that our clients can better manage the risks and other issues associated with their cross-border and domestic trades.

Cash Management caters to the needs of a diverse client base of corporates and financial institutions. With the provision of a comprehensive range of innovative solutions, we handle the complexities required by global and regional treasury functions including customer access, payment and collection services, liquidity management, information and account services and electronic bill presentation and payment solutions.

Securities Services provides a range of trust, payment, administration and related services for selected securities and financial transactions, as well as domestic securities custody in more than 30 markets.

### Distribution Channels and Marketing

As part of our targets originally announced in October 2015, we are re-focusing and optimizing our client coverage model to the benefit of our core clients. We are exiting client relationships where we consider returns to be too low or risks to be too high while also strengthening our client on-boarding and know-your client (KYC) procedures.

Investment Banking Coverage (IBC) and Corporate Banking Coverage (CBC) have been brought together to provide integrated coverage expertise for CIB. The group delivers the most appropriate products across advisory, capital markets, risk management and transaction banking to both the C-Suite and Treasurer. The German Large Corporates (GLC) division delivers broad product and advisory expertise to our mid-market franchise with a regional footprint.

Clients include major corporates, financial institutions, financial sponsors, governments and sovereigns around the world. Our industry expertise covers consumer and retail services, financial institutions, financial sponsors, healthcare, industrials, technology, media & telecoms, natural resources and real estate, and lodging and leisure.

## Private, Wealth & Commercial Clients Corporate Division (PW&CC)

### Corporate Division Overview

The Private, Wealth & Commercial Clients (PW&CC) Corporate Division combines the Bank's expertise in private and commercial banking as well as in wealth management solutions. We offer high-quality advice and a wide range of financial services in both the Bank's home market in Germany and internationally. Our objective is to be an advisory bank with a global network, strong expertise in capital markets and financing solutions and cutting-edge digital services.

Our Corporate Division comprises the following business units:

The Private & Commercial Clients Germany (PCC Germany) Business Unit focuses on private and commercial clients in Germany. For small and medium-sized corporate clients, we offer an integrated commercial banking coverage model improving client proximity and cross-divisional collaboration by leveraging the expertise of Deutsche Bank Group.

The Private & Commercial Clients International (PCC International) Business Unit provides banking and other financial services to private, commercial and corporate clients in Europe and India. In Europe, we operate in five major banking markets: Italy, Spain, Belgium, Portugal and Poland.

The Wealth Management Business Unit serves wealth, high-net-worth (HNW) and ultra-high-net-worth (UHNW) individuals and family offices, offering our clients a broad range of traditional and alternative investment products and solutions, as well as lending and deposit products. Leveraging our global network and expertise from across Deutsche Bank, we provide capital markets expertise and international solutions tailored to the individual needs of clients. These include wealth planning over generations and international borders, discretionary portfolio management, structured risk management as well as the development of bespoke solutions for individuals or selected institutions in close collaboration with experts in Global Markets, Corporate & Investment Banking and Asset Management.

We have made the following significant capital expenditures or divestitures since January 1, 2014:

On December 28, 2015, we agreed to sell our entire 19.99 % stake in Hua Xia Bank Company Limited ("Hua Xia") to PICC Property and Casualty Company Limited ("PICC Property & Casualty"). The completion of the transaction was subject to customary closing conditions and regulatory approvals, including that of the China Banking Regulatory Commission, which granted its approval for PICC Property and Casualty to acquire Deutsche Bank's stake in Hua Xia in the fourth quarter 2016.

In the fourth quarter 2015 Deutsche Bank Group announced that it had entered into a definitive asset purchase agreement to sell its US Private Client Services (PCS) unit to Raymond James Financial, Inc. In September 2016 the transaction was completed successfully.

In November 2015, Visa Inc. announced a definitive agreement to acquire Visa Europe Limited. As part of this acquisition Visa Europe Limited requested all its shareholders, which included several Deutsche Bank Group entities, to return their shares against consideration. Deutsche Bank returned its shares in Visa Europe Limited in January 2016 and received the cash and preferred shares consideration at closing on June 21, 2016 as well as an entitlement to a deferred cash payment including interest upon the third anniversary of the closing date.

In October 2014, we contributed ownership of the real estate of 90 retail banking branches in Italy to a closed-end institutional real estate fund, Italian Banking Fund (IBF), managed by Hines Italy SGR. The contributed real estate had a total value of € 134 million and will mostly be leased back for a period of at least 12 years.

In May 2014, we completed the sale of a 20.2 % stake in Deutsche Herold AG to Zürich Beteiligungs AG, a subsidiary of Zurich Insurance Group AG. We acquired the 20.2 % stake from a third party immediately ahead of selling it to Zurich. 15.2 % of the disposal to Zurich was based on a share purchase agreement that was entered into by Deutsche Bank and Zurich in 2001. The remaining 5.0 % stake was sold due to Zurich exercising a call option.

### Products and Services

We provide banking and other financial services ranging from comprehensive services for retail clients, to solutions for clients in Private Banking and Wealth Management, to business and commercial client coverage.

Our PCC Germany and PCC International Business Units offer a similar range of products and services throughout Europe and India with some variations among countries that are driven by local market, regulatory and customer requirements. Products and services include payment and current account services, investment and insurance products, deposits as well as credit products. For small and medium-sized clients, the PCC Business Units additionally offer mid-cap related products provided by other divisions as part of our mid-cap joint venture within Deutsche Bank.

Our Wealth Management Business Unit offers customized wealth management solutions and private banking services, including discretionary portfolio management and traditional and alternative investment solutions, complemented by structured risk management, wealth planning, lending and family office services.

### Distribution Channels and Marketing

We follow an omni-channel approach to optimize accessibility and availability of services for our customers. The expansion of digital capabilities remains a strong focus across all our businesses.

PCC Germany and PCC International:

- Branches: Within branches, the PCC Business Units generally offer the entire range of products and advice. The branch network is supported by Customer Contact Centers and Self-service Terminals.
- Advisory Centers: The Advisory Centers in Germany represent a connection between the branches and our digital offerings to ensure a holistic service and advice for our private and commercial clients independent of branch opening hours.

- Online and Mobile Banking: Websites of the PCC Business Units offer clients a broad variety of product information and services including interactive tools, tutorials as well as rich media content. They also provide a high performing transaction-platform for banking, brokerage and self-services, combined with a highly frequented multi-mobile offering for smartphones and tablets.
- Financial Agents / Third party distributors: In most countries, the PCC Business Units additionally provide banking products and services through self-employed financial agents as well as through third-party distributors.

#### Wealth Management:

- Global Coverage/Advisory teams: These teams manage client relationships, provide advice and assist clients to access WM's products and services. To ensure holistic service and advice, all wealth management clients have a single point of access, with dedicated teams serving specific client groups.
- Key Client Partners (KCP): For qualified ultra-high-net-worth clients, Key Client Partners (KCP) provide tailored solutions and investment opportunities across a full range of asset classes. Capabilities include — but are not limited to — private markets, financing solutions, non-core assets, special situation alternatives and capital markets solutions.

## Deutsche Asset Management Corporate Division (Deutsche AM)

### Corporate Division Overview

With over €700 billion of invested assets as of December 31, 2016, Deutsche AM is one of the world's leading investment management organizations, bringing access to the world's financial markets and delivering solutions to clients around the globe. Deutsche AM aims to provide sustainable financial futures for all its clients: individual investors and the institutions that serve them.

In 2016, Deutsche AM took a number of steps to become a more focused asset manager: separating from Deutsche Bank's wealth management business, transferring trading and balance sheet-reliant businesses to the Global Markets division, and exiting non-strategic businesses, including the Abbey Life business.

We have made the following significant capital divestitures since January 1, 2014:

In December 2016, Deutsche Bank completed the sale of the Abbey Life business (Abbey Life Assurance Company Limited, Abbey Life Trustee Services Limited and Abbey Life Trust Securities Limited) to a subsidiary of Phoenix Group Holdings ("Phoenix Group").

### Products and Services

Deutsche AM's investment capabilities span both active and passive strategies and a diverse array of asset classes including equities, fixed income, liquidity, real estate, infrastructure, private equity, and sustainable investments. Deutsche AM delivers alpha and beta solutions to address the longevity, liability and liquidity needs of investors, leveraging intelligence and technology.

### Distribution Channels and Marketing

Coverage/Advisory teams manage client relationships, provide advice and assist clients to access Deutsche AM's products and services. Deutsche AM also markets and distributes its offering through other business divisions of Deutsche Bank Group, notably PW&CC for retail customers, as well as through third-party distributors. To ensure effective service and advice, all clients have a single point of access to Deutsche AM, with dedicated teams serving specific client groups.

## Postbank Corporate Division

### Corporate Division Overview

Postbank is a German financial service provider for retail, business and corporate clients as well as for other financial service providers. As a multi-channel bank, Postbank provides its products in its German-wide network of branches, through mobile sales agents, direct banking (Online and Mobile) and call centers as well as in third party sales through agents. The company also offers postal and parcel services in its branches in cooperation with Deutsche Post DHL AG. Postbank's focus of business activities are on retail banking and corporate banking (transaction banking and financing) in Germany. The completion of the operational separability from Deutsche Bank Group was achieved as per the end of the first half of 2016.

We have made the following significant capital divestitures since January 1, 2014:

In November 2015, Visa Inc. announced a definitive agreement to acquire Visa Europe Limited. As part of this acquisition Visa Europe Limited requested all its shareholders, including Postbank, to return their shares against consideration. Postbank returned its shares in Visa Europe Limited in January 2016 and received the cash and preferred shares consideration at closing on June 21, 2016 as well as an entitlement to a deferred cash payment including interest upon the third anniversary of the closing date.

In July 2015, the shares in Postbank P.O.S. Transact GmbH were sold and the company subsequently deconsolidated.

### Products and Services

In retail banking Postbank offers its retail and business customers' standardized banking and financial service products designed to meet all basic financial needs. Its core products are current accounts, saving accounts, mortgage loans, building society contracts and consumer loans. The product range is completed by investment products (especially investment funds) and insurance products as well as postal services and further non-banking products.

In corporate banking Postbank focuses mainly on German SMEs. Its core products are corporate loans, international commercial real estate finance, payment transaction services, factoring and leasing as well as interest rate and currency management. Corporate banking services also include client driven money market and capital market activities.

### Distribution Channels and Marketing

Postbank operates a nation-wide network of branches that had 1,043 locations in Germany at the end of 2016, as well as a branch in Luxembourg. Additionally Postbank uses around 4,500 Deutsche Post DHL AG partner retail outlets, where customers can access selected Postbank financial services, as well as around 700 Postbank Finanzberatung AG advisory centers. As a multi-channel bank, Postbank offers its products in branches, through mobile sales agents, direct banking (online and mobile), call centers as well as via third-party sales through agents and cooperation partners.

- Branches: In addition to our German-wide branch network we have begun launching new sales centers where customers can experience our entire range of products and advice as well as postal services under one roof.
- Self-service Terminals: These terminals support our branch network and allow clients to withdraw and transfer funds, receive account statements and make appointments with our financial advisors.
- Mobile sales agents: Additionally we market our retail banking products and services through self-employed financial agents.
- Call centers: Our call centers provide clients with remote services (i.e., account information, securities brokerage).
- Online and mobile banking: On our websites, we offer clients a broad variety of relevant product information and services including interactive tools, tutorials and rich media content. We provide a high performing transaction platform for banking, brokerage and self-services, combined with a highly frequented multi-mobile offering for smartphones and tablets. Moreover, we further invest in improvements of seamless client friendly end-to-end process automation.

## Non-Core Operations Unit Corporate Division (NCOU)

In the second half of 2012, the Non-Core Operations Unit (NCOU) was established as the fifth pillar of our business structure. Its aim was to help the Bank reduce risks associated with capital-intensive assets that are not core to the strategy, thereby reducing capital demand. As set out in our previous strategy announcements, our objectives in setting up the NCOU were to improve external transparency of our non-core positions; to increase management focus on the core operating businesses by separating the non-core activities; and to facilitate targeted accelerated de-risking.

NCOU has successfully executed its de-risking target and reduced the portfolio in size to achieve the 2016 year-end target to less than €10 billion RWA. In carrying out this mandate, NCOU has actively focused on initiatives which delivered efficient capital contribution and de-leveraging results, thereby enabling the Bank to strengthen our fully loaded Common Equity Tier 1 ratio. As a result, the NCOU ceased to exist as a standalone division from 2017 onwards.

The remaining legacy assets have a balance sheet value of approximately €6 billion as of December 31, 2016 and will now be managed by the corresponding Core operating segments, predominately Global Markets and Private Wealth & Commercial Clients.

The NCOU division made the following significant divestitures since January 1, 2014:

In November 2016 Deutsche Bank sold its remaining 16.9 % stake in Red Rock Resorts after IPO in April 2016 where Deutsche Bank sold around 3 %.

In April 2016, Deutsche Bank reached an agreement to sell Maher Terminals USA LLC in Port Elizabeth, New Jersey to Macquarie Infrastructure Partners III ("MIP III"), a fund managed by Macquarie Infrastructure and Real Assets. Under the transaction, MIP III has agreed to acquire 100 % of Maher Terminals USA. Following receipt of all regulatory approvals, we completed the sale in November 2016 for U.S.\$ 739 million.

In April 2015, Deutsche Bank reached an agreement to sell the Fairview Container Terminal in Port of Prince Rupert, Canada (a segment of Maher Terminals) to DP World (a Dubai-based marine terminal operator) for CAD 580 million, subject to regulatory approvals. Following the receipt of all regulatory approvals, we completed the sale in August 2015.

On December 19, 2014, Deutsche Bank closed the sale of Nevada Property 1 LLC, the owner of The Cosmopolitan of Las Vegas, to Blackstone Real Estate Partners VII for U.S.\$ 1.73 billion.

In March 2014, Deutsche Bank completed the sale of BHF-BANK to Kleinwort Benson Group and RHJ International for a total consideration of €347 million primarily in cash (€316 million) and the remainder in the form of new shares in RHJ International issued at par value. These shares have subsequently been sold.

## Infrastructure and Regional Management

The infrastructure functions perform control and service functions and, in particular, tasks relating to Group-wide, supra-divisional resource-planning, steering and control, as well as to risk, liquidity and capital management.

The infrastructure functions are organized in the following areas of responsibility:

- Chairman: Management Board, Communications, CSR, Group Audit, Corporate Strategy, Research and Group Incident & Investigation Management
- Chief Financial Officer: Group Finance, Group Tax, Group Treasury, Investor Relations, Corporate M&A, Group Management Consulting, Regional Finance, Divisional Finance including Cost Operations, Planning and Performance Management and Finance Change & Administration.
- Chief Risk Officer: Credit Risk, Operational Risk, Market Risk, Liquidity Risk, Enterprise Risk, Business aligned Risk management, Regional Risk management, Information & Resiliency Risk Management and Corporate Insurance
- Chief Regulatory Officer: Group Regulatory Affairs, Group Structuring, Public Affairs, Compliance and Anti-Financial Crime
- Chief Administrative Officer: Legal including Data Protection, Global Governance and Human Resources including Corporate Executive Matters
- Chief Operating Officer: Group Technology and Operations, Digital Transformation, Corporate Services, Chief Information Security Office and Chief Data Officer

Regional Management has the task to protect the Group's integrity and reputation and to coordinate and align local activity and strategic development across the Group's businesses, infrastructure and legal entities.

All expenses and revenues incurred within the infrastructure and regional management areas are fully allocated to our five (formerly six) corporate divisions.

## Significant Capital Expenditures and Divestitures

Information on each Corporate Division's significant capital expenditures and divestitures from the last three financial years has been included in the above descriptions of the Corporate Divisions.

Since January 1, 2016, there have been no public takeover offers by third parties with respect to our shares and we have not made any public takeover offers in respect of any other company's shares.



# Results of Operations

## Consolidated Results of Operations

You should read the following discussion and analysis in conjunction with the consolidated financial statements.

### Condensed Consolidated Statement of Income

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
Net interest income	14,707	15,881	14,272	(1,175)	(7)	1,610	11
Provision for credit losses	1,383	956	1,134	427	45	(178)	(16)
<b>Net interest income after provision for credit losses</b>	<b>13,324</b>	<b>14,925</b>	<b>13,138</b>	<b>(1,601)</b>	<b>(11)</b>	<b>1,788</b>	<b>14</b>
Commissions and fee income <sup>1</sup>	11,744	12,765	12,409	(1,021)	(8)	356	3
Net gains (losses) on financial assets/liabilities at fair value through profit or loss <sup>1</sup>	1,401	3,842	4,299	(2,440)	(64)	(457)	(11)
Net gains (losses) on financial assets available for sale	653	203	242	450	N/M	(39)	(16)
Net income (loss) from equity method investments	455	164	619	291	177	(455)	(73)
Net income (loss) from securities held to maturity	0	0	0	0	N/M	0	N/M
Other income (loss)	1,053	669	108	385	58	561	N/M
<b>Total noninterest income</b>	<b>15,307</b>	<b>17,644</b>	<b>17,677</b>	<b>(2,336)</b>	<b>(13)</b>	<b>(33)</b>	<b>(0)</b>
<b>Total net revenues<sup>2</sup></b>	<b>28,632</b>	<b>32,569</b>	<b>30,815</b>	<b>(3,937)</b>	<b>(12)</b>	<b>1,754</b>	<b>6</b>
Compensation and benefits	11,874	13,293	12,512	(1,419)	(11)	781	6
General and administrative expenses	15,454	18,632	14,654	(3,178)	(17)	3,977	27
Policyholder benefits and claims	374	256	289	117	46	(32)	(11)
Impairment of goodwill and other intangible assets	1,256	5,776	111	(4,520)	(78)	5,665	N/M
Restructuring activities	484	710	133	(226)	(32)	577	N/M
<b>Total noninterest expenses</b>	<b>29,442</b>	<b>38,667</b>	<b>27,699</b>	<b>(9,225)</b>	<b>(24)</b>	<b>10,968</b>	<b>40</b>
<b>Income (loss) before income taxes</b>	<b>(810)</b>	<b>(6,097)</b>	<b>3,116</b>	<b>5,287</b>	<b>(87)</b>	<b>(9,213)</b>	<b>N/M</b>
Income tax expense (benefit)	546	675	1,425	(129)	(19)	(750)	(53)
<b>Net income (loss)</b>	<b>(1,356)</b>	<b>(6,772)</b>	<b>1,691</b>	<b>5,416</b>	<b>(80)</b>	<b>(8,463)</b>	<b>N/M</b>
Net income attributable to noncontrolling interests	45	21	28	24	112	(6)	(23)
<b>Net income (loss) attributable to Deutsche Bank shareholders and additional equity components</b>	<b>(1,402)</b>	<b>(6,794)</b>	<b>1,663</b>	<b>5,392</b>	<b>(79)</b>	<b>(8,457)</b>	<b>N/M</b>

N/M – Not meaningful

<sup>1</sup> For further detail please refer to Note 1 "Significant Accounting Policies and Critical Accounting Estimates" of this report.

<sup>2</sup> After provision for credit losses.

## Net Interest Income

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
Total interest and similar income	25,636	25,967	25,001	(331)	(1)	966	4
Total interest expenses	10,929	10,086	10,729	843	8	(643)	(6)
<b>Net interest income</b>	<b>14,707</b>	<b>15,881</b>	<b>14,272</b>	<b>(1,175)</b>	<b>(7)</b>	<b>1,610</b>	<b>11</b>
Average interest-earning assets <sup>1</sup>	1,033,172	1,031,827	1,040,908	1,345	0	(9,080)	(1)
Average interest-bearing liabilities <sup>1</sup>	812,578	816,793	855,105	(4,215)	(1)	(38,312)	(4)
Gross interest yield <sup>2</sup>	2.39 %	2.52 %	2.40 %	(0.13) ppt	(5)	0.12 ppt	5
Gross interest rate paid <sup>3</sup>	1.23 %	1.23 %	1.25 %	0.00 ppt	0	(0.02) ppt	(2)
Net interest spread <sup>4</sup>	1.16 %	1.28 %	1.14 %	(0.12) ppt	(9)	0.14 ppt	12
Net interest margin <sup>5</sup>	1.42 %	1.54 %	1.37 %	(0.12) ppt	(8)	0.17 ppt	12

ppt – Percentage points

<sup>1</sup> Average balances for each year are calculated in general based upon month-end balances.<sup>2</sup> Gross interest yield is the average interest rate earned on our average interest-earning assets.<sup>3</sup> Gross interest rate paid is the average interest rate paid on our average interest-bearing liabilities.<sup>4</sup> Net interest spread is the difference between the average interest rate earned on average interest-earning assets and the average interest rate paid on average interest-bearing liabilities.<sup>5</sup> Net interest margin is net interest income expressed as a percentage of average interest-earning assets.

### 2016

Net interest income was €14.7 billion in 2016 compared to €15.9 billion in 2015. The decrease of €1.2 billion, or 7 %, was mainly driven by higher interest expenses and lower interest income. Net interest income in GM was lower and included lower revenues from Prime Finance due to reduced client balances. Higher interest expenses in GM included the impact of higher cost of funding. Interest income in CIB declined due to margin compression, the low interest rate environment, depressed trade volume and internal strategic perimeter decisions as part of our targets originally announced in October 2015. Both, the net interest spread and the net interest margin declined by 12 basis points in 2016 as compared to prior year.

### 2015

The increase in net interest income in 2015 of €1.6 billion, or 11 %, to €15.9 billion compared to €14.3 billion in 2014, was primarily driven by higher interest income on trading assets in GM, mainly from strong client activity and increased client balances. Also contributing to the increase were favorable foreign exchange rate movements and organic growth in Deutsche AM. Overall, the net interest spread increased by 14 basis points and the net interest margin improved by 17 basis points primarily driven by lower interest related volume, an increase in interest income and a decrease in interest expenses in 2015 as compared to prior year.

## Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
GM – Sales & Trading (equity)	852	1,258	1,416	(406)	(32)	(158)	(11)
GM – Sales & Trading (debt and other products)	3,582	3,857	3,105	(275)	(7)	752	24
Non-Core Operations Unit	(1,449)	(634)	(691)	(815)	129	57	(8)
Other	(1,584)	(639)	469	(945)	148	(1,108)	N/M
<b>Total net gains (losses) on financial assets/ liabilities at fair value through profit or loss</b>	<b>1,401</b>	<b>3,842</b>	<b>4,299</b>	<b>(2,441)</b>	<b>(64)</b>	<b>(457)</b>	<b>(11)</b>

### 2016

Net gains on financial assets/liabilities at fair value through profit or loss decreased by €2.4 billion to €1.4 billion for the full year 2016. The main drivers for the decrease in net gains on financial assets/liabilities at fair value through profit or loss was the impact of unfavorable foreign exchange rates and interest rates on the fair value of derivatives in the category “Other” which was largely offset by gains related to the underlying assets in GM. The decline in NCOU was primarily driven by de-risking losses on the unwind of long-dated derivative exposure and related assets. Additionally the revenues in GM were impacted by a challenging environment in Equities and implementation of our targets originally announced in October 2015.

## 2015

Net gains on financial assets/liabilities at fair value through profit or loss decreased by €457 million to €3.8 billion for the full year 2015. The main driver for this was an increase in net losses on financial assets/liabilities at fair value through profit or loss of €1.1 billion in the category Other. Contributing factors were losses on long swap exposure in GM due to unfavorable interest rate and foreign exchange movement partly offset by an increase of €752 million in Sales and Trading (debt and other products) mainly reflecting increased market volatility primarily in the first quarter of 2015 resulting in new client and deal flow.

## Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

Our trading and risk management businesses include significant activities in interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments designated at fair value through profit or loss (i.e., coupon and dividend income) and the costs of funding net trading positions are part of net interest income. Our trading activities can periodically shift income between net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies.

In order to provide a more business-focused discussion, the following table presents net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss by corporate division and by product within GM.

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
Net interest income	14,707	15,881	14,272	(1,175)	(7)	1,610	11
Total net gains (losses) on financial assets/ liabilities at fair value through profit or loss	1,401	3,842	4,299	(2,440)	(64)	(457)	(11)
<b>Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>16,108</b>	<b>19,723</b>	<b>18,570</b>	<b>(3,615)</b>	<b>(18)</b>	<b>1,153</b>	<b>6</b>
<b>Breakdown by Corporate Division/product:<sup>1</sup></b>							
Sales & Trading (equity)	1,979	2,887	2,639	(907)	(31)	247	9
Sales & Trading (debt and other products)	7,452	8,215	7,328	(763)	(9)	887	12
Total Sales & Trading	9,431	11,102	9,967	(1,671)	(15)	1,135	11
Other <sup>2</sup>	(204)	(360)	(785)	155	(43)	425	(54)
Global Markets <sup>3</sup>	9,227	10,742	9,182	(1,515)	(14)	1,560	17
Corporate & Investment Banking	2,090	2,215	1,969	(125)	(6)	247	13
Private, Wealth and Commercial Clients	3,877	3,862	3,973	14	0	(111)	(3)
Deutsche Asset Management	364	255	398	109	43	(144)	(36)
Postbank	2,175	2,316	2,165	(142)	(6)	151	7
Non-Core Operation Unit	(1,261)	(353)	(310)	(909)	N/M	(43)	14
Consolidation & Adjustments	(363)	685	1,193	(1,048)	N/M	(508)	(43)
<b>Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>16,108</b>	<b>19,723</b>	<b>18,570</b>	<b>(3,615)</b>	<b>(18)</b>	<b>1,153</b>	<b>6</b>

N/M – Not meaningful

<sup>1</sup> This breakdown reflects net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss only. For a discussion of the corporate divisions' total revenues by product please refer to Note 4 "Business Segments and Related Information".

<sup>2</sup> Includes the net interest spread on loans as well as the fair value changes of credit default swaps and loans designated at fair value through profit or loss.

<sup>3</sup> Includes net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss of origination, advisory and other products.

## Global Markets (GM)

### 2016

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €9.2 billion in 2016, a decrease of €1.5 billion, or 14 %, compared to 2015. In Sales & Trading (debt and other products), revenues were lower by €763 million in 2016, a decrease of 9 % compared to 2015. This decline was driven by a challenging market environment and country exits as part of our targets originally announced in October 2015. Lower revenues in Emerging Markets and Foreign Exchange were partly offset by higher Core Rates revenues. In Sales & Trading (equity), revenues were lower by €907 million in 2016, a decrease of 31 % compared to 2015. This decline was felt across all equity businesses as a result of lower overall client activity in a challenging market environment. Prime Finance revenues were also impacted by higher funding costs due to widening of our own credit spreads following negative market perceptions concerning Deutsche Bank. Revenues in 'Other' were negative €204 million, but improved by €155 million in 2016, an increase of 43 % compared to 2015.

### 2015

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €10.7 billion in 2015, an increase of €1.6 billion, or 17 %, compared to 2014. In Sales & Trading (debt and other products), revenues were €887 million higher in 2015, an increase of 12 % compared to 2014. This was driven by increased market volatility and strong client activity in both Foreign Exchange and Asia Pacific Local Markets, as well as strong performance in Core Rates. Emerging Market revenues were higher, whilst Credit revenues remained in line with prior year. In Sales & Trading (equity), revenues were €247 million higher in 2015, an increase of 9 % compared to 2014. Significantly higher revenues in Prime Finance driven by increased client balances were partly offset by lower client activity and a challenging risk management environment in Equity Derivatives. Equity Trading revenues remained in line with the prior year. Other revenues were negative, but improved by €425 million in 2015, an increase of 54 % compared to 2014. This was driven by significantly lower valuation adjustments with negative impacts.

## Corporate & Investment Banking (CIB)

### 2016

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €2.1 billion in 2016, a decrease of €125 million, or 6 %, compared to 2015. The decline was mainly driven by lower interest revenues in Trade Finance due to margin compression and impact from negative interest rates.

### 2015

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €2.2 billion in 2015, an increase of €247 million, or 13 %, compared to 2014. Higher net interest revenues were driven by increased lending income specifically in the US and UK, coupled with higher volumes within Structured Export and Commodity Trade Finance. Fair value losses also decreased due to exchange rate gains within the FX business.

## Private Wealth and Commercial Clients (PW&CC)

### 2016

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss of €3.9 billion in 2016 were flat compared to 2015. Net interest income declined compared to 2015 reflecting the impact of the continued low interest rate environment in Europe. Beyond that, the prior year period included a higher extraordinary dividend payment received in PCC Germany subsequent to an investee's sale transaction. These decreases were offset by higher net gains (losses) on financial assets/liabilities at fair value through profit or loss driven by positive transaction related effects relating to PW&CC's stake in Hua Xia Bank Co. Ltd.

### 2015

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €3.9 billion in 2015, a decrease of €111 million, or 3 %, compared to 2014. The decrease was mainly driven by transaction-related effects relating to PW&CC's stake in Hua Xia Bank Co. Ltd and the ongoing challenging interest rate environment in 2015. This was partly offset by favorable movements in foreign exchange rates, reduced funding costs and increased lending volumes in our Wealth Management business as well as an extraordinary dividend payment received in PCC Germany subsequent to an investee's sale transaction.

**Deutsche Asset Management (Deutsche AM)****2016**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €364 million in 2016, an increase of €109 million, or 43 %, compared to 2015. The increase was mainly due to a write up of our exposure to HETA Asset Resolution AG within our guaranteed funds during 2016 and favorable mark-to-market movements on policyholder positions in Abbey Life following higher market gains.

**2015**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €255 million in 2015, a decrease of €144 million, or 36 %, compared to 2014. The decrease was mainly due to a write down of our exposure to HETA Asset Resolution AG in 2015, coupled with negative mark-to-market movements for guaranteed funds.

**Postbank (PB)****2016**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €2.2 billion in 2016, a decrease of €142 million or 6 %, compared to 2015. While net interest revenues remained virtually flat despite the remaining challenges resulting from low interest rate environment, net gains (losses) on financial assets/liabilities at fair value through profit or loss decreased by €143 million or 87 % due to extraordinary high net trading revenues in 2015.

**2015**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were €2.3 billion in 2015, an increase of €151 million, or 7 %, compared to 2014. The increase was mainly driven by increased net gains on financial assets/liabilities at fair value through profit or loss relating to extraordinarily high, in comparison to normal levels, net trading revenues of €322 million in 2015. Despite the remaining challenges resulting from the low interest rate environment Postbank was able to stabilize net interest revenues via growth in loan volume.

**Non-Core Operations Unit (NCOU)****2016**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss was a net loss of €1.3 billion in 2016, compared to a net loss of €353 million in 2015. The development was predominantly driven by the resolution of long-dated derivative exposures as well as various bond sales and further unwinds across the portfolio.

**2015**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss was a net loss of €353 million in 2015, an increase in loss of €43 million, or 14 %, compared to 2014. The increase was predominantly driven by lower net interest revenues following asset sales and despite an absence of a one-time loss in 2014 related to the Special Commodities Group from our exposure to traded products in the U.S.

**Consolidation & Adjustments (C&A)****2016**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss was a net loss of €363 million in 2016 versus a gain of €685 million in 2015, a decrease of €1.0 billion. This decrease was primarily due to interest rate increases in the long end of the curve in USD and EUR during the fourth quarter of 2016. The offsetting mark to market movements were reported in other lines of the income statement.

**2015**

Combined net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss was €685 million in 2015 versus €1,193 million in 2014, a decrease of €508 million, or 43 %. This decrease was primarily due to interest rate decreases at the long end of the curve in 2014. These instruments were micro hedged and offsetting mark-to-market movement were reported in other line items of the income statement. This decrease was partly offset by a positive impact from FVA on internal uncollateralized derivatives.

## Provision for Credit Losses

### 2016

Provision for credit losses was €1.4 billion in 2016, an increase of €427 million, or 45 %, compared to the same period in 2015. This mainly resulted from higher provisions in CIB and GM driven by exposures related to the shipping, metals and mining and oil and gas industry sectors. Further increases in NCOU were driven by IAS 39 reclassified assets within our European mortgage portfolios. These increases were partly offset by lower provisions in PW&CC as well as in Postbank reflecting the quality of the retail loan portfolio and the benign economic environment.

### 2015

Provision for credit losses in 2015 was €956 million, down by €178 million, or 16 % versus 2014 driven by significant reductions in NCOU in relation to IAS 39 reclassified assets and real estate exposures as well as in PW&CC due to sales of non-performing loans, the favorable credit environment in Germany and the stabilizing economic conditions in southern Europe. These reductions were partly offset by increases in CIB caused by the Shipping and Leveraged Finance portfolios.

## Remaining Noninterest Income

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
Commissions and fee income <sup>1</sup>	11,744	12,765	12,409	(1,021)	(8)	356	3
Net gains (losses) on financial assets available for sale	653	203	242	450	N/M	(39)	(16)
Net income (loss) from equity method investments	455	164	619	291	177	(455)	(73)
Other income (loss)	1,053	669	108	385	58	561	N/M
<b>Total remaining noninterest income</b>	<b>13,906</b>	<b>13,802</b>	<b>13,378</b>	<b>104</b>	<b>1</b>	<b>424</b>	<b>3</b>
<sup>1</sup> includes:							
Commissions and fees from fiduciary activities:							
Commissions for administration	401	432	404	(31)	(7)	28	7
Commissions for assets under management	3,507	3,666	3,057	(159)	(4)	609	20
Commissions for other securities business	380	382	283	(3)	(1)	99	35
<b>Total</b>	<b>4,287</b>	<b>4,480</b>	<b>3,744</b>	<b>(193)</b>	<b>(4)</b>	<b>736</b>	<b>20</b>
Commissions, broker's fees, mark-ups on securities underwriting and other securities activities:							
Underwriting and advisory fees	1,871	2,388	2,545	(517)	(22)	(157)	(6)
Brokerage fees	1,434	1,746	1,488	(312)	(18)	258	17
<b>Total</b>	<b>3,305</b>	<b>4,134</b>	<b>4,033</b>	<b>(829)</b>	<b>(20)</b>	<b>101</b>	<b>3</b>
Fees for other customer services	4,152	4,151	4,632	1	0	(480)	(10)
<b>Total commissions and fee income</b>	<b>11,744</b>	<b>12,765</b>	<b>12,409</b>	<b>(1,021)</b>	<b>(8)</b>	<b>356</b>	<b>3</b>

N/M – Not meaningful

### Commissions and fee income

#### 2016

Total Commissions and fee income decreased from €12.8 billion in 2015 by €1.0 billion, or 8 % to €11.7 billion in 2016. In PW&CC, commission and fee income declined due to difficult market environment and reduced client activities. CIB revenues were impacted primarily by a decline in deal volumes and issuance, resulting from worldwide political uncertainty and anticipation of interest rate hikes. Reduced commissions from lower market volumes impacted GM.

#### 2015

Total Commissions and fee income increased from €12.4 billion in 2014 by €356 million, or 3 % to €12.8 billion in 2015. Fees for assets under management increased due to a strong operating performance of our businesses reflecting a favorable market, impact from net asset inflows and performance fees in Active Asset Management. This was partially offset by a decrease in Fees for other customer services, including a decline in Postbank due to a new contract with Deutsche Post DHL and a decline in underwriting and advisory fees.

### Net gains (losses) on financial assets available for sale

#### 2016

Net gains on financial assets available for sale were €653 million in 2016 compared to €203 million in 2015, an increase of €450 million. The increase resulted from a sale of stake in Visa Europe Limited and of sovereign bonds in Postbank, as well as de-risking activities in NCOU.

#### 2015

Net gains on financial assets available for sale were €203 million in 2015 compared to €242 million in 2014, a decrease of €39 million, or 16 %. The decline in 2015 mainly resulted from a prior year period gain related to a business sale as well as gains from securities sales in DB Bauspar.

### Net income (loss) from equity method investments

#### 2016

Net gains from equity investments increased by €291 million to €455 million in 2016, from €164 million in 2015 primarily in NCOU due to a gain from the IPO of Red Rock Resorts.

#### 2015

Net gains from equity investments decreased by 73 % from €619 million in 2014 to €164 million in 2015 primarily due to valuation effects in 2015 relating to Hua Xia Bank.

### Other income (loss)

#### 2016

Other income increased by 58 % from €669 million in 2015 to €1.1 billion in 2016. The increase in 2016 was primarily driven by a realization in Other comprehensive income from share derecognition in Hua Xia Bank Co. Ltd. and was partly offset by de-risking losses due to sale of IAS 39 assets in NCOU and the nonrecurrence of a specific litigation recovery and gain on sale of Maher Prince Rupert in 2015.

#### 2015

Other income increased from €108 million in 2014 to €669 million in 2015. The increase in 2015 was primarily driven by asset sales related to accelerated de-risking including Maher Prince Rupert and a specific litigation recovery in NCOU.



## Noninterest Expenses

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
Compensation and benefits	11,874	13,293	12,512	(1,419)	(11)	781	6
General and administrative expenses <sup>1</sup>	15,454	18,632	14,654	(3,178)	(17)	3,977	27
Policyholder benefits and claims	374	256	289	117	46	(32)	(11)
Impairment of goodwill and other intangible assets	1,256	5,776	111	(4,520)	(78)	5,665	N/M
Restructuring activities	484	710	133	(226)	(32)	577	N/M
<b>Total noninterest expenses</b>	<b>29,442</b>	<b>38,667</b>	<b>27,699</b>	<b>(9,225)</b>	<b>(24)</b>	<b>10,968</b>	<b>40</b>

N/M – Not meaningful

<sup>1</sup> includes:

	2016	2015	2014	in € m.	in %	in € m.	in %
IT costs	3,872	3,664	3,333	208	6	331	10
Occupancy, furniture and equipment expenses	1,972	1,944	1,978	28	1	(34)	(2)
Professional service fees	2,305	2,283	2,029	22	1	255	13
Communication and data services	761	807	725	(46)	(6)	82	11
Travel and representation expenses	450	505	521	(56)	(11)	(16)	(3)
Banking and transaction charges	664	598	660	66	11	(62)	(9)
Marketing expenses	285	294	293	(9)	(3)	2	1
Consolidated investments	334	406	811	(72)	(18)	(405)	(50)
Other expenses <sup>2</sup>	4,812	8,129	4,305	(3,317)	(41)	3,824	89
<b>Total general and administrative expenses</b>	<b>15,454</b>	<b>18,632</b>	<b>14,654</b>	<b>(3,178)</b>	<b>(17)</b>	<b>3,977</b>	<b>27</b>

<sup>2</sup> Includes litigation related expenses of €2.4 billion in 2016, €5.2 billion in 2015 and €1.6 billion in 2014 and €0.4 billion for loan processing fees of PW&CC in 2014.

### Compensation and benefits

#### 2016

Compensation and benefits decreased by €1.4 billion, or 11 %, to €11.9 billion in 2016 compared to €13.3 billion in 2015, primarily due to lower performance related compensation.

#### 2015

Compensation and benefits increased by €781 million, or 6 %, to €13.3 billion in 2015 compared to €12.5 billion in 2014 which primarily reflects unfavorable foreign exchange developments.

### General and administrative expenses

#### 2016

General and administrative expenses decreased by €3.2 billion, or 17 %, to €15.5 billion in 2016 compared to €18.6 billion in 2015. The decrease was mainly due to a €2.8 billion reduction in litigation charges compared to 2015. Effects from favorable foreign exchange rate movements as well as reductions in various expense positions were partially offset by higher IT cost, including higher depreciation for self-developed software.

#### 2015

General and administrative expenses increased by €4.0 billion, or 27 %, to €18.6 billion in 2015 compared to €14.7 billion in 2014. The increase was primarily driven by higher litigation costs of €5.2 billion compared to €1.6 billion of litigation for the Group and €400 million for loan processing fees in PW&CC in 2014, unfavorable foreign exchange rate effects, higher software amortizations and impairments as well as significant higher charges for bank levies. These effects were partly offset by lower costs due to the disposal of assets in NCOU in 2014 and other cost reductions.

### Policyholder benefits and claims

#### 2016

Policyholder benefits and claims increased by €117 million, or 46 %, from €256 million in 2015 to €374 million in 2016 and were solely driven by higher policyholder benefits and claims recorded in the Abbey Life business. These charges were offset by net gains on financial assets/liabilities at fair value through profit or loss on policyholder benefits and claims.

#### 2015

Policyholder benefits and claims decreased by €32 million, or 11 %, from €289 million in 2014 to €256 million in 2015 and were solely driven by insurance-related charges regarding the Abbey Life business. These charges were offset by net gains on financial assets/liabilities at fair value through profit or loss on policyholder benefits and claims.

### Impairment of goodwill and other intangible assets

#### 2016

Impairment charges on goodwill and other intangible assets decreased by €4.5 billion to €1.3 billion, or 78 %, from €5.8 billion in 2015. The 2016 charge reflects an impairment of €1.0 billion in Deutsche AM triggered by the sale of Abbey Life and an impairment of €285 million in GM, following the transfer of certain businesses from Deutsche AM.

#### 2015

The impairment charges on goodwill and other intangible assets of €5.8 billion were attributable to €2.6 billion (thereof €1.8 billion impairment of goodwill and €834 million other intangible assets) in Postbank, €1.6 billion in GM, €1.0 billion in PW&CC and €600 million in CIB. The charge represents a full impairment of goodwill in GM and Postbank and in addition a partial impairment of other intangible assets in Postbank. Impairments largely were due to expected higher regulatory capital requirements and disposals within PW&CC.

### Restructuring

#### 2016

Restructuring expenses amounted to €484 million in 2016 compared to €710 million in 2015 reflecting our ongoing execution of strategic measures.

#### 2015

Restructuring expenses amounted to €710 million in 2015 compared to €133 million in 2014. The increase was driven by €616 million for the implementation of our targets originally announced in October 2015, partly offset by the lower spending for our OpEx program which was completed as planned in 2015.

## Income Tax Expense

#### 2016

Income tax expense was €546 million (2015: €675 million). The effective tax rate of negative 67 % (2015: negative 11 %) was mainly impacted by non-tax deductible goodwill impairment and litigation charges.

#### 2015

Income tax expense was €675 million (2014: €1.4 billion). The effective tax rate of negative 11 % (2014: 46 %) was mainly impacted by significant non-tax deductible impairments of goodwill and litigation charges.

## Segment Results of Operations

The following is a discussion of the results of our business segments. See Note 4 “Business Segments and Related Information” to the consolidated financial statements for information regarding:

- changes in the format of our segment disclosure and
- the framework of our management reporting systems.

The criterion for segmentation into divisions is our organizational structure as it existed at December 31, 2016. Segment results were prepared in accordance with our management reporting systems.

	2016							
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
<b>Net revenues<sup>1</sup></b>	<b>9,290</b>	<b>7,483</b>	<b>7,717</b>	<b>3,020</b>	<b>3,366</b>	<b>(382)</b>	<b>(479)</b>	<b>30,014</b>
<b>Provision for credit losses</b>	<b>142</b>	<b>672</b>	<b>255</b>	<b>1</b>	<b>184</b>	<b>128</b>	<b>1</b>	<b>1,383</b>
<b>Noninterest expenses</b>								
Compensation and benefits	1,787	1,711	2,438	611	1,397	68	3,861	11,874
General and administrative expenses	6,885	3,243	3,815	1,171	1,418	2,678	(3,756)	15,454
Policyholder benefits and claims	0	0	0	374	0	0	0	374
Impairment of goodwill and other intangible assets	285	0	0	1,021	0	(49)	(0)	1,256
Restructuring activities	127	165	141	47	0	4	(0)	484
<b>Total noninterest expenses</b>	<b>9,084</b>	<b>5,119</b>	<b>6,394</b>	<b>3,223</b>	<b>2,815</b>	<b>2,701</b>	<b>106</b>	<b>29,442</b>
<b>Noncontrolling interests</b>	<b>47</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(4)</b>	<b>(46)</b>	<b>0</b>
<b>Income (loss) before income taxes</b>	<b>16</b>	<b>1,691</b>	<b>1,068</b>	<b>(204)</b>	<b>367</b>	<b>(3,207)</b>	<b>(541)</b>	<b>(810)</b>
Cost/income ratio	98 %	68 %	83 %	107 %	84 %	N/M	N/M	98 %
<b>Assets<sup>2</sup></b>	<b>1,012,627</b>	<b>189,910</b>	<b>189,444</b>	<b>12,340</b>	<b>139,743</b>	<b>5,523</b>	<b>40,959</b>	<b>1,590,546</b>
Expenditures for additions to long-lived assets	2	1	13	0	121	(0)	773	909
Risk-weighted assets <sup>3</sup>	157,913	79,698	43,855	8,961	42,209	9,174	15,706	357,518
CRD 4 leverage exposure measure (spot value at reporting date)	682,346	271,925	195,373	3,131	146,978	7,882	40,018	1,347,653
Average shareholders' equity	24,695	12,076	9,008	6,221	6,006	4,037	38	62,082
Post-tax return on average tangible shareholders' equity <sup>4</sup>	0 %	10 %	9 %	(8) %	4 %	N/M	N/M	(3) %
Post-tax return on average shareholders' equity <sup>4</sup>	0 %	9 %	8 %	(2) %	4 %	N/M	N/M	(2) %
<sup>1</sup> Includes:								
Net interest income	4,765	2,092	3,678	326	2,154	188	1,504	14,707
Net income (loss) from equity method investments	124	14	5	44	0	269	(1)	455
<sup>2</sup> Includes:								
Equity method investments	517	112	23	203	0	98	73	1,027

N/M – Not meaningful

<sup>3</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>4</sup> The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (67) % for the year ended December 31, 2016. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 35 % for the year ended December 31, 2016.

	2015							
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
<b>Net revenues<sup>1</sup></b>	<b>10,857</b>	<b>8,047</b>	<b>7,510</b>	<b>3,021</b>	<b>3,112</b>	<b>794</b>	<b>184</b>	<b>33,525</b>
<b>Provision for credit losses</b>	<b>50</b>	<b>342</b>	<b>300</b>	<b>1</b>	<b>211</b>	<b>51</b>	<b>1</b>	<b>956</b>
<b>Noninterest expenses</b>								
Compensation and benefits	2,320	2,115	2,517	778	1,425	86	4,052	13,293
General and administrative expenses	8,622	3,512	3,869	1,304	1,475	2,921	(3,073)	18,632
Policyholder benefits and claims	0	0	0	256	0	0	0	256
Impairment of goodwill and other intangible assets	1,568	600	1,011	0	2,597	0	0	5,776
Restructuring activities	89	39	585	(2)	0	(1)	0	710
<b>Total noninterest expenses</b>	<b>12,599</b>	<b>6,266</b>	<b>7,983</b>	<b>2,336</b>	<b>5,497</b>	<b>3,006</b>	<b>980</b>	<b>38,667</b>
<b>Noncontrolling interests</b>	<b>26</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>1</b>	<b>1</b>	<b>(27)</b>	<b>0</b>
<b>Income (loss) before income taxes</b>	<b>(1,817)</b>	<b>1,439</b>	<b>(774)</b>	<b>684</b>	<b>(2,596)</b>	<b>(2,264)</b>	<b>(770)</b>	<b>(6,097)</b>
Cost/income ratio	116 %	78 %	106 %	77 %	177 %	N/M	N/M	115 %
<b>Assets<sup>2</sup></b>	<b>1,113,771</b>	<b>123,809</b>	<b>176,038</b>	<b>30,352</b>	<b>136,061</b>	<b>23,007</b>	<b>26,092</b>	<b>1,629,130</b>
Expenditures for additions to long-lived assets	1	1	0	1	112	(0)	643	758
Risk-weighted assets <sup>3</sup>	161,347	86,087	49,603	10,759	43,242	32,896	12,780	396,714
CRD 4 leverage exposure measure (spot value at reporting date)	731,197	276,732	188,467	5,358	141,370	36,553	15,511	1,395,188
Average shareholders' equity	24,675	12,483	10,265	5,719	7,798	6,755	1,361	69,055
Post-tax return on average tangible shareholders' equity <sup>4</sup>	(5) %	8 %	(6) %	48 %	(30) %	N/M	N/M	(12) %
Post-tax return on average shareholders' equity <sup>4</sup>	(5) %	7 %	(5) %	8 %	(22) %	N/M	N/M	(10) %
<sup>1</sup> Includes:								
Net interest income	5,807	2,299	3,868	449	2,153	282	1,024	15,881
Net income (loss) from equity method investments	55	12	40	34	0	20	3	164
<sup>2</sup> Includes:								
Equity method investments	466	111	19	182	3	166	68	1,013

N/M – Not meaningful

<sup>3</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.<sup>4</sup> The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (11 %) for the year ended December 31, 2015. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 35 % for the year ended December 31, 2015.

								2014
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
Net revenues <sup>1</sup>	10,069	7,667	7,868	2,643	3,238	489	(26)	31,949
Provision for credit losses	27	232	349	(0)	274	251	1	1,134
Noninterest expenses								
Compensation and benefits	2,286	2,067	2,568	631	1,344	94	3,522	12,512
General and administrative expenses	5,796	3,033	3,872	1,132	1,743	2,366	(3,287)	14,654
Policyholder benefits and claims	0	0	0	289	0	0	0	289
Impairment of goodwill and other intangible assets	0	0	0	(83)	0	194	0	111
Restructuring activities	92	29	9	(3)	0	4	1	133
Total noninterest expenses	8,174	5,129	6,449	1,965	3,087	2,658	237	27,699
Noncontrolling interests	25	1	(0)	4	1	(2)	(28)	0
Income (loss) before income taxes	1,843	2,306	1,070	674	(123)	(2,419)	(236)	3,116
Cost/income ratio	81 %	67 %	82 %	74 %	95 %	N/M	N/M	87 %
Assets <sup>2</sup>	1,186,046	130,634	164,928	29,840	141,157	33,936	22,163	1,708,703
Expenditures for additions to long-lived assets	0	0	0	1	108	(0)	517	626
Risk-weighted assets <sup>3</sup>	147,063	73,692	46,564	5,402	42,843	56,899	21,506	393,969
CRD 4 leverage exposure measure (spot value at reporting date)	754,648	248,828	172,212	4,367	144,051	85,673	35,401	1,445,181
Average shareholders' equity	20,569	10,512	9,183	5,144	8,134	7,724	143	61,410
Post-tax return on average tangible shareholders' equity <sup>4</sup>	6 %	16 %	10 %	67 %	(2) %	N/M	N/M	4 %
Post-tax return on average shareholders' equity <sup>4</sup>	6 %	14 %	8 %	9 %	(1) %	N/M	N/M	3 %
<sup>1</sup> Includes:								
Net interest income	5,390	2,114	3,720	398	2,152	381	117	14,272
Net income (loss) from equity method investments	125	5	440	22	(9)	34	2	619
<sup>2</sup> Includes:								
Equity method investments	472	99	3,151	163	3	170	85	4,143

N/M – Not meaningful

<sup>3</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>4</sup> The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was 46 % for the year ended December 31, 2014. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 35 % for the year ended December 31, 2014.

## Corporate Divisions

### Global Markets Corporate Division

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues</b>							
Sales & Trading (equity)	2,502	3,337	3,117	(835)	(25)	220	7
Sales & Trading (debt and other products)	7,339	8,215	7,595	(876)	(11)	620	8
<b>Sales &amp; Trading</b>	<b>9,841</b>	<b>11,552</b>	<b>10,712</b>	<b>(1,711)</b>	<b>(15)</b>	<b>840</b>	<b>8</b>
Other	(551)	(695)	(643)	144	(21)	(52)	8
<b>Total net revenues</b>	<b>9,290</b>	<b>10,857</b>	<b>10,069</b>	<b>(1,567)</b>	<b>(14)</b>	<b>788</b>	<b>8</b>
Provision for credit losses	142	50	27	92	185	23	85
<b>Noninterest expenses</b>							
Compensation and benefits	1,787	2,320	2,286	(533)	(23)	34	1
General and administrative expenses	6,885	8,622	5,796	(1,737)	(20)	2,826	49
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	285	1,568	0	(1,283)	(82)	1,568	N/M
Restructuring activities	127	89	92	38	43	(3)	(4)
<b>Total noninterest expenses</b>	<b>9,084</b>	<b>12,599</b>	<b>8,174</b>	<b>(3,515)</b>	<b>(28)</b>	<b>4,424</b>	<b>54</b>
<b>Noncontrolling interests</b>	<b>47</b>	<b>26</b>	<b>25</b>	<b>22</b>	<b>85</b>	<b>1</b>	<b>3</b>
<b>Income (loss) before income taxes</b>	<b>16</b>	<b>(1,817)</b>	<b>1,843</b>	<b>1,833</b>	<b>N/M</b>	<b>(3,660)</b>	<b>N/M</b>
Cost/income ratio	98 %	116 %	81 %	N/M	(18) ppt	N/M	35 ppt
Assets <sup>1</sup>	1,012,627	1,113,771	1,186,046	(101,143)	(9)	(72,276)	(6)
Risk-weighted assets <sup>2</sup>	157,913	161,347	147,063	(3,433)	(2)	14,284	10
Average shareholders' equity <sup>3</sup>	24,695	24,675	20,569	20	0	4,106	20
Post-tax return on average tangible shareholders' equity	0 %	(5) %	6 %	N/M	6 ppt	N/M	(12) ppt
Post-tax return on average shareholders' equity	0 %	(5) %	6 %	N/M	5 ppt	N/M	(11) ppt

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

#### 2016

Global Markets 2016 net revenues were €9.3 billion, a decrease of €1.6 billion, or 14 % from €10.9 billion in 2015. Revenues were impacted by a challenging environment for Equities, negative market perceptions concerning Deutsche Bank and the implementation of our targets originally announced in October 2015.

Sales & Trading (debt and other products) net revenues were €7.3 billion, a decrease of €876 million, or 11 %. Revenues in Foreign Exchange were in line with a strong prior year. Revenues in Core Rates were flat, as good performance in Europe was partly offset by a weaker performance in the U.S. Credit revenues were also in line with the prior year and included the impact of de-risking in Securitized Trading as part of our targets originally announced in October 2015. Strong performance in Financing and Solutions and Commercial Real Estate, especially in the U.S. was offset by underperformance in Credit Flow and Securitized Trading. Emerging Market revenues were significantly lower in 2016 driven by the impact of country exits, specifically Russia, as part of the implementation of our targets originally announced in October 2015, lower client flow and macro uncertainty. Asia Pacific Local Markets revenues were significantly lower as a result of unfavorable market conditions in the first half of the year and subdued markets negatively impacting client flow.

Sales & Trading (equity) net revenues were €2.5 billion, a decrease of €835 million, or 25 %. Prime Finance revenues were lower reflecting a decline in client balances and trading activity as well as increased cost of funding driven by widening of DB credit spreads. Equity Derivatives revenues were significantly lower due to lower client activity. Cash Equity revenues were lower in 2016 as a result of a challenging market environment and lower client volumes.

Other net revenues were negative €551 million in full year 2016, compared to negative €695 million in full year 2015. Other net revenues included transfers from and to Corporate & Investment Banking related to client coverage and product distribution, as well as the following valuation adjustment items. First, a mark-to-market gain of €61 million (full year 2015: a gain of €113 million) relating to RWA mitigation efforts arising on Credit Valuation Adjustment (CVA). CRR/CRD 4 capital rules result in charges to the Group's RWA in respect of CVA (the Group has sought to mitigate these regulatory charges through hedging with credit default swaps; these regulatory capital hedges are additional to those entered into to hedge CVA exposures under IFRS hedge accounting rules, and accordingly, result in mark-to-market movements in profit or loss that are reported as a revenue item). Second, a loss of €146 million in full year 2015 relating to a refinement in the calculation of IFRS CVA, with no corresponding item booked in 2016. Third, a Funding Valuation Adjustment (FVA) loss of €141 million (full year 2015: a loss of €145 million, including a negative impact of €26 million due to a calculation refinement). Lastly, a gain of €27 million (full year 2015: a gain of €48 million) relating to the impact of a Debt Valuation Adjustment (DVA) on certain derivative liabilities.

In provisions for credit losses, Global Markets recorded a net charge of €142 million (2015: net charge of €50 million), an increase of €92 million, driven by a small number of exposures in Metals and Mining and Commercial Real Estate.

Noninterest expenses decreased by €3.5 billion or 28 % compared to full year 2015. The decrease was primarily due to lower goodwill impairment and litigation charges compared to 2015. Noninterest expenses in 2016 included €876 million in litigation expenses and impairments. Excluding these effects, noninterest expenses in 2016 were 3 % lower than in 2015.

Income before income taxes in 2016 was a gain of €16 million, compared to a loss of €1.8 billion in the prior year, driven by €2.0 billion lower litigation in 2016 and €1.3 billion higher goodwill impairment charges in 2015, partly offset by €1.6 billion lower revenues in 2016.

## 2015

Global Markets 2015 net revenues were €10.9 billion, an increase of €788 million, or 8 % from €10.1 billion in 2014.

Sales & Trading (debt and other products) net revenues were €8.2 billion, an increase of €620 million, or 8 %. Revenues in Foreign Exchange were significantly higher driven by increased market volatility and strong client activity. Revenues in Core Rates were significantly higher driven by strong performance in Europe and North America. Credit revenues were in line with the prior year, as strong performance in credit flow and securitized trading was offset by lower client activity in commercial real estate and a weaker market environment particularly in APAC.

Emerging Market revenues were higher despite challenging markets and our exit from Russia, reflecting strong performance in Latin America. Asia Pacific Local Markets revenues were significantly higher from robust new deal volume and client flow due to increased volatility mainly in response to the devaluation of the Chinese Yuan in August 2015.

Sales & Trading (equity) net revenues were €3.3 billion, an increase of €220 million, or 7 %. Prime Finance revenues were significantly higher driven by increased client balances. Equity Derivatives revenues were lower, reflecting lower client activity and a challenging risk management environment in the second half of the year. Cash Equity revenues were in line with the prior year.

Other net revenues were negative €695 million in full year 2015, compared to negative €643 million in full year 2014. Other net revenues included transfers from and to Corporate & Investment Banking related to client coverage and product distribution, as well as the following valuation adjustment items. First, a mark-to-market gain of €113 million (full year 2014: a gain of €8 million) relating to RWA mitigation efforts arising on Credit Valuation Adjustment (CVA). Second, a loss of €146 million (full year 2014: a loss of €58 million) relating to a refinement in the calculation of IFRS CVA. Thirdly, a Funding Valuation Adjustment (FVA) loss of €145 million (full year 2014: a loss of €139 million), including a negative impact of €26 million due to a calculation refinement (full year 2014: a loss of €51 million). Lastly, a gain of €48 million (full year 2014: a loss of €126 million including a gain relating to a calculation refinement of €37 million) relating to the impact of a Debt Valuation Adjustment (DVA) on certain derivative liabilities.



In provisions for credit losses, Global Markets recorded a net charge of €50 million (2014: net charge of €27 million). The increase was driven by the impact of a ratings recalibration in Commercial Real Estate.

Noninterest expenses increased by €4.4 billion or 54 % compared to full year 2014. The increase was primarily due to goodwill impairment charges and higher litigation costs.

Income before income taxes was a loss of €1.8 billion, compared to a gain of €1.8 billion in the prior year, driven by goodwill impairment of €1.6 billion and €2.0 billion higher litigation charges partly offset by higher revenues.

## Corporate & Investment Banking Division

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues</b>							
Trade Finance & Cash Management Corporates	2,627	2,803	2,611	(176)	(6)	192	7
Institutional Cash & Securities Services	1,847	1,867	1,605	(20)	(1)	262	16
Equity Origination	405	658	761	(253)	(39)	(103)	(14)
Debt Origination	1,388	1,469	1,574	(82)	(6)	(104)	(7)
Advisory	500	587	579	(86)	(15)	8	1
Loan products & Other	717	663	538	54	8	126	23
<b>Total net revenues</b>	<b>7,483</b>	<b>8,047</b>	<b>7,667</b>	<b>(564)</b>	<b>(7)</b>	<b>380</b>	<b>5</b>
<b>Provision for credit losses</b>	<b>672</b>	<b>342</b>	<b>232</b>	<b>330</b>	<b>97</b>	<b>110</b>	<b>48</b>
<b>Noninterest expenses</b>							
Compensation and benefits	1,711	2,115	2,067	(403)	(19)	48	2
General and administrative expenses	3,243	3,512	3,033	(269)	(8)	479	16
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	0	600	0	(600)	N/M	600	N/M
Restructuring activities	165	39	29	126	N/M	10	34
<b>Total noninterest expenses</b>	<b>5,119</b>	<b>6,266</b>	<b>5,129</b>	<b>(1,147)</b>	<b>(18)</b>	<b>1,137</b>	<b>22</b>
<b>Noncontrolling interests</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>N/M</b>	<b>(0)</b>	<b>(77)</b>
<b>Income (loss) before income taxes</b>	<b>1,691</b>	<b>1,439</b>	<b>2,306</b>	<b>252</b>	<b>17</b>	<b>(867)</b>	<b>(38)</b>
Cost/income ratio	68 %	78 %	67 %	N/M	(9) ppt	N/M	11 ppt
Assets <sup>1</sup>	189,910	123,809	130,634	66,102	53	(6,825)	(5)
Risk-weighted assets <sup>2</sup>	79,698	86,087	73,692	(6,388)	(7)	12,395	17
Average shareholders' equity <sup>3</sup>	12,076	12,483	10,512	(407)	(3)	1,970	19
Post-tax return on average tangible shareholders' equity	10 %	8 %	16 %	N/M	2 ppt	N/M	(8) ppt
Post-tax return on average shareholders' equity	9 %	7 %	14 %	N/M	2 ppt	N/M	(7) ppt

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.

<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

### 2016

Revenues in the Corporate & Investment Banking division declined in 2016 compared to the prior year. The majority of this decrease was in Corporate Finance, with the industry-wide slowdown in client activity and primary markets first seen in the fourth quarter of 2015 continuing through the first half of 2016. Transaction Banking revenues decreased marginally, in the face of a number of macro-economic headwinds. Provisions for credit losses increased substantially in 2016. Mitigating these developments was a significant year-on-year decrease in noninterest expenses.

Net revenues were €7.5 billion, a decrease of €564 million or 7 % compared to the prior year. Within Transaction Banking, Trade Finance and Cash Management Corporates revenues were down €176 million or 6 %, with low interest rates within the eurozone area, high margin pressure and client perimeter rationalization as part of our targets originally announced in October 2015 all impacting negatively. Institutional Cash and Securities Services was flat year-on-year. Securities Services performance was again affected by lower interest rates in Europe, coupled with lower global IPO activity. This was offset by an improved performance in Institutional Cash, where the beneficial impact of increased interest rates within the U.S. outweighed the initial negative effects of a change in the business risk appetite

and client perimeter. Within Corporate Finance, Equity Origination experienced the biggest decrease, down € 253 million or 39 % for the year reflecting an industry wide reduction in issuance levels. These levels did see a partial recovery during the second half of 2016, which was reflected in an increase in revenues in Equity Origination compared to the first half of 2016. Debt Origination was lower by € 82 million or 6 % for the full year, driven by a weak first quarter. However, performance improved amid increased market liquidity and relatively stable interest rates to post higher revenues for the subsequent 9 months of the year compared to 2015. Advisory revenues decreased € 86 million or 15 %, as market activity was at lower levels compared to 2015. As seen with Equity Origination, the second half of 2016 also saw an increase in activity, which translated to an improvement in revenue performance. Loan products and Other revenues increased € 54 million or 8 %, as a result of corporate lending activity as well as transfers to and from Global Markets.

Provisions for credit losses were up € 330 million or 97 % compared to 2015. The increase was primarily driven by the deterioration in credit quality of the shipping sector where the industry suffered from persistent structural challenges; such as oversupply and redundancy of certain types of ships. As a consequence this severe industry weakness also triggered more borrowers to fall into the defaulted category valued under a liquidation scenario.

Noninterest expenses were € 5.1 billion, a decrease of € 1.1 billion or 18 % year-on-year, with the non-recurring goodwill impairment (2015: € 600 million) and reduced litigation (2016: € 17 million; 2015: € 329 million) driving the reduction and more than offsetting an increase in restructuring costs. The year also saw lower performance related compensation costs, a 3 % reduction in headcount as part of strategic initiatives and savings from active management of non compensation costs.

Income before income taxes was € 1.7 billion, an increase of € 252 million or 17 % compared to 2015. The substantial reduction in noninterest expenses more than offset lower revenues and a significant increase in credit loss provisions.

## 2015

2015 saw solid net revenues reported, with Transaction Banking showing significant increases compared to 2014 driven by increased volumes and favorable exchange rate movements. For Corporate Finance it was a year of two halves, with the first six months of the year producing substantial returns amid some record issuances, before tailing off heavily in the second six months of the year reflecting lower activity across Origination and Advisory markets.

Net revenues were € 8 billion, an increase of € 380 million, or 5 % from € 7.7 billion in 2014. Within Transaction Banking, revenues increased by € 454 million, or 11 %, with revenue growth across all regions. Trade Finance benefited specifically from improved margins within the structured business, while trade flow also saw an increase in activity, again from increased margins coupled with funded volume increases. Revenues in Cash Management for corporate clients were supported by favorable foreign exchange rate movements as well as increased volumes. Revenues in Institutional Cash and Securities Services grew on the back of strong business activity driven by volume growth and increased client deposits in addition to favorable foreign exchange rate movements. Origination and Advisory net revenues were € 2.7 billion for the full year 2015, a decrease of € 199 million, or 7 % reflecting a decline in market share and partial lower risk appetite, particularly in leveraged finance. Revenues in Equity Origination were lower, reflecting a lower fee pool in the second half of the year. Debt Origination was also down 7 %, driven by reduced market activity and lower risk tolerance within the second six months of the year, while Advisory revenues were in line with the prior year. Loan products and Other revenues increased € 126 million or 23 %, as a result of corporate lending activity as well as transfers to and from Global Markets.

Provisions for credit losses were € 342 million, an increase of € 110 million or 48 % driven by increased provisions taken in the Shipping and Leveraged Finance portfolios.

Noninterest expenses increased by € 1.1 billion or 22 %. The increase was due to goodwill impairment charges (€ 600 million), higher litigation costs (€ 329 million), adverse foreign exchange rate movements as well as higher expenses related to regulatory requirements.

Income before income taxes was €1.4 billion, a decrease of €867 million or 38 % on the prior year. The goodwill impairment charge and increased litigation, coupled with an increase in credit loss provisions was only partially offset by improved revenue performance.

## Private, Wealth & Commercial Clients Corporate Division

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues:</b>							
Credit products	2,223	2,148	2,043	75	3	105	5
Deposit products	1,138	1,332	1,534	(193)	(15)	(202)	(13)
Investment & insurance products	1,045	1,309	1,219	(264)	(20)	90	7
Payments, cards & account products	559	586	590	(27)	(5)	(4)	(1)
Other products	254	213	205	41	19	7	4
<b>Total Private &amp; Commercial Clients (PCC)</b>	<b>5,218</b>	<b>5,588</b>	<b>5,591</b>	<b>(369)</b>	<b>(7)</b>	<b>(3)</b>	<b>(0)</b>
Net interest revenues	811	816	653	(5)	(1)	163	25
Management Fees	645	747	731	(102)	(14)	16	2
Performance & Transaction Fees	350	494	453	(145)	(29)	41	9
Other revenues	75	40	17	35	89	23	140
<b>Total Wealth Management (WM)</b>	<b>1,880</b>	<b>2,097</b>	<b>1,854</b>	<b>(217)</b>	<b>(10)</b>	<b>243</b>	<b>13</b>
Hua Xia	618	(175)	423	793	N/M	(598)	N/M
<b>Total net revenues</b>	<b>7,717</b>	<b>7,510</b>	<b>7,868</b>	<b>207</b>	<b>3</b>	<b>(358)</b>	<b>(5)</b>
Provision for credit losses	255	300	349	(45)	(15)	(49)	(14)
<b>Noninterest expenses:</b>							
Compensation and benefits	2,438	2,517	2,568	(79)	(3)	(51)	(2)
General and administrative expenses	3,815	3,869	3,872	(55)	(1)	(3)	(0)
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	0	1,011	0	(1,011)	N/M	1,011	N/M
Restructuring activities	141	585	9	(444)	(76)	577	N/M
<b>Total noninterest expenses</b>	<b>6,394</b>	<b>7,983</b>	<b>6,449</b>	<b>(1,589)</b>	<b>(20)</b>	<b>1,535</b>	<b>24</b>
<b>Noncontrolling interests</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>N/M</b>	<b>(0)</b>	<b>105</b>
<b>Income (loss) before income taxes</b>	<b>1,068</b>	<b>(774)</b>	<b>1,070</b>	<b>1,842</b>	<b>N/M</b>	<b>(1,844)</b>	<b>N/M</b>
Cost/income ratio	83 %	106 %	82 %	N/M	(23) ppt	N/M	24 ppt
Assets <sup>1</sup>	189,444	176,038	164,928	13,406	8	11,110	7
Risk-weighted assets <sup>2</sup>	43,855	49,603	46,564	(5,748)	(12)	3,039	7
Average shareholders' equity <sup>3</sup>	9,008	10,265	9,183	(1,257)	(12)	1,082	12
Post-tax return on average tangible shareholders' equity	9 %	(6) %	10 %	N/M	16 ppt	N/M	(16) ppt
Post-tax return on average shareholders' equity	8 %	(5) %	8 %	N/M	13 ppt	N/M	(12) ppt

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.

<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

### Additional information

in € bn. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € bn.	in %	in € bn.	in %
Invested assets <sup>1</sup>	424	503	489	(79)	(16)	14	3
Net new money	(39)	3	22	(42)	N/M	(18)	(84)

N/M – Not meaningful

<sup>1</sup> We define invested assets as (a) assets we hold on behalf of customers for investment purposes and/or (b) client assets that are managed by us. We manage invested assets on a discretionary or advisory basis, or these assets are deposited with us.

### 2016

PW&CC's business environment remained challenging throughout 2016. Persistent low interest rates and a more challenging market environment resulted in reduced client activity and a decline in both deposit and investment revenues. PW&CC maintained strict cost discipline and also benefited from continued low levels of provisions for credit losses. During 2016, PW&CC made substantial progress in the execution of strategic measures including the stream-

lining of distribution models and the further expansion of digital offerings. Also as part of our targets originally announced in October 2015, PW&CC completed the disposals of the Private Client Services (PCS) unit in the U.S. and the Hua Xia Bank Co. Ltd. stake in China. The latter transaction resulted in a significant gain on sale, whereas PW&CC's prior year results were negatively impacted by Hua Xia-related valuation effects, a goodwill impairment charge of €1.0 billion and significant expenses for restructuring activities.

Net revenues in PW&CC of €7.7 billion increased by €207 million, or 3 %, compared to the prior year period. This increase was driven by a higher contribution from Hua Xia Bank Co. Ltd. with revenues of €618 million in 2016 including the aforementioned positive impact from the sale transaction. 2015 included net negative revenues of €175 million from Hua Xia Bank Co. Ltd.. Valuation effects and other transaction-related impacts of €697 million were partly offset by regular equity pick-ups on the stake. Excluding the impacts from the disposals of Hua Xia Bank Co. Ltd. and PCS (as discussed further below), net revenues declined compared to the prior year period. In the Private & Commercial Client (PCC) businesses, revenues decreased by €369 million, or 7 %. This decline was driven by the ongoing turbulent market environment, which led to reduced client activity. Investment & insurance product revenues declined by €264 million, or 20 %. Net revenues from Deposit products decreased by €193 million, or 15 %, compared to 2015, driven by the lower interest rate environment in Europe. These declines were partly mitigated by improved Credit product revenues, which increased by €75 million, or 3 %, mainly reflecting higher loan volumes. PCC's Other product revenues increased by €41 million, including a €98 million gain attributable to the sale of the stake in VISA Europe Limited as well as a €50 million dividend payment from one of PCC's shareholdings subsequent to a sales transaction by the investee in 2015. Prior year revenues included a comparable impact of €101 million also in Other product revenues. Revenues in the Wealth Management (WM) businesses decreased by €217 million, or 10 %, in part due to a deconsolidation impact after the disposal of the PCS unit in September 2016. Apart from this deconsolidation impact, Performance & Transaction Fees as well as Management Fees in WM were also impacted by the difficult market environment with reduced client activity, strategic de-risking initiatives and the negative market perceptions associated with Deutsche Bank. WM's Net interest revenues remained largely stable, whereas Other revenues increased by €35 million compared to the prior year period, mainly due to a gain related to the disposal of the PCS unit.

Provision for credit losses of €255 million decreased by €45 million, or 15 %, compared to prior year reflecting the continued good quality of the loan portfolio and the benign economic environment. Provision for credit losses also benefited from selective portfolio sales with similar impacts in 2015 and 2016.

Noninterest expenses of €6.4 billion in 2016 decreased by €1.6 billion, or 20 %, compared to the prior year period. 2015 included the aforementioned €1.0 billion goodwill impairments as well as €418 million higher charges for restructuring and severances. 2015 was also impacted by a €118 million partial write-off of software, whereas noninterest expenses in 2016 benefited from a reduced cost base after the disposal of the PCS unit in September. Excluding these effects, noninterest expenses were at comparable levels in 2015 and 2016. The impact of higher investments in digitization and further spending related to strategic measures was offset by lower expenses for compensation and strict cost discipline.

Income before income taxes of €1.1 billion increased by €1.8 billion compared to 2015. The increase was attributable to the aforementioned impairment items and higher charges for restructuring and severances in 2015 combined with the positive impact from the disposal of the Hua Xia Bank Co. Ltd. stake in 2016. Excluding these factors, income before income taxes declined in 2016 compared to 2015 reflecting the impact of the continued low interest rate environment and the volatile market environment on revenues in the WM and the PCC businesses.

Invested Assets of €424 billion decreased by €79 billion compared to December 31, 2015. The decline was mainly attributable to two factors. First, a deconsolidation effect of €38 billion subsequent to the disposal of the PCS unit. Second, net outflows of €39 billion (€32 billion in WM, €7 billion in PCC businesses) mainly occurring at the end of the third quarter and the beginning of the fourth quarter subsequent to the negative market perceptions associated with Deutsche Bank. In WM, net outflows during 2016 also reflected continued deleveraging activities of the clients as well as efforts to optimize risk management practices and to improve efficiencies such as cross-border servicing.

## 2015

PW&CC's results in 2015 were significantly impacted by three material effects which led to charges of €2.3 billion in total. First, a goodwill impairment of €1.0 billion reflecting the impact of expected higher regulatory capital requirements on PW&CC's Private & Commercial Client (PCC) businesses. Second, valuation effects and other transaction-related negative impacts of €697 million related to Hua Xia Bank Co. Ltd., triggered by the agreement to sell the stake and also reflecting Hua Xia Bank's share price development in 2015. Third, noninterest expenses included €595 million of restructuring and severance charges, mainly related to the restructuring of PW&CC's head office and the branch networks of the PCC businesses.

Net revenues of €7.5 billion in 2015 decreased by €358 million, or 5 %, compared to 2014. The decline was driven by the aforementioned €697 million valuation and transaction-related effects relating to PW&CC's stake in Hua Xia Bank Co. Ltd., which were partly offset by higher regular equity pick-ups on the stake. In the PCC businesses, total net revenues remained stable compared to 2014 reflecting partly offsetting developments. A decline in net revenues from Deposit products of €202 million, or 13 %, compared to 2014, mainly caused by the continued low interest rate environment in Europe, was partly offset by higher revenues from Investment & insurance products of €90 million, or 7 %, reflecting a continuing strong performance in the Investment businesses in a favorable market environment. Revenues from Credit products also increased by €105 million, or 5 %, driven by higher loan volumes, especially in Mortgages and Consumer Finance, as well as a modest increase in the overall portfolio margin. Other product revenues in the PCC businesses included positive effects of comparable size in both 2014 and 2015. In 2015, PCC Germany received an extraordinary dividend payment of €101 million subsequent to an investee's sales transaction. In 2014, Other product revenues included a non-recurring gain as well as gains from securities sales in DB Bauspar. Revenues in PW&CC's Wealth Management (WM) businesses increased in 2015 by €243 million, or 13 %, compared to 2014. Net interest revenues were up €163 million, or 25 %, reflecting favorable movements in foreign exchange rates, reduced funding costs and increased lending volumes. Higher Performance & Transaction Fees of €41 million, or 9 % and Management Fees of €16 million, or 2 % reflect favorable movements in foreign exchange rates.

Provision for credit losses of €300 million decreased by €49 million, or 14 % in 2015, reflecting the quality of PW&CC's loan book across business units and the ongoing benign economic environment in Germany. Provision for credit losses also benefited from selective portfolio sales in 2015 and in 2014 on a comparable level.

Noninterest expenses of €8.0 billion increased by €1.5 billion, significantly impacted by the aforementioned goodwill impairment of €1.0 billion. In addition, 2015 included €595 million provisions for restructuring and severance payments, mainly related to PW&CC's head office and PCC's branch network restructuring. Noninterest expenses in 2015 also included a €118 million partial write-off of software related to the strategic decisions on the use of the joint IT platform with Postbank. In comparison, noninterest expenses in 2014 included €267 million charges for loan processing fees triggered by a change in German legal practice as well as €107 million provisions for severances and restructuring. Beyond that, 2014 also included a positive effect from the disposition of real estate in Europe. Apart from these effects, PW&CC continued to realize incremental savings from efficiency measures in 2015, which were offset by higher expenses related to regulatory requirements, unfavorable movements in foreign exchange rates and inflationary cost increases (e.g. tariff, pensions, rental cost increases).

Loss before income taxes was €774 million in 2015, including the aforementioned charges of €2.3 billion in 2015. This compares to income before income taxes of €1.1 billion in 2014 which was affected by the aforementioned €267 million charges for loan processing fees and €107 million provision for restructuring and severances.

Invested assets of €503 billion increased by €14 billion compared to December 31, 2014 mainly driven by positive foreign exchange rates, accompanied by €3 billion net inflows driven by Wealth Management businesses.

## Deutsche Asset Management Corporate Division

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues</b>							
Management Fees	2,196	2,344	1,988	(148)	(6)	356	18
Performance and transaction fees	220	247	189	(27)	(11)	58	31
Other revenues	208	172	175	35	20	(2)	(1)
Mark-to-market movements on policyholder positions in Abbey Life	396	258	291	139	54	(34)	(12)
<b>Total net revenues</b>	<b>3,020</b>	<b>3,021</b>	<b>2,643</b>	<b>(1)</b>	<b>(0)</b>	<b>378</b>	<b>14</b>
<b>Provision for credit losses</b>	<b>1</b>	<b>1</b>	<b>(0)</b>	<b>(0)</b>	<b>(4)</b>	<b>1</b>	<b>N/M</b>
<b>Noninterest expenses</b>							
Compensation and benefits	611	778	631	(167)	(21)	147	23
General and administrative expenses	1,171	1,304	1,132	(134)	(10)	173	15
Policyholder benefits and claims	374	256	289	117	46	(32)	(11)
Impairment of goodwill and other intangible assets	1,021	0	(83)	1,021	N/M	83	N/M
Restructuring activities	47	(2)	(3)	49	N/M	1	(27)
<b>Total noninterest expenses</b>	<b>3,223</b>	<b>2,336</b>	<b>1,965</b>	<b>886</b>	<b>38</b>	<b>371</b>	<b>19</b>
<b>Noncontrolling interests</b>	<b>0</b>	<b>(0)</b>	<b>4</b>	<b>1</b>	<b>N/M</b>	<b>(4)</b>	<b>N/M</b>
<b>Income (loss) before income taxes</b>	<b>(204)</b>	<b>684</b>	<b>674</b>	<b>(888)</b>	<b>N/M</b>	<b>10</b>	<b>1</b>
Cost/income ratio	107 %	77 %	74 %	N/M	29 ppt	N/M	3 ppt
Assets <sup>1</sup>	12,340	30,352	29,840	(18,013)	(59)	513	2
Risk-weighted assets <sup>2</sup>	8,961	10,759	5,402	(1,798)	(17)	5,357	99
Average shareholders' equity <sup>3</sup>	6,221	5,719	5,144	503	9	575	11
Post-tax return on average tangible shareholders' equity	(8) %	48 %	67 %	N/M	(56) ppt	N/M	(19) ppt
Post-tax return on average shareholders' equity	(2) %	8 %	9 %	N/M	(10) ppt	N/M	(1) ppt

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

## 2016

In 2016, Deutsche AM performance was impacted by the sale of Abbey Life resulting in € 1.0 billion goodwill and other intangible assets impairments and by net asset outflows, exacerbated by Deutsche Bank specific factors. Despite less favorable market conditions reflecting ongoing uncertainty from sustained low global growth, excluding movements on policyholder positions and impairments in Abbey Life, Deutsche AM achieved solid IBIT of € 794 million, an increase of 16 % from € 683 million in 2015. Revenues excluding the mark-to-market movements on policyholder positions in Abbey Life were down 5 % year-on-year, while noninterest expenses excluding policyholders' benefits and claims and impairments were down 12 % compared to 2015.

Net revenues for full year 2016 were € 3.0 billion, and are in line with prior year. Net revenues excluding the mark-to-market movements on policyholder positions in Abbey Life were € 2.6 billion, a decrease of 5 % from € 2.8 billion in 2015. Management fees and other recurring revenues decreased by € 148 million, or 6 %, due to lower invested assets and unfavorable market conditions impacting the Passive and Active businesses. Performance and transaction fees decreased by € 27 million, or 11 %, compared to a strong prior year period in Alternatives products. Other revenues increased by € 35 million, or 20 %, due to a prior year write down relating to Heta Asset Resolution AG exposure and the current year sale of Abbey Life and Deutsche AM India, partly offset by negative fair value of guaranteed products and lower dividend income in Alternatives. Mark-to-market movements on policyholder positions in Abbey Life increased by € 139 million, or 54 %, following higher market gains.

Noninterest expenses of € 3.2 billion increased by € 886 million, or 38 %, due to impairments of goodwill predominantly related to the sale of Abbey Life and an increase in policyholder benefits and claims which is offset within revenues. Excluding Abbey Life policyholder benefits and claims and the aforementioned impairments, noninterest expenses of € 1.8 billion in 2016 were lower than in 2015, mainly due to lower compensation costs and the reversal of a specific cost item incurred in the fourth quarter of 2015.



The loss before income taxes was €204 million, a decrease of €888 million compared to 2015, primarily driven by the aforementioned impact from the sale of Abbey Life.

Invested assets were €706 billion as of December 31, 2016, a decrease of €38 billion versus December 31, 2015, driven by challenging market conditions exacerbated by the negative market perceptions concerning Deutsche Bank, market rumors surrounding the future of Deutsche AM and changes in Deutsche AM's management. Net asset outflows of €41 billion were driven by the Americas region, where outflows in cash were the main source of the results, driven by money market reform. Exchange-traded funds were another area with sizeable outflows as the currency-hedged category experienced outflows across the industry. The decrease was also driven by disposals of €18 billion mainly relating to Abbey Life and Deutsche AM India. Partly offsetting the outflows was the effect from a favorable Equity and Fixed Income market development of €16 billion, and favorable foreign exchange rate movements of €4 billion. We also experienced positive inflows of €2 billion in Asia Pacific in 2016.

The following table provides a development of invested assets during 2016, broken down by product type as well as the respective average fee rates:

in €bn.	Alternatives	Cash	Equity	Fixed Income	Multi Asset	Total Invested Assets
<b>Balance as of December 31, 2015</b>	<b>84</b>	<b>77</b>	<b>183</b>	<b>314</b>	<b>86</b>	<b>744</b>
Inflows	16	10	41	69	23	158
Outflows	(15)	(19)	(54)	(85)	(26)	(199)
Net Flows	1	(9)	(13)	(16)	(3)	(41)
FX impact	1	1	1	2	(0)	4
Market Development	2	(1)	7	8	2	16
Other	(3)	(4)	(6)	(2)	(2)	(18)
<b>Balance as of December 31, 2016</b>	<b>84</b>	<b>63</b>	<b>171</b>	<b>305</b>	<b>82</b>	<b>706</b>
<b>Average fee rate (in bps)</b>	<b>62</b>	<b>6</b>	<b>53</b>	<b>15</b>	<b>43</b>	<b>32</b>

## 2015

In 2015, Deutsche AM continued to grow across products and regions benefitting from higher Equity market levels, increased net new money and resulting higher assets under management relative to the prior period, and the favorable movement in foreign exchange rates, which positively increased recurring revenue streams. Performance continued to be impacted by increased regulatory costs and an ongoing low interest rate environment, which challenged fair value guaranteed products.

Net revenues for full year 2015 were €3.0 billion, an increase of €378 million, or 14 %. Management fees and other recurring revenues increased by €356 million, or 18 %, driven by an increase in the average assets under management following positive flows, higher average Equity market levels, and favorable movements in foreign exchange rates. Performance and transaction fees were up €58 million, or 31 %, following higher performance fee recognition from Active and Alternatives businesses. Other revenues decreased by €2 million, in line with the prior year. Mark-to-market movements on policyholder positions in Abbey Life decreased by €34 million, or 12 %, largely offset in noninterest expenses.

Noninterest expenses were up €371 million, or 19 %, mainly driven by unfavorable movement in foreign exchange rates, prior year reversal of intangible write-downs for Scudder, higher asset under management related costs, and higher compensation costs partly offset by lower costs related to the OpEx program and lower policyholder benefits and claims.

Income before income taxes was €684 million in 2015, an increase of €10 million, or 1 %, driven by the aforementioned increase in net revenues.

Invested assets were €744 billion as of December 31, 2015, an increase of €53 billion, or 8 %, mainly driven by foreign currency movements of €36 billion, net inflows of €18 billion, and favorable Equity market levels of €4 billion, partially offset by divestment and other movements of €5 billion.



The following table provides a development of invested assets during 2015, broken down by product type as well as the respective average fee rates:

in € bn.	Alternatives	Cash	Equity	Fixed Income	Multi Asset	Total Invested Assets
<b>Balance as of December 31, 2014</b>	<b>90</b>	<b>73</b>	<b>149</b>	<b>307</b>	<b>73</b>	<b>691</b>
Inflows	16	11	75	94	32	228
Outflows	(20)	(12)	(52)	(106)	(20)	(210)
Net Flows	(5)	(1)	23	(12)	12	18
FX impact	5	5	7	19	1	36
Market Development	(2)	2	5	(2)	0	4
Other	(5)	(1)	(1)	2	0	(5)
<b>Balance as of December 31, 2015</b>	<b>84</b>	<b>77</b>	<b>183</b>	<b>314</b>	<b>86</b>	<b>744</b>
<b>Average fee rate (in bps)</b>	<b>54</b>	<b>7</b>	<b>50</b>	<b>14</b>	<b>40</b>	<b>30</b>

## Postbank

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues</b>							
Current Accounts	1,101	1,179	1,281	(77)	(7)	(102)	(8)
Loans	1,133	1,112	912	21	2	200	22
Savings	590	695	703	(104)	(15)	(8)	(1)
Home Loans & Savings	216	230	225	(14)	(6)	5	2
Investment & Insurance Products	94	94	98	1	1	(5)	(5)
Postal	230	239	415	(9)	(4)	(176)	(42)
NCOU	(228)	(393)	(317)	165	(42)	(76)	24
Other	229	(43)	(78)	272	N/M	35	(45)
<b>Total net revenues</b>	<b>3,366</b>	<b>3,112</b>	<b>3,238</b>	<b>254</b>	<b>8</b>	<b>(126)</b>	<b>(4)</b>
<b>Provision for credit losses</b>	<b>184</b>	<b>211</b>	<b>274</b>	<b>(27)</b>	<b>(13)</b>	<b>(63)</b>	<b>(23)</b>
<b>Noninterest expenses</b>							
Compensation and benefits	1,397	1,425	1,344	(28)	(2)	81	6
General and administrative expenses	1,418	1,475	1,743	(57)	(4)	(268)	(15)
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	0	2,597	0	(2,597)	N/M	2,597	N/M
Restructuring activities	0	0	0	0	N/M	0	N/M
<b>Total noninterest expenses</b>	<b>2,815</b>	<b>5,497</b>	<b>3,087</b>	<b>(2,682)</b>	<b>(49)</b>	<b>2,410</b>	<b>78</b>
<b>Noncontrolling interests</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>(0)</b>	<b>(26)</b>	<b>(0)</b>	<b>(13)</b>
<b>Income (loss) before income taxes</b>	<b>367</b>	<b>(2,596)</b>	<b>(123)</b>	<b>2,963</b>	<b>N/M</b>	<b>(2,473)</b>	<b>N/M</b>
Cost/income ratio	84 %	177 %	95 %	N/M	(93) ppt	N/M	81 ppt
Assets <sup>1</sup>	139,743	136,061	141,157	3,682	3	(5,096)	(4)
Risk-weighted assets <sup>2</sup>	42,209	43,242	42,843	(1,032)	(2)	399	1
Average shareholders' equity <sup>3</sup>	6,006	7,798	8,134	(1,791)	(23)	(337)	(4)
Post-tax return on average tangible shareholders' equity	4 %	(30) %	(2) %	N/M	34 ppt	N/M	(28) ppt
Post-tax return on average shareholders' equity	4 %	(22) %	(1) %	N/M	26 ppt	N/M	(21) ppt

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.

<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

## 2016

In 2016, Postbank continued to focus on loan growth as well as on cost and efficiency measures while continued headwinds from the persisting low interest rate environment impacted revenues on Savings and Current Accounts. Postbank reported an income before income taxes of €367 million in 2016 compared to a loss before income taxes of €2.6 billion in 2015, which was heavily impacted by extraordinary items, such as goodwill impairment and other smaller effects from adjustments of home loan savings interest provisions of around €2.8 billion in total.

Net revenues increased by € 254 million, or 8 % compared to 2015. Main drivers were increased Other revenues of € 272 million in 2016 due to gains on sales of certain investment securities (including the sale of a stake in VISA Europe Ltd.) while Postbank's NCOU revenues increased by € 165 million, or 42 %, mainly attributable to a discontinued revenue burden from adjustments in 2015, including the adjustment of home loan savings interest provisions.

Postbank increased its net revenues in Loans by € 21 million or 2 % despite a positive impact of € 58 million in 2015 due to specific effects from successful contract alignments with business partners from Postbank mainly driven by loan volume growth in mortgages, consumer loans and corporate loans. The decline in net revenues from Savings and Current Accounts of € 104 million or 15 % and € 77 million or 7 %, respectively, compared to 2015 was mainly caused by the continued low interest rate environment in Europe. Postbank responded to the aforementioned pressure on revenues from deposits products with the introduction of new pricing models for current accounts starting in November 2016. Revenues in Home Loans & Savings decreased by € 14 million or 6 % mainly due to the low interest rate environment and remaining volume of outstanding high-yielding home loans savings.

Provision for credit losses decreased by € 27 million, or 13 % in 2016 reflecting the ongoing benign economic environment in Germany and the quality of Postbank's loan book.

Noninterest expenses decreased by € 2.7 billion, mainly attributable to the aforementioned goodwill impairment of € 2.6 billion in 2015. The remaining improvement in noninterest expenses was due to continued cost focus and lower expenses for strategic initiatives including reduced severance payments, despite higher regulatory costs for deposit protection schemes. Both compensation and benefits as well as general and administrative expenses decreased by 2 % and 4 % respectively, as compared to 2015. Apart from the above-mentioned effects, Postbank continued to realize further efficiency improvements by client orientated end-to-end process optimization as well as streamlined and digitized processes.

Income before income taxes increased by € 3.0 billion to € 367 million in 2016 mainly due to nonrecurring goodwill impairments and extraordinary high revenues resulting from sales of certain investment securities.

Invested assets of € 72 billion decreased by € 3 billion compared to December 31, 2015 driven by € 3 billion outflows in savings products.

## 2015

Postbank's business environment remained challenging during 2015 due to the low interest rate environment. Furthermore Postbank's 2015 results were significantly adversely impacted by two material effects amounting to € 2.8 billion in total: firstly, the goodwill impairment of € 2.6 billion made in the third quarter 2015 and secondly, adjustments made especially with respect to provisions arising from home loans savings. Excluding these effects, Postbank achieved a positive result in 2015.

Net revenues decreased by € 126 million, or 4 % compared to 2014. This was driven by increased headwinds from the low interest rate environment which, in particular, resulted in declining revenues on Savings and Current Accounts and the aforementioned adjustments recorded in Postbank's NCOU. Net revenues from Postal declined by € 176 million, or 42 %, mainly due to a contract alignment with our cooperation partner Deutsche Post DHL AG, partly offset by lower costs related to the same contractual amendments. These declines were partly compensated by an increase in Loans of € 200 million, or 22 %. This was driven by higher loan volumes, especially in mortgages and consumer loans and a modest overall portfolio margin increase, accompanied by specific effects totaling € 58 million from successful contract alignments with business partners from Postbank. Net revenues from Investment & Insurance declined by € 5 million, or 5 %, while Other revenues rose by € 35 million, or 45 %.

Provision for credit losses decreased by € 63 million, or 23 % in 2015 reflecting the positive macroeconomic environment in Germany as well as the quality of Postbank's loan book.

Noninterest expenses increased by € 2.4 billion, significantly impacted by the aforementioned impairment of € 2.6 billion of goodwill. Furthermore 2015 included extraordinary high expenses of € 197 million for strategic initiatives to improve Postbank's competitiveness. Excluding these effects, Postbank improved its management of noninterest expenses which was supported by lower costs resulting from the contractual alignment with Deutsche Post DHL AG and efficiency measures realized in 2015. Those were partly offset by higher expenses caused by regulatory requirements and inflationary cost increases (tariff, pensions and rental cost increases).

Loss before income taxes was € 2.6 billion in 2015. Excluding the earlier mentioned goodwill impairment and adjustments of € 2.8 billion in total, Postbank achieved a positive result compared to a loss before income taxes of € 123 million in 2014.

Invested assets of € 75 billion decreased by € 2 billion compared to December 31, 2014 driven by € 3 billion outflows in savings products.

## Non-Core Operations Unit Corporate Division

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Net revenues</b>	<b>(382)</b>	<b>794</b>	<b>489</b>	<b>(1,176)</b>	<b>N/M</b>	<b>305</b>	<b>62</b>
thereof:							
Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	(1,261)	(353)	(310)	(909)	N/M	(43)	14
<b>Provision for credit losses</b>	<b>128</b>	<b>51</b>	<b>251</b>	<b>76</b>	<b>148</b>	<b>(200)</b>	<b>(80)</b>
<b>Noninterest expenses</b>							
Compensation and benefits	68	86	94	(18)	(20)	(8)	(9)
General and administrative expenses	2,678	2,921	2,366	(243)	(8)	555	23
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	(49)	0	194	(49)	N/M	(194)	N/M
Restructuring activities	4	(1)	4	5	N/M	(6)	N/M
<b>Total noninterest expenses</b>	<b>2,701</b>	<b>3,006</b>	<b>2,658</b>	<b>(304)</b>	<b>(10)</b>	<b>347</b>	<b>13</b>
<b>Noncontrolling interests</b>	<b>(4)</b>	<b>1</b>	<b>(2)</b>	<b>(5)</b>	<b>N/M</b>	<b>3</b>	<b>N/M</b>
<b>Income (loss) before income taxes</b>	<b>(3,207)</b>	<b>(2,264)</b>	<b>(2,419)</b>	<b>(943)</b>	<b>42</b>	<b>155</b>	<b>(6)</b>
Assets <sup>1</sup>	5,523	23,007	33,936	(17,485)	(76)	(10,929)	(32)
Risk-weighted assets <sup>2</sup>	9,174	32,896	56,899	(23,722)	(72)	(24,003)	(42)
Average shareholders' equity <sup>3</sup>	4,037	6,755	7,724	(2,717)	(40)	(969)	(13)

N/M – Not meaningful

<sup>1</sup> Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.

<sup>2</sup> Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.

<sup>3</sup> See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

## 2016

During 2016, NCOU successfully executed its de-risking strategy and reduced its portfolio in size to achieve its year-end closure target. Activity focused on initiatives aimed at delivering efficient capital contribution and de-leveraging results, which took place across a number of portfolios. These included the resolution of long-dated derivative exposures as well as various bond sales and further unwinds across the correlation and negative basis portfolios. The sale of our stakes in Maher Port Elizabeth and Red Rock Resorts were also completed in the period.

Net revenues for NCOU in the reporting period were negative €382 million versus positive €794 million in the prior year. This was predominately driven by de-risking losses of €821 million, mainly from the unwind of long dated derivative exposures and related assets, partially offset by a gain of €368 million in relation to Red Rock Resorts. In addition portfolio revenues declined following asset sales including Maher Prince Rupert, which was partially offset by lower valuation adjustments and mark-to-market impacts. Net revenues in 2015 included €219 million from a specific litigation recovery and a gain of €195 million on the sale of Maher Prince Rupert.

Provisions for credit losses increased by €76 million, in comparison to 2015. This was predominantly driven by higher provisions taken against the European residential mortgages and commercial loans which included IAS 39 reclassified assets.

Noninterest expenses decreased by €304 million, or 10 %, in comparison to 2015 predominately due to lower litigation related expenses. Costs excluding litigation charges were 18 % lower year-on-year, driven by asset sales including Maher Prince Rupert in 2015.

The loss before income taxes increased by €943 million to €3.2 billion, compared to 2015. The increase was primarily driven by losses from de-risking activity, while noninterest expenses were lower.

## 2015

In 2015, NCOU continued to execute its de-risking strategy, including the completion of the Maher Prince Rupert sale, as well as various exposures from legacy banking assets. The loss before income taxes profile improved overall but was impacted by an increase in noninterest expenses, specifically related to the developments in litigation-related provisions. Asset de-risking in 2015 delivered net gains of €412 million.

Net revenues increased by €305 million, or 62 %, mainly due to specific impacts including €219 million from a specific litigation recovery and a gain of €195 million on the sale of Maher Prince Rupert. Lower portfolio revenues following asset sales, including The Cosmopolitan of Las Vegas were partially offset by lower valuation adjustments and mark-to-market impacts. Net revenues in 2014 included mark-to-market losses of €314 million related to a Maher Terminals debt re-financing and a €151 million loss related to the Special Commodities Group from our exposure to traded products in the U.S. power sector.

Provisions for credit losses decreased by €200 million, or 80 %, in comparison to 2014. This reduction was predominantly driven by lower credit losses for IAS 39 reclassified assets which included releases related to real estate exposures.

Noninterest expenses increased by €347 million, or 13 %, predominately driven by higher litigation-related expenses. Noninterest expenses excluding litigation charges were 41 % lower year-on year, driven by asset sales including The Cosmopolitan of Las Vegas and the non-recurrence of a one-time impairment in the prior year related to Maher Terminals.

The loss before income taxes was €2.3 billion, an improvement of €155 million compared to 2014. Higher revenues and lower credit losses were the main drivers, while noninterest expenses were higher with regard to litigation related matters.

## Consolidation & Adjustments

in € m. (unless stated otherwise)			2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
	2016	2015	2014	in € m. in %	in € m. in %	in %
<b>Net revenues<sup>1</sup></b>	<b>(479)</b>	<b>184</b>	<b>(26)</b>	<b>(663)</b>	<b>N/M</b>	<b>210</b> <b>N/M</b>
Provision for credit losses	1	1	1	1	86	0 7
<b>Noninterest expenses</b>						
Compensation and benefits	3,861	4,052	3,522	(191)	(5)	530 15
General and administrative expenses	(3,756)	(3,073)	(3,287)	(683)	22	214 (7)
Policyholder benefits and claims	0	0	0	0	N/M	0 N/M
Impairment of goodwill and other intangible assets	(0)	0	0	(0)	N/M	0 N/M
Restructuring activities	(0)	0	1	(0)	N/M	(1) (94)
<b>Total noninterest expenses</b>	<b>106</b>	<b>980</b>	<b>237</b>	<b>(874)</b>	<b>(89)</b>	<b>743</b> <b>N/M</b>
<b>Noncontrolling interests</b>	<b>(46)</b>	<b>(27)</b>	<b>(28)</b>	<b>(19)</b>	<b>70</b>	<b>1</b> <b>(4)</b>
<b>Income (loss) before income taxes</b>	<b>(541)</b>	<b>(770)</b>	<b>(236)</b>	<b>229</b>	<b>(30)</b>	<b>(535)</b> <b>N/M</b>
<b>Assets<sup>2</sup></b>	<b>40,959</b>	<b>26,092</b>	<b>22,163</b>	<b>14,867</b>	<b>57</b>	<b>3,930</b> <b>18</b>
<b>Risk-weighted assets<sup>3</sup></b>	<b>15,706</b>	<b>12,780</b>	<b>21,506</b>	<b>2,926</b>	<b>23</b>	<b>(8,726)</b> <b>(41)</b>
<b>Average shareholders' equity<sup>4</sup></b>	<b>38</b>	<b>1,361</b>	<b>143</b>	<b>(1,323)</b>	<b>(97)</b>	<b>1,218</b> <b>N/M</b>

N/M – Not meaningful

<sup>1</sup> Net interest income and noninterest income.<sup>2</sup> Assets in C&A reflect residual Treasury assets not allocated to the business segments as well as Corporate assets, such as deferred tax assets and central clearing accounts, outside the management responsibility of the business segments.<sup>3</sup> Risk weighted assets are based upon CRR/CRD 4 fully-loaded. Risk-weighted assets in C&A reflect Treasury and Corporate assets outside the management responsibility of the business segments, primarily the Group's deferred tax assets.<sup>4</sup> Average shareholders' equity assigned to C&A reflects the residual amount of equity that is not allocated to the segments as described in Note 4 "Business Segments and Related Information".

### 2016

In 2016, C&A net revenues of negative €479 million were mainly due to negative €252 million in valuation and timing differences of the Treasury portfolio. The main negative driver, in valuations and timing differences, was changes in interest rates offset by the widening of our own credit spread and movements in cross currency basis spreads. Net revenues also included negative €127 million related to the foreign exchange revaluation of proceeds from GBP denominated AT1 issuance; additionally, revenues include negative €126 million from municipal bonds taxable equivalent which is reported by the business and balanced out via C&A. These negative effects were partly offset by a positive result of €71 million from FVA on internal uncollateralized intercompany derivatives due to a tightening of funding spreads.

Noninterest expenses of €106 million were mainly driven by €137 million costs associated with the preparation for deconsolidation of Postbank, partly offset by €30 million related to tax recoveries.

Loss before income taxes was €541 million in 2016 compared to a loss of €770 million in 2015, primarily as the fourth quarter 2015 included a negative impact of €358 million from litigation costs related to infrastructure functions reallocated from Global Markets to C&A.

### 2015

In 2015, C&A net revenues of €184 million included €221 million of Treasury revenues which were offset in noninterest expenses as Treasury allocates revenues and costs to business segments. C&A revenues also included negative €146 million in valuation and timing differences driven by a narrowing of our own credit spread, and a narrowing of the basis spread between EUR/USD, as well as an impact from a change in valuation methodology for debt held at fair value. Revenues also included negative €130 million resulting from the Postbank squeeze out. These negative effects were partly offset by a positive €72 million from FVA on internal uncollateralized intercompany derivatives.

Noninterest expenses of €980 million were mainly driven by €358 million of litigation costs related to infrastructure functions as well as €68 million of costs associated with the preparation for deconsolidation of Postbank including a related real estate transfer tax. Noninterest expenses also include a €54 million provision for compensation-related costs.

Loss before income taxes was at €770 million in 2015 compared to a loss of €236 million in 2014. The development was primarily driven by litigation costs related to infrastructure functions.

## Financial Position

in € m.	Dec 31, 2016	Dec 31, 2015	2016 increase (decrease) from 2015	
			in € m.	in %
Cash and central bank balances	181,364	96,940	84,424	87
Interbank balances (w/o central banks)	11,606	12,842	(1,236)	(10)
Central bank funds sold, securities purchased under resale agreements and securities borrowed	36,368	56,013	(19,645)	(35)
Trading assets	171,044	196,035	(24,991)	(13)
Positive market values from derivative financial instruments	485,150	515,594	(30,444)	(6)
Financial assets designated at fair value through profit or loss thereof:	87,587	109,253	(21,666)	(20)
Securities purchased under resale agreements	47,404	51,073	(3,669)	(7)
Securities borrowed	21,136	21,489	(353)	(2)
Loans	408,909	427,749	(18,840)	(4)
Securities held to maturity	3,206	0	3,206	N/M
Brokerage and securities related receivables	105,100	94,939	10,161	11
Remaining assets	100,213	119,765	(19,552)	(16)
<b>Total assets</b>	<b>1,590,546</b>	<b>1,629,130</b>	<b>(38,584)</b>	<b>(2)</b>
Deposits	550,204	566,974	(16,770)	(3)
Central bank funds purchased, securities sold under repurchase agreements and securities loaned	29,338	13,073	16,265	124
Trading liabilities	57,029	52,304	4,725	9
Negative market values from derivative financial instruments	463,858	494,076	(30,218)	(6)
Financial liabilities designated at fair value through profit or loss thereof:	60,492	44,852	15,640	35
Securities sold under repurchase agreements	50,397	31,637	18,760	59
Securities loaned	1,298	554	744	134
Other short-term borrowings	17,295	28,010	(10,715)	(38)
Long-term debt	172,316	160,016	12,300	8
Brokerage and securities related payables	122,019	134,637	(12,618)	(9)
Remaining liabilities	53,176	67,564	(14,388)	(21)
<b>Total liabilities</b>	<b>1,525,727</b>	<b>1,561,506</b>	<b>(35,779)</b>	<b>(2)</b>
<b>Total equity</b>	<b>64,819</b>	<b>67,624</b>	<b>(2,805)</b>	<b>(4)</b>

## Movements in Assets

As of December 31, 2016, total assets decreased by €38.6 billion (or 2 %) compared to year-end 2015.

The overall decrease was primarily driven by a €30.4 billion reduction in positive market values from derivative financial instruments, mainly attributable to interest rate movements as changes in interest rate curves were inversely correlated to changes in the mark-to-market values of our interest rate derivative products.

Trading assets decreased by €25.0 billion, primarily driven by debt securities due to reduced client appetite and falling markets, as well as a result of de-risking of the trading portfolio in our Non-Core Operations Unit.

Central bank funds sold, securities purchased under resale agreements and securities borrowed, under both accrual and fair value accounting, decreased by €23.7 billion, mainly driven by reductions in both client balance sheet and firm financing needs as well as from reduced short coverage requirements.

Loans decreased by €18.8 billion mainly driven by managed reductions in Corporate & Investment Banking, primarily in Trade Finance/Cash Management, and our Non-Core Operations Unit, also with the aim to reduce risk weighted assets.

Financial assets designated at fair value through profit or loss, excluding securities purchased under resale agreements and securities borrowed which were already discussed above, decreased by €17.6 billion mainly driven by the sale of Abbey Life in the fourth quarter.

Financial assets available for sale (reported as part of remaining assets) decreased by €17.4 billion, mainly driven by sale activity in Strategic Liquidity Reserve bond positions with the intention of reducing risk weighted assets and the sale of Abbey Life.

These decreases were partly offset by increase in cash and central bank balances together with interbank balances by €83.2 billion, primarily driven by increased repo activity in our Strategic Liquidity Reserve and other cash generating activities like the managed reduction of financial assets available for sale as discussed above.

Brokerage and securities related receivables increased by €10.2 billion, mainly due to an increase in receivables from pending settlements from record low levels at year-end 2015.

Starting 2016, certain holdings in securities as part of our Strategic Liquidity Reserve are re-classified from financial assets available for sale to securities held to maturity. As of December 2016, the reported €3.2 billion in securities held to maturity correspond to a decrease in the same amount in financial assets available for sale.

The overall movement of the balance sheet included an increase of €7.2 billion due to foreign exchange rate movements mainly driven by strengthening of the U.S. dollar versus the Euro. The effects from foreign exchange rate movements are also reflected in the development of the balance sheet line items discussed in this section.

## Movements in Liabilities

As of December 31, 2016, total liabilities decreased by €35.8 billion (or 2 %) compared to year-end 2015.

The overall reduction was primarily driven by a €30.2 billion decrease in negative market values from derivative financial instruments to record low levels primarily due to the same factors as the movements in positive market values from derivative financial instruments as discussed above.

Deposits decreased by €16.8 billion during the period mainly driven by withdrawals in the third quarter influenced by the negative market perceptions concerning Deutsche Bank, partly offset by an increase in the fourth quarter due to various initiatives to acquire deposits, especially in Corporate and Investment Banking.

Brokerage and securities related payables decreased by €12.6 billion primarily due to a decrease in prime brokerage payables, partly offset by an increase in payables from pending settlements from record low levels at year-end 2015.

Other short term borrowings decreased by €10.7 billion mainly driven by reduction in commercial paper balances during the period, being replaced by other funding sources and from de-risking activities.



These decreases were partly offset by increase in central bank funds purchased, securities sold under repurchase agreements and securities loaned, under both accrual and fair value accounting, by €35.8 billion, largely due to increased repo activity in our Strategic Liquidity Reserve and higher secured funding of highly liquid inventory.

Long-term debt increased by €12.3 billion, primarily driven by funding raised via the ECB's Targeted Long Term Refinancing Operations (TLTRO).

Trading liabilities increased by €4.7 billion, mainly due to new business and hedging activity coupled with decreased netting due to reduced client positions.

Similar to total assets, foreign exchange rate movements during the period had an offsetting impact which is already embedded in the overall movements in liabilities as discussed in this section.

## Liquidity

Liquidity reserves amounted to €219 billion as of December 31, 2016 (compared to €215 billion as of December 31, 2015). We maintained a positive liquidity stress result as of December 31, 2016 (under the combined scenario).

## Equity

Total Equity as of December 31, 2016 decreased by €2.8 billion. The main factors contributing to this development were a net loss attributable to Deutsche Bank shareholders of €1.4 billion, a reduction of accumulated other comprehensive income by €854 million and re-measurement losses related to defined benefit plans of €517 million. The reduction of accumulated other comprehensive income was mostly related to the dispositions of Hua Xia and Abbey Life, while net unrealized gains from exchange rate changes (especially in the U.S dollar) were partly offsetting.

## Regulatory Capital

Our CET 1 capital according to CRR/CRD 4 as of December 31, 2016 was €47.8 billion, compared to €52.4 billion as of December 31, 2015. Risk-weighted assets according to CRR/CRD 4 decreased to €356.2 billion as of December 31, 2016, compared to €397.4 billion as of December 31, 2015. Due to this decrease in risk-weighted assets the CRR/CRD 4 CET 1 capital ratio as of December 31, 2016 increased to 13.4 % compared to 13.2 % as of December 31, 2015.

Our fully loaded CRR/CRD 4 CET 1 capital as of December 31, 2016 amounted to €42.3 billion compared to €44.1 billion as of December 31, 2015. Fully loaded CRR/CRD 4 RWA were €357.5 billion resulting in a fully loaded CRR/CRD 4 CET 1 capital ratio of 11.8 %, with corresponding amounts of €396.7 billion and 11.1 % in 2015. For details of the development please refer to "Management Report: Risk and Capital Performance: Capital and Leverage Ratio".

## Amendments to IAS 39 and IFRS 7, "Reclassification of Financial Assets"

As of December 31, 2016 and December 31, 2015 the carrying value of reclassified assets was €619 million and €4.4 billion, respectively, compared with a fair value of €519 million and €4.3 billion as of December 31, 2016 and December 31, 2015, respectively. These assets were held in the NCOU.

Please refer to Note 13 "Amendments to IAS 39 and IFRS 7, 'Reclassification of Financial Assets'" for additional information on these assets and on the impact of their reclassification.

[Page intentionally left blank for SEC filing purposes]

[Portion of page intentionally left blank for SEC filing purposes]

## Tabular Disclosure of Contractual Obligations

Cash payment requirements outstanding as of December 31, 2016.

Contractual obligations in € m.	Payment due by period				
	Total	Less than 1 year	1–3 years	3–5 years	More than 5 years
Long-term debt obligations <sup>1</sup>	189,950	32,089	67,429	40,354	50,078
Trust preferred securities <sup>1</sup>	6,978	2,617	4,268	93	0
Long-term financial liabilities designated at fair value through profit or loss <sup>2</sup>	6,923	2,486	824	643	2,969
Finance lease obligations	91	6	11	8	67
Operating lease obligations	3,893	707	1,216	877	1,093
Purchase obligations	2,521	641	769	266	845
Long-term deposits <sup>1</sup>	28,255	0	12,508	4,513	11,234
Other long-term liabilities	4,593	1,310	1,925	502	856
<b>Total</b>	<b>243,203</b>	<b>39,856</b>	<b>88,949</b>	<b>47,255</b>	<b>67,142</b>

<sup>1</sup> Includes interest payments.

<sup>2</sup> Long-term debt and long-term deposits designated at fair value through profit or loss.

Figures above do not include the revenues of non-cancellable sublease rentals of €89 million on operating leases. Purchase obligations for goods and services include future payments for, among other things, information technology services and facility management. Some figures above for purchase obligations represent minimum contractual payments and actual future payments may be higher. Long-term deposits exclude contracts with a remaining maturity of less than one year. Under certain conditions future payments for some long-term financial liabilities designated at fair value through profit or loss may occur earlier. See the following notes to the consolidated financial statements for further information: Note 5 “Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss”, Note 25 “Leases”, Note 29 “Deposits” and Note 33 “Long-Term Debt and Trust Preferred Securities”.

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
**Risk and Opportunities – 86**  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

# Risk Report

	Introduction – 89
90	Risk and Capital Overview
	Key Risk Metrics – 90
	Overall Risk Assessment – 91
	Risk Profile – 92
94	Risk and Capital Framework
	Risk Management Principles and Governance – 94
	Risk Governance – 95
	Risk Culture – 96
	Risk Appetite and Capacity – 99
	Risk and Capital Plan – 100
	Stress testing – 102
	Recovery and Resolution Planning – 104
106	Risk and Capital Management
	Capital Management – 106
	Resource Limit Setting – 106
	Risk Identification and Assessment – 107
	Credit Risk Management – 107
	Market Risk Management – 115
	Operational Risk – 123
	Liquidity Risk Management – 128
	Business (Strategic) Risk Management – 133
	Reputational Risk Management – 133
	Insurance Specific Risk Management – 135
	Risk Concentration and Risk Diversification – 135
136	Risk and Capital Performance
	Capital and Leverage Ratio – 136
	Credit Risk Exposure – 153
	Asset Quality – 171
	Trading Market Risk Exposures – 180
	Nontrading Market Risk Exposures – 185
	Operational Risk Exposure – 186
	Liquidity Risk Exposure – 187



# Introduction

## Disclosures in line with IFRS 7 and IAS 1 as well as IFRS 4

The following Risk Report provides qualitative and quantitative disclosures about credit, market and other risks in line with the requirements of International Financial Reporting Standard 7 (IFRS 7) Financial Instruments: Disclosures, and capital disclosures required by International Accounting Standard 1 (IAS 1) Presentation of Financial Statements, as well as qualitative and quantitative disclosures about insurance risks in line with the requirements of International Financial Reporting Standard 4 (IFRS 4) Insurance contracts. Information which forms part of and is incorporated by reference into the financial statements of this report is marked by a bracket in the margins throughout this Risk Report.

## Disclosures according to Pillar 3 of the Basel 3 Capital Framework

Most disclosures according to Pillar 3 of the Basel 3 Capital Framework, which are implemented in the European Union by the CRR and supported by EBA Implementing Technical Standards, are published in our additional Pillar 3 report, which can be found on our webpage. In cases where disclosures in this Risk Report also support Pillar 3 disclosure requirements these are highlighted by references from the Pillar 3 Report into the Risk Report.

## Disclosures according to principles and recommendations of the Enhanced Disclosure Task Force (EDTF)

In 2012 the Enhanced Disclosure Task Force (“EDTF”) was established as a private sector initiative under the auspice of the Financial Stability Board, with the primary objective to develop fundamental principles for enhanced risk disclosures and to recommend improvements to existing risk disclosures. As a member of the EDTF we adhered to the disclosure recommendations in this Risk Report and also partly in our additional Pillar 3 Report.

# Risk and Capital Overview

## Key Risk Metrics

The following selected key risk ratios and corresponding metrics form part of our holistic risk management across individual risk types. The Common Equity Tier 1 Ratio (CET 1), Internal Capital Adequacy Ratio (ICA), Leverage Ratio (LR), Liquidity Coverage Ratio (LCR), and Stressed Net Liquidity Position (SNLP) serve as high level metrics and are fully integrated across strategic planning, risk appetite framework, stress testing (except LCR), and recovery and resolution planning practices, which are reviewed and approved by our Management Board at least annually. The CET 1, LR, Leverage Exposure, LCR and Risk Weighted Assets ratios and metrics, which are regulatory defined, are based on the fully loaded rules under the Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation or “CRR”) and the Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (Capital Requirements Directive 4 or “CRD 4”). ICA, Economic Capital and SNLP are Deutsche Bank specific internal risk metrics in addition to the above described regulatory metrics.

<b>Common Equity Tier 1 Ratio</b>		<b>Total Risk-Weighted Assets</b>	
31.12.2016	11.8 %	31.12.2016	€ 357.5 bn
31.12.2015	11.1 %	31.12.2015	€ 396.7 bn
<b>Internal Capital Adequacy Ratio<sup>1</sup></b>		<b>Total Economic Capital</b>	
31.12.2016	162 %	31.12.2016	€ 35.4 bn
31.12.2015	158 %	31.12.2015	€ 38.4 bn
<b>Leverage Ratio</b>		<b>Leverage Exposure</b>	
31.12.2016	3.5 %	31.12.2016	€ 1,348 bn
31.12.2015	3.5 %	31.12.2015	€ 1,395 bn
<b>Liquidity Coverage Ratio</b>		<b>Stressed Net Liquidity Position (sNLP)</b>	
31.12.2016	128 %	31.12.2016	€ 36.1 bn
31.12.2015	119 %	31.12.2015	€ 45.5 bn

<sup>1</sup> The definition of Capital Supply for the purpose of calculating the Internal Capital Adequacy ratio has been further aligned to CRR/CRD 4 rules in that, goodwill and other intangible assets are now deducted from Capital Supply instead of being added to economic capital demand. More information is provided in section “Internal Capital Adequacy”.

For further details please refer to sections “Risk Appetite and Capacity”, “Recovery and Resolution Planning”, “Stress Testing”, “Risk Profile”, “Internal Capital Adequacy Assessment Process”, “Capital Instruments”, “Development of Regulatory Capital” (for phase-in and fully loaded CET1 and Risk Weighted Assets figures), “Development of Risk Weighted Assets”, “Leverage Ratio” (for phase-in and fully loaded Leverage Ratio), “Liquidity Coverage Ratio”, and “Stress Testing and Scenario Analysis”.

## Overall Risk Assessment

Key risk categories include 1) financial risks such as credit risk (including settlement and transfer risk), market risk (trading, non-trading and traded default risk), liquidity risk, business risk (including tax and strategic risk), and 2) non-financial risks (NFRs) including reputational risk and operational risk (with important sub-categories compliance risk, legal risk, model risk, information security risks, fraud risks, and money laundering risks). We manage the identification, assessment and mitigation of top and emerging risks through an internal governance process and the use of risk management tools and processes. Our approach to identification and impact assessment aims to ensure that we mitigate the impact of these risks on our financial results, long-term strategic goals and reputation. Please refer to section "Risk and Capital Management" for detailed information on the management of our material risks.

As part of our regular risk and cross-risk analysis, sensitivities of the key portfolio risks are reviewed using a bottom-up risk assessment and through a top-down macro-economic and political scenario analysis. This two-pronged approach allows us to capture not only risk drivers that have an impact across our risk inventories and business divisions but also those that are relevant only to specific portfolios.

Political risks remained at a heightened level during the fourth quarter of 2016. Markets generally reacted positively following the November 2016 US presidential election, as the USD appreciated and bond yields increased in anticipation of potential fiscal stimulus and higher economic growth, although emerging markets underperformed amid capital outflows. In Italy, the 'No' vote in December on the constitutional reform referendum was widely expected by markets, with near-term risks centered on the fragile banking system. Oil prices rebounded as OPEC agreed to implement production cuts. We expect that political uncertainty will continue to dominate risks in the euro area in 2017, with elections in several key European economies to occur against a backdrop of potentially tense Brexit negotiations following the triggering of Article 50 of the Treaty on the European Union by the UK, which is expected to occur by end-March 2017. A potential shift towards a more protectionist policy stance in the U.S. would put pressure on its key trading partners including China and Mexico. Selected Emerging Markets face elevated political and security risks.

The assessment of the potential impacts of these risks is integrated into our group-wide stress tests which assess our ability to absorb these events should they occur. The results of these tests showed that the currently available capital and liquidity reserves, in combination with available mitigation measures, would allow us to absorb the impact of these risks if they were to materialize in line with the tests' parameters. Information about risk and capital positions for our portfolios can be found in the "Risk and Capital Performance" section.

Consistent with prior years, 2016 continued to demonstrate the trend of increasing global regulation of the financial services industry, which we view as likely to persist through the coming years. We are focused on identifying potential political and regulatory changes and assessing the possible impact on our business model and processes.

The overall focus of Risk and Capital Management throughout 2016 was on maintaining our risk profile in line with our risk strategy, increasing our capital base and supporting our strategic management initiatives with a focus on balance sheet optimization. This approach is reflected across the different risk metrics summarized below.

## Risk Profile

The table below shows our overall risk position as measured by the economic capital usage calculated for credit, market, operational and business risk for the dates specified. To determine our overall (economic capital) risk position, we generally consider diversification benefits across risk types.

### Overall risk position as measured by economic capital usage by risk type

in € m. (unless stated otherwise)	Dec 31, 2016	Dec 31, 2015	2016 increase (decrease) from 2015	
			in € m.	in %
Credit risk	13,105	13,685	(580)	(4)
Market risk	14,593	17,436	(2,843)	(16)
Trading market risk	4,229	4,557	(328)	(7)
Nontrading market risk	10,364	12,878	(2,514)	(20)
Operational risk	10,488	10,243	245	2
Business risk	5,098	5,931	(833)	(14)
Diversification benefit <sup>1</sup>	(7,846)	(8,852)	1,006	(11)
<b>Total economic capital usage</b>	<b>35,438</b>	<b>38,442</b>	<b>(3,004)</b>	<b>(8)</b>

<sup>1</sup> Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).

As of December 31, 2016, our economic capital usage amounted to €35.4 billion, which was €3.0 billion or 8 %, below the €38.4 billion economic capital usage as of December 31, 2015. The decrease was mainly driven by the sale of our participation in Hua Xia Bank.

The economic capital usage for credit risk was €580 million or 4 % lower as of December 31, 2016 compared to year-end 2015 mainly due to a lower settlement risk component.

The economic capital usage for trading market risk decreased to €4.2 billion as of December 31, 2016, compared to €4.6 billion at year-end 2015. The decrease was primarily driven by reductions in exposures in the Non-Core Operations Unit, the sale of Abbey Life and lower levels of inventory in the securitization and corporate real estate business areas. The nontrading market risk economic capital usage decreased by €2.5 billion or 20 % compared to December 31, 2015, mainly driven by a considerable decrease in the investment risk from the sale of our participation in Hua Xia Bank and due to lower structural foreign exchange risk exposure resulting from a reduced shareholders equity position in foreign currency.

The operational risk economic capital usage totaled €10.5 billion as of December 31, 2016, which is €245 million or 2 % higher than the €10.2 billion economic capital usage as of December 31, 2015. The increase was mainly driven by legal operational risk losses including legal provisions and an increased operational risk loss profile of the industry as a whole. This is reflected in the operational risk loss data that has given rise to the increased economic capital usage and which is largely due to the outflows related to litigation, investigations and regulatory enforcement actions.

Our business risk economic capital methodology captures strategic risk, which also implicitly includes elements of non-standard risks including refinancing and reputational risk, and a tax risk component. The business risk decreased by €833 million compared to December 31, 2015, to €5.1 billion as of December 31, 2016. This decrease reflected a lower economic capital usage for the strategic risk component driven by an updated earnings outlook.

The inter-risk diversification effect of the economic capital usage across credit, market, operational and strategic risk decreased by €1.0 billion mainly due to overall lower economic capital usage.

Our mix of various business activities results in diverse risk taking by our business divisions. We also measure the key risks inherent in their respective business models through the undiversified Total Economic Capital (EC) metric, which mirrors each business division's risk profile before taking into account cross-risk effects at the Group level.

## Risk profile of our business divisions as measured by economic capital

Dec 31, 2016

in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total	Total (in %)
Credit Risk	4,984	3,202	1,726	62	2,582	108	442	13,106	37
Market Risk	4,444	897	360	2,197	1,352	332	5,010	14,592	41
Operational Risk	6,567	1,763	833	561	604	160	0	10,488	30
Business Risk	4,582	171	32	100	0	245	(32)	5,098	14
Diversification Benefit <sup>1</sup>	(4,990)	(1,018)	(477)	(441)	(562)	(110)	(248)	(7,846)	(22)
<b>Total EC</b>	<b>15,587</b>	<b>5,015</b>	<b>2,473</b>	<b>2,480</b>	<b>3,976</b>	<b>735</b>	<b>5,172</b>	<b>35,438</b>	<b>100</b>
Total EC in %	44	14	7	7	11	2	15	100	N/M

N/M – Not meaningful

<sup>1</sup> Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).Dec 31, 2015<sup>1</sup>

in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total	Total (in %)
Credit Risk	4,838	3,899	1,678	90	2,601	537	42	13,685	36
Market Risk	4,971	819	2,564	2,095	1,611	899	4,478	17,437	45
Operational Risk	6,274	1,613	958	282	600	452	64	10,243	27
Business Risk	5,154	405	1	0	0	261	110	5,931	15
Diversification Benefit <sup>2</sup>	(5,123)	(1,172)	(964)	(373)	(647)	(369)	(204)	(8,852)	(23)
<b>Total EC</b>	<b>16,113</b>	<b>5,564</b>	<b>4,237</b>	<b>2,094</b>	<b>4,165</b>	<b>1,780</b>	<b>4,490</b>	<b>38,442</b>	<b>100</b>
Total EC in %	42	14	11	5	11	5	12	100	N/M

N/M – Not meaningful

<sup>1</sup> Amounts allocated to the business segments have been restated to reflect comparatives according to the structure as of December 31, 2016.<sup>2</sup> Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).

Global Markets (GM) risk profile is dominated by its trading in support of origination, structuring and market making activities, which gives rise to market risk and credit risk. The share of the operational risk in GM's risk profile reflects the high loss profile in the industry and internal losses. The remainder of GM's risk profile is derived from business risk reflecting earnings volatility risk. The economic capital usage for market and business risk decreased in 2016 partly offset by increased usage for operational risk. The decrease in economic capital usage for market risk is driven by lower exposure to the traded default risk component and the sale of Abbey Life.

Corporate & Investment Banking's (CIB) revenues are generated from various products with different risk profiles. The vast majority of its risk relates to credit risk in the Trade Finance and Corporate Finance businesses, while other businesses attract low to no credit risk. The economic capital usage for credit risk decreased in 2016 mainly due to a lower counterparty risk component. Market risk mainly results from modeling of client deposits and trading.

Private, Wealth & Commercial Clients' (PW&CC) risk profile comprises credit risk from retail, small and medium-sized enterprises (SMEs) lending and wealth management (WM) activities as well as nontrading market risk from investment risk, modeling of client deposits and credit spread risk. The divestment of Hua Xia Bank resulted in a significant decrease in economic capital usage for nontrading market compared to the year-end 2015.

The main risk driver of Deutsche Asset Management's (Deutsche AM) business are guarantees on investment funds, which we report as nontrading market risk. Otherwise Deutsche AM's advisory and commission focused business attracts primarily operational risk. The economic capital usage for operational risk and business risk increased compared to the year-end 2015.

Postbank's risk profile is mainly driven by lending and deposit business with retail and corporate customers attracting credit risk, credit spread risks in the banking book covered under market risk and some operational risk.

The Non-Core Operations Unit (NCOU) portfolio included activities that were non-core to the Bank's future strategy; assets earmarked for de-risking; assets suitable for separation; assets with significant capital absorption but low returns; and assets exposed to legal risks. NCOU's risk profile covered risks across the entire range of our operations which primarily comprised credit and market risks targeted where possible for accelerated de-risking. The economic capital usage for market risk was lower compared to year-end 2015 mainly due to general wind-down of non-strategic assets.

Consolidation & Adjustments mainly comprises nontrading market risk for structural foreign exchange risk, pension risk and equity compensation risk. The increase of economic capital usage for credit risk in 2016 was mainly due to changes in business structure of the Bank.

## Risk and Capital Framework

### Risk Management Principles and Governance

The diversity of our business model requires us to identify, assess, measure, aggregate and manage our risks, and to allocate our capital among our businesses. Risk and capital are managed via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the activities of the divisions and business units:

- Core risk management responsibilities are embedded in the Management Board and delegated to senior risk managers and senior risk management committees responsible for execution and oversight.
- We operate a Three Lines of Defense ("3LoD") risk management model. The 1st Line of Defense ("1st LoD") are all the business divisions and service providing infrastructure areas (Group Technology Operations and Corporate Services) who are the "owners" of the risks. The 2nd Line of Defense ("2nd LoD") are all the independent risk and control infrastructure functions. The 3rd Line of Defense ("3rd LoD") is Group Audit, which assures the effectiveness of our controls. The 3LoD model and the underlying design principles apply to all levels of the organization i.e. group-level, regions, countries, branches and legal entities. All 3LoD are independent of one another and accountable for maintaining structures that ensure adherence to the design principles at all levels.
- The risk strategy is approved by the Management Board on an annual basis and is defined based on the Group Risk Appetite and the Strategic and Capital Plan in order to align risk, capital and performance targets.
- Cross-risk analysis reviews are conducted across the Group to validate that sound risk management practices and a holistic awareness of risk exist.
- All material risk types, including credit risk, market risk, operational risk, liquidity risk, business risk and reputational risk, are managed via risk management processes. Modeling and measurement approaches for quantifying risk and capital demand are implemented across the material risk types. Reputational risk is implicitly covered in our economic capital framework, primarily within operational and strategic risk. For more details, refer to section "Risk and Capital Management" for the management process of our material risks.
- Monitoring, stress testing tools and escalation processes are in place for key capital and liquidity thresholds and metrics.
- Systems, processes and policies are critical components of our risk management capability.
- Recovery planning provides the escalation path for crisis management governance and supplies senior management with a set of actions designed to improve the capital and liquidity positions in a stress event.
- Resolution planning is the responsibility of our resolution authority, the Single Resolution Board. It provides a strategy to manage Deutsche Bank in case of default. It is designed to prevent major disruptions to the financial system or the wider economy through maintaining critical services.

## Risk Governance

Our operations throughout the world are regulated and supervised by relevant authorities in each of the jurisdictions in which we conduct business. Such regulation focuses on licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. The European Central Bank (the “ECB”) in connection with the competent authorities of EU countries which joined the Single Supervisory Mechanism via the Joint Supervisory Team act in cooperation as our primary supervisors to monitor our compliance with the German Banking Act and other applicable laws and regulations as well as the CRR/CRD 4 framework and respective implementations into German law.

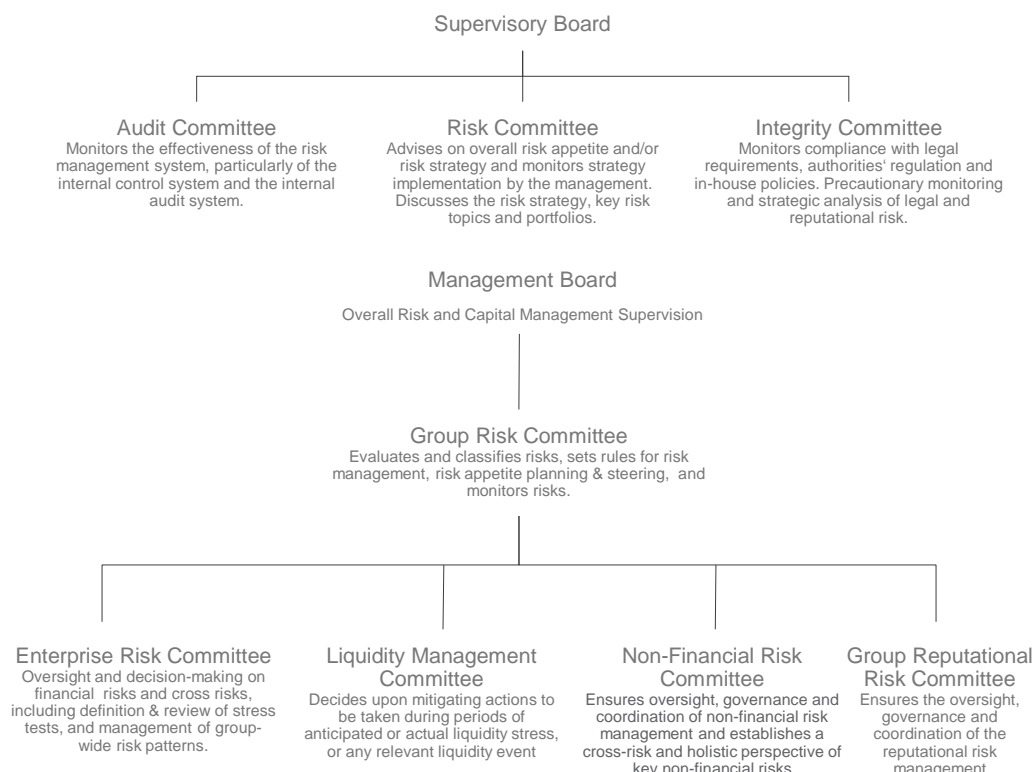
European banking regulators assess our capacity to assume risk in several ways, which are described in more detail in the section “Regulatory Capital” of this report.

Several layers of management provide cohesive risk governance:

- The Supervisory Board is informed regularly on our risk situation, risk management and risk controlling, as well as on our reputation and material litigation cases. It has formed various committees to handle specific tasks.
  - At the meetings of the Risk Committee, the Management Board reports on key risk portfolios, on risk strategy and on matters of special importance due to the risks they entail. It also reports on loans requiring a Supervisory Board resolution pursuant to law or the Articles of Association. The Risk Committee deliberates with the Management Board on issues of the aggregate risk position and the risk strategy and supports the Supervisory Board in monitoring the implementation of this strategy.
  - The Integrity Committee, among other matters, monitors the Management Board’s measures that promote the company’s compliance with legal requirements, authorities’ regulations and the company’s own in-house policies. It also reviews the Bank’s Code of Business Conduct and Ethics, and, upon request, supports the Risk Committee in monitoring and analyzing the Bank’s legal and reputational risks.
  - The Audit Committee, among other matters, monitors the effectiveness of the risk management system, particularly the internal control system and the internal audit system.
- The Management Board is responsible for managing Deutsche Bank Group in accordance with the law, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the company, thus taking into consideration the interests of the shareholders, employees and other stakeholders. The Management Board is responsible for establishing a proper business organization, encompassing appropriate and effective risk management. The Management Board established the Group Risk Committee (“GRC”) in April, 2016 as the central forum for review and decision on material risk topics, by merging the Capital and Risk Committee (“CaR”) and the Risk Executive Committee (“Risk ExCo”). The GRC is supported by four sub-committees: the Group Reputational Risk Committee (“GRRC”), the Non-Financial Risk Committee (“NFRC”), the Enterprise Risk Committee (“ERC”), and the Liquidity Management Committee (“LMC”), the roles of which are described in more detail below.



## Risk Management Governance Structure of the Deutsche Bank Group



The following functional committees are central to the management of risk at Deutsche Bank:

- The GRC has various duties and dedicated authority, including approval of key risk management principles or recommendation thereof to the Management Board for approval, recommendation of the Group Recovery Plan and the Contingency Funding Plan to the Management Board for approval, recommendation of overarching risk appetite parameters and recovery triggers to the Management Board for approval, setting of risk limits for risk resources available to the Business Divisions, and supporting the Management Board during group-wide Risk and Capital planning processes. Further duties include review of high-level risk portfolios and risk exposure developments, review of internal and regulatory group-wide stress testing results and making recommendations of required actions and monitoring of the development of risk culture across the Group.
- The NFRC oversees, governs and coordinates the management of non-financial risks in Deutsche Bank Group and establishes a cross-risk and holistic perspective of the key non-financial risks of the Group. It is tasked to define the non-financial risk appetite framework, to monitor and control the non-financial risk operating model, including the 3LoD principles and interdependencies between business divisions and control functions and within control functions.
- The GRRC is responsible for the oversight, governance and coordination of reputational risk management and provides for an appropriate look-back and a lessons learnt process. It reviews and decides all reputational risk issues escalated by the Regional Reputational Risk Committees ("RRRCs") and RRRC decisions which have been appealed by the Business Units. It provides guidance on Group-wide reputational risk matters, including communication of sensitive topics, to the appropriate levels of Deutsche Bank Group. The RRRCs which are sub-committees of the GRRC, are responsible for the oversight, governance and coordination of the management of reputational risk in the respective regions on behalf of the Management Board.

- The ERC has been established as a successor of the Portfolio Risk Committee (“PRC”) with a mandate to focus on enterprise-wide risk trends, events and cross-risk portfolios, bringing together risk experts from various risk disciplines. The ERC approves the annual country risk portfolio overviews, establishes product limits, reviews risk portfolio concentrations across the Group, monitors group-wide stress tests used for managing the Group's risk appetite, and reviews topics with enterprise-wide risk implications like risk culture.
- The LMC decides upon mitigation actions to be taken during periods of anticipated or actual liquidity stress or any relevant event. In that capacity, the committee is responsible for making a detailed assessment of the liquidity position of the Bank, including the ability to fulfill all payment obligations under market related stress, idiosyncratic stress, or a combination of both. The LMC is also responsible for overseeing the execution of liquidity countermeasures in a timely manner and monitoring the liquidity position of the Bank on an ongoing basis, during the stress period.

Our Chief Risk Officer (“CRO”), who is a member of the Management Board, has Group-wide, supra-divisional responsibility for the management of all credit, market and operational risks as well as for the comprehensive control of risk, including liquidity risk, and continuing development of methods for risk measurement. In addition, the CRO is responsible for monitoring, analyzing and reporting risk on a comprehensive basis.

The CRO has direct management responsibility for various risk management functions which are established with the mandate to:

- Foster consistency with the risk appetite set by the GRC within a framework established by the Management Board and applied to Business Divisions;
- Determine and implement risk and capital management policies, procedures and methodologies that are appropriate to the businesses within each division;
- Establish and approve risk limits;
- Conduct periodic portfolio reviews to keep the portfolio of risks within acceptable parameters; and
- Develop and implement risk and capital management infrastructures and systems that are appropriate for each division.

In addition to the specialized risk management functions, our Enterprise Risk Management (ERM) function covers overarching aspects of risk management. Its mandate is to provide an increased focus on holistic risk management and cross-risk oversight to further enhance our risk portfolio steering. Key objectives are to:

- Drive key strategic cross-risk initiatives and establish greater cohesion between defining portfolio strategy and governing execution;
- Provide a strategic and forward-looking perspective on the key risk issues for discussion at senior levels within the Bank (risk appetite, stress testing framework);
- Strengthen risk culture in the bank; and
- Foster the implementation of consistent risk management standards.

ERM also develops the Bank-wide risk management framework aimed at identifying and controlling risks across the institution within the agreed risk appetite.

The specialized risk management functions and ERM have a reporting line to the CRO.

Our Finance, Risk and Group Audit functions operate independently of our Business Divisions. It is the responsibility of the Finance and Risk departments to quantify and verify the risk that we assume. Group Audit as our 3rd Line of Defense, independently examines, evaluates and reports on the adequacy of both the design and effectiveness of the systems of internal control including the risk management systems.

The integration of the risk management of our subsidiary Deutsche Postbank AG is promoted through harmonized processes for identifying, assessing, managing, monitoring, and communicating risk, the strategies and procedures for determining and safe guarding risk-bearing capacity, and corresponding internal control procedures. Key features of the joint governance are:

- Functional reporting lines from the Postbank Risk Management to Deutsche Bank Risk;
- Participation of voting members from Deutsche Bank from the respective risk functions in Postbank's key risk committees and vice versa for selected key committees; and
- Alignment to key Group risk policies.

The key risk management committees of Postbank are:

- The Bank Risk Committee, which advises Postbank's Management Board with respect to the determination of overall risk appetite and risk and capital allocation;
- The Credit Risk Committee, which is responsible for limit allocation and the definition of an appropriate limit framework;
- The Market Risk Committee, which decides on limit allocations as well as strategic positioning of Postbank's banking and trading book and the management of liquidity risk;
- The Operational Risk Management Committee, which defines the appropriate risk framework as well as the limit allocation for the individual business areas; and
- The Model and Validation Risk Committee, which monitors validation of all rating systems and risk management models.

The Chief Risk Officer of Postbank or senior risk managers of Deutsche Bank are voting members of the committees listed above.

## Risk Culture

We seek to promote a strong risk culture throughout our organization. Our aim is to help reinforce our resilience by encouraging a holistic approach to the management of risk and return throughout our organization as well as the effective management of our risk, capital and reputational profile. We actively take risks in connection with our business and as such the following principles underpin risk culture within our group:

- Risk is taken within a defined risk appetite;
- Every risk taken needs to be approved within the risk management framework;
- Risk taken needs to be adequately compensated; and
- Risk should be continuously monitored and managed.

Employees at all levels are responsible for the management and escalation of risks. We expect employees to exhibit behaviors that support a strong risk culture. To promote this our policies require that behavior assessment is incorporated into our performance assessment and compensation processes. We have communicated the following risk culture behaviors through various communication vehicles:

- Being fully responsible for our risks;
- Being rigorous, forward looking and comprehensive in the assessment of risk;
- Inviting, providing and respecting challenges;
- Trouble shooting collectively; and
- Placing Deutsche Bank and its reputation at the heart of all decisions.

To reinforce these expected behaviors and strengthen our risk culture, we conduct a number of group-wide activities. Our Board members and senior management frequently communicate the importance of a strong risk culture to support a consistent tone from the top. To support these behaviors, in 2016, we ran an internal educational campaign entitled “We’re all risk managers”, which included a video and intranet messages from Board members and other senior leaders.

The Red Flags process continues to provide a link between risk-related conduct and performance management. It allows us to monitor adherence to certain risk-related policies and processes, whereby a breach leads to an appropriately risk-weighted Red Flag. In 2016, the process was enhanced through the introduction of IT-enabled reporting. Individual Red Flag results are considered in promotion, compensation and performance management decisions.

We have continued to develop our training curriculum to raise risk awareness. In 2016, we launched a revised Risk Awareness course for all employees, which included new sections on reputational risk and risk appetite.

## Risk Appetite and Capacity

Risk appetite expresses the aggregate level of risk that we are willing to assume within our risk capacity in order to achieve our business objectives, as defined by a set of minimum quantitative metrics and qualitative statements. Risk capacity is defined as the maximum level of risk we can assume before breaching regulatory constraints and our obligations to stakeholders.

Risk appetite is an integral element in our business planning processes via our Risk Plan and Strategy, to promote the appropriate alignment of risk, capital and performance targets, while at the same time considering risk capacity and appetite constraints from both financial and non-financial risks. Compliance of the plan with our risk appetite and capacity is also tested under stressed market conditions. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions.

The Management Board reviews and approves our risk appetite and capacity on an annual basis, or more frequently in the event of unexpected changes to the risk environment, with the aim of ensuring that they are consistent with our Group's strategy, business and regulatory environment and stakeholders' requirements.

In order to determine our risk appetite and capacity, we set different group level triggers and thresholds on a forward looking basis and define the escalation requirements for further action. We assign risk metrics that are sensitive to the material risks to which we are exposed and which are able to function as key indicators of financial health. In addition to that, we link our risk and recovery management governance framework with the risk appetite framework. In detail, we assess a suite of metrics under stress (CRR/CRD 4 phase-in and fully loaded Common Equity Tier 1 (“CET 1”) ratio and Leverage Ratio (“LR”), Internal Capital Adequacy (“ICA”) ratio, and Stressed Net Liquidity Position (“SNLP”)) within the regularly performed benchmark and more severe group-wide stress tests.

Reports relating to our risk profile as compared to our risk appetite and strategy and our monitoring thereof are presented regularly up to the Management Board. In the event that our desired risk appetite is breached under either normal or stressed scenarios, a predefined escalation governance matrix is applied so these breaches are highlighted to the respective committees. Amendments to the risk appetite and capacity must be approved by the Group Risk Committee or the full Management Board, depending on their significance.

## Risk and Capital Plan

### Strategic and Capital Plan

We conduct annually an integrated strategic planning process which lays out the development of our future strategic direction as a group and for our business areas/units. The strategic plan aims to create a holistic perspective on capital, funding and risk under risk-return considerations. This process translates our long term strategic targets into measurable short- to medium-term financial targets and enables intra-year performance monitoring and management. Thereby we aim to identify growth options by considering the risks involved and the allocation of available capital resources to drive sustainable performance. Risk-specific portfolio strategies complement this framework and allow for an in-depth implementation of the risk strategy on portfolio level, addressing risk specifics including risk concentrations.

The strategic planning process consists of two phases: a top-down target setting and a bottom-up substantiation.

In a first phase – the top down target setting – our key targets for profit and loss (including revenues and costs), capital supply, capital demand as well as leverage, funding and liquidity are discussed for the group and the key business areas. In this process, the targets for the next five years are based on our global macro-economic outlook and the expected regulatory framework. Subsequently, the targets are approved by the Management Board.

In a second phase, the top-down objectives are substantiated bottom-up by detailed business unit plans, which for the first year consist of a month by month operative plan; year two is planned per quarter and years three to five are annual plans. The proposed bottom-up plans are reviewed and challenged by Finance and Risk and are discussed individually with the business heads. Thereby, the specifics of the business are considered and concrete targets decided in line with our strategic direction. The bottom-up plans include targets for key legal entities to review local risk and capitalization levels. Stress tests complement the strategic plan to also consider stressed market conditions.

The resulting Strategic and Capital Plan is presented to the Management Board for discussion and approval. The final plan is presented to the Supervisory Board.

The Strategic and Capital Plan is designed to support our vision of being a leading client-centric global universal bank and aims to ensure:

- Balanced risk adjusted performance across business areas and units;
- High risk management standards with focus on risk concentrations;
- Compliance with regulatory requirements;
- Strong capital and liquidity position; and
- Stable funding and liquidity strategy allowing for business planning within the liquidity risk appetite and regulatory requirements.

The Strategic and Capital Planning process allows us to:

- Set earnings and key risk and capital adequacy targets considering the bank's strategic focus and business plans;
- Assess our risk-bearing capacity with regard to internal and external requirements (i.e., economic capital and regulatory capital); and
- Apply an appropriate stress test to assess the impact on capital demand, capital supply and liquidity.

The specific limits e.g. for regulatory capital demand, economic capital, and leverage exposures are derived from the Strategic and Capital Plan to align risk, capital and performance targets at all relevant levels of the organization.

All externally communicated financial targets are monitored on an ongoing basis in appropriate management committees. Any projected shortfall from targets is discussed together with potential mitigating strategies to ensure that we remain on track to achieve our targets. Amendments to the strategic and capital plan must be approved by the Management Board. Achieving our externally communicated solvency targets ensures that we also comply with the Group Supervisory Review and Evaluation Process ("SREP") requirements as articulated by our home supervisor. On December 8, 2016, Deutsche Bank was informed by the ECB of its decision regarding prudential minimum capital requirements for 2017, following the results of the 2016 SREP. The decision requires Deutsche Bank to maintain a phase-in CET 1 ratio of at least 9.51 % on a consolidated basis, beginning on January 1, 2017. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50 %, the Pillar 2 requirement (SREP Add-on) of 2.75 %, the phase-in capital conservation buffer of 1.25 %, the countercyclical buffer (currently 0.01 %) and the phase-in G-SII buffer following Deutsche Bank's designation as a global systemically important institution ("G-SII") of 1.00 %. The new CET 1 capital requirement of 9.51 % for 2017 is lower than the CET 1 capital requirement of 10.76 %, which was applicable to Deutsche Bank in 2016. Correspondingly, 2017 requirements for Deutsche Bank's Tier 1 capital ratio are at 11.01 % and for its total capital ratio at 13.01 %. Also following the results of the 2016 SREP, the ECB communicated to us an individual expectation to hold a further "Pillar 2" CET 1 capital add-on, commonly referred to as the "Pillar 2" guidance'. The capital add-on pursuant to the "Pillar 2" guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the "Pillar 2" guidance although it is not legally binding, and failure to meet the "Pillar 2" guidance does not automatically trigger legal action.

## Internal Capital Adequacy Assessment Process

The Internal Capital Adequacy Assessment Process ("ICAAP") requires banks to identify and assess risks, maintain sufficient capital to face these risks and apply appropriate risk-management techniques to maintain adequate capitalization on an ongoing and forward-looking basis, i.e., internal capital supply to exceed internal capital demand (figures are described in more detail in the section "Internal Capital Adequacy").

At a Group level, we comply with ICAAP as required under Pillar 2 of Basel 3 and its local implementation in Germany, the Minimum Requirements for Risk Management (MaRisk), through a Group-wide risk management and governance framework, methodologies, processes and infrastructure.

In line with MaRisk and Basel requirements, the key instruments to help us maintain our adequate capitalization on an ongoing and forward looking basis are:

- A strategic planning process which aligns risk strategy and appetite with commercial objectives;
- A continuous monitoring process against approved risk, leverage and capital targets set;
- Regular risk, leverage and capital reporting to management; and
- An economic capital and stress testing framework which also includes specific stress tests to underpin our recovery monitoring processes.

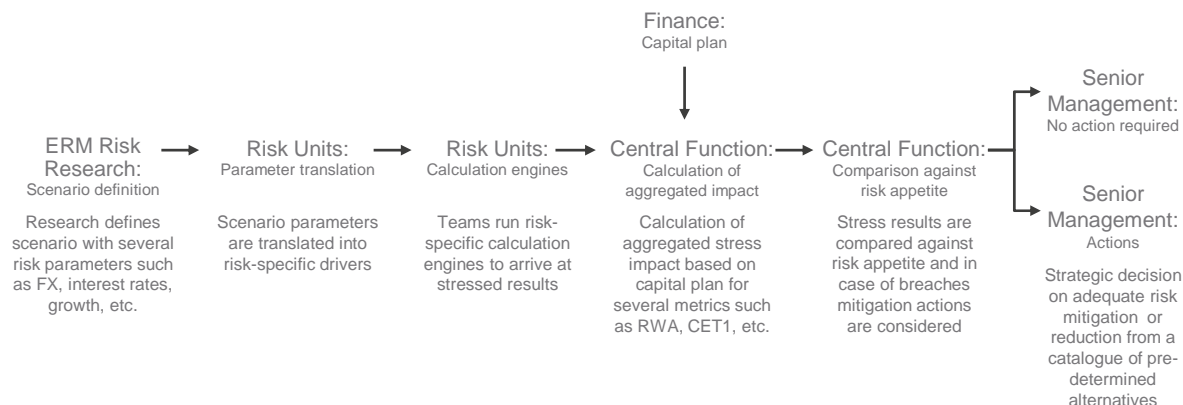
## Stress testing

We have a strong commitment to stress testing performed on a regular basis in order to assess the impact of a severe economic downturn on our risk profile and financial position. These exercises complement traditional risk measures and represent an integral part of our strategic and capital planning process. Our stress testing framework comprises regular Group-wide stress tests based on internally defined benchmark and more severe macroeconomic global downturn scenarios. We include all material risk types into our stress testing exercises. The time-horizon of internal stress tests is generally one year and can be extended to multi-year, if required by the scenario assumptions. Our methodologies undergo regular scrutiny from Deutsche Bank's internal validation team (Global Model Validation and Governance - GMVG) whether they correctly capture the impact of a given stress scenario. These analyses are complemented by portfolio- and country-specific stress tests as well as regulatory requirements, such as annual reverse stress tests and additional stress tests requested by our regulators on group or legal entity level. Examples of regulatory stress tests performed in 2016 are the EBA stress test at Group level and the CCAR stress test for the US entity. Moreover, capital plan stress testing is performed to assess the viability of our capital plan in adverse circumstances and to demonstrate a clear link between risk appetite, business strategy, capital plan and stress testing. An integrated procedure allows us to assess the impact of ad-hoc scenarios that simulate potential imminent financial or geopolitical shocks.

The initial phase of our internal stress tests consists of defining a macroeconomic downturn scenario by ERM Risk Research in cooperation with business specialists. ERM Risk Research monitors the political and economic development around the world and maintains a macro-economic heat map that identifies potentially harmful scenarios. Based on quantitative models and expert judgments, economic parameters such as foreign exchange rates, interest rates, GDP growth or unemployment rates are set accordingly to reflect the impact on our business. The scenario parameters are translated into specific risk drivers by subject matter experts in the risk units. Based on our internal models framework for stress testing, the following major metrics are calculated under stress: risk-weighted assets, impacts on profit and loss and economic capital by risk type. These results are aggregated at the Group level, and key metrics such as the SNLP, the CET 1 ratio, ICA ratio and Leverage Ratio under stress are derived. Prior to the impact assessment the scenarios are discussed and approved by the Enterprise Risk Committee (ERC) which also reviews the final stress results. After comparing these results against our defined risk appetite, the ERC also discusses specific mitigation actions to remediate the stress impact in alignment with the overall strategic and capital plan if certain limits are breached. The results also feed into the recovery planning which is crucial for the recoverability of the Bank in times of crisis. The outcome is presented to senior management up to the Management Board to raise awareness on the highest level as it provides key insights into specific business vulnerabilities and contributes to the overall risk profile assessment of the bank. The group wide stress tests performed in 2016 indicated that the bank's capitalization together with available mitigation measures allow it to reach the internally set stress exit level being well above regulatory early intervention levels. A reverse stress test is performed annually in order to challenge our business model to determine the severity of scenarios that would cause us to become unviable. Such a reverse stress test is based on a hypothetical macroeconomic scenario and idiosyncratic events and takes into account severe impacts of major risks on our results. Comparing the hypothetical scenario that would be necessary to result in our non-viability according to the reverse stress, to the current economic environment, we consider the probability of occurrence of such a hypothetical macroeconomic scenario as extremely low. Given the extremely low probability of the reverse stress test scenario, we do not believe that our business continuity is at risk.



## Stress Testing Framework of Deutsche Bank Group



## Risk Reporting and Measurement Systems

Our risk data systems support regulatory reporting and external disclosures, as well as internal management reporting for credit, market, operational (including legal risk), business, reputational, liquidity risk, model risk and compliance risk. The risk infrastructure incorporates the relevant legal entities and business divisions and provides the basis for reporting on risk positions, capital adequacy and limit utilization to the relevant functions on a regular and ad-hoc basis. Established units within Finance and Risk assume responsibility for measurement, analysis and reporting of risk while promoting sufficient quality and integrity of risk-related data. Our risk management systems are reviewed by Group Audit following a risk-based audit approach.

The main reports on risk and capital management that are used to provide the central governance bodies with information relating to Group risk profile are the following:

- Risk and Capital Profile is presented monthly to the GRC and the Management Board and is subsequently submitted to the Risk Committee of the Supervisory Board for information. It comprises an overview of the current risk, capital and liquidity status of the Group, also incorporating information on regulatory capital and internal capital adequacy.
- An overview of our capital, liquidity and funding is presented to the GRC by Group Capital Management and the Group Treasurer every month. It comprises information on key metrics including CRR/CRD 4 Common Equity Tier 1 capital and the CRR/CRD 4 leverage ratio, as well as an overview of our current funding and liquidity status, the liquidity stress test results and contingency measures.
- Results of the group-wide macroeconomic stress tests that are performed twice per quarter and/or more frequently are reported to and discussed at the ERC.

The above reports are complemented by a suite of other standard and ad-hoc management reports of Risk and Finance, which are presented to several different senior committees responsible for risk and capital management at Group level.

## Recovery and Resolution Planning

The 2007/2008 financial crisis exposed banks and the broader financial market to unprecedented pressures. These pressures led to certain banks seeking significant support from their governments and to large scale interventions by central banks. The crisis also forced many financial institutions to significantly restructure their businesses and strengthen their capital, liquidity and funding bases. This crisis revealed that many financial institutions were insufficiently prepared for a fast-evolving systemic crisis and thus were unable to act and respond in a way that would avoid potential failure and prevent material adverse impacts on the financial system and ultimately the economy and society.

In response to the crisis, a number of jurisdictions (such as the member states of the European Union, including Germany and the UK as well as the US) have enacted new regulations requiring banks or competent regulatory authorities, to develop recovery and resolution plans. The Group recovery plan ('Recovery Plan') is updated and submitted to our regulators at least annually to reflect changes in the business and the regulatory requirements.

The Recovery Plan prepares us to restore our financial strength and viability during an extreme stress situation. The Recovery Plan's more specific purpose is to outline how we can respond to a financial stress situation that would significantly impact our capital or liquidity position. Therefore it lays out a set of defined actions aimed to protect us, our customers and the markets and prevent a potentially more costly resolution event. In line with regulatory guidance, we have identified a wide range of recovery measures that will mitigate different types of stress scenarios. These scenarios originate from both idiosyncratic and market-wide events, which would lead to severe capital and liquidity impacts as well as impacts on our performance and balance sheet. The Recovery Plan, including its corresponding policy, is intended to enable us to effectively monitor, escalate, plan and execute recovery actions in the event of a crisis situation.

The Management Board determines when the Recovery Plan has to be invoked and which recovery measures are deemed appropriate.

The Recovery Plan is designed to cover multiple regulations including those applicable to us in the European Union ("EU") under the Bank Recovery and Resolution Directive ("BRRD") (as implemented in Germany) and the Single Resolution Mechanism Regulation ("SRM Regulation") as well as other key jurisdictions. Furthermore, the plan incorporates feedback from extensive discussions with our supervisory authority and the EU College of Supervisors as well as by the Crisis Management Group ("CMG") formed by key home and host authorities.

We are also working closely with our resolution authority, the Single Resolution Board, to create a Group Resolution Plan for Deutsche Bank as set out in the BRRD, the SRM and the German Recovery and Resolution Act ("Sanierungs- und Abwicklungsgesetz" or "SAG").

In addition, Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DFA") and the implementing regulations issued by the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation ("FDIC") require each bank holding company with assets of U.S.\$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the "Title I US Resolution Plan"). For foreign-based covered companies including us, the Title I US Resolution Plan only relates to subsidiaries, branches, agencies and businesses that are domiciled in or conducted in whole or in material part in the United States. In addition, Deutsche Bank Trust Company Americas ("DBTCA"), one of our insured depository institutions ("IDIs") in the United States, became subject in 2014 to the FDIC's final rule. This rule requires IDIs with total assets of U.S.\$ 50 billion or more to periodically submit a resolution plan to the FDIC (the "IDI Plan" and, together with the Title I US Resolution Plan, the "US Resolution Plan") under the Federal Deposit Insurance Act (the "IDI Rule"). In 2014, we expanded our Title I US Resolution Plan to also be responsive to the IDI Rule requirements. In accordance with regulatory requirements, Deutsche Bank filed its most recent US Resolution and IDI plans in July 2015. In June 2016, Deutsche Bank received guidance from the Federal Reserve and

the FDIC that the filing dates for our US Resolution Plan had been extended until July 2017. The core elements of our 2015 US Resolution Plan are Material Entities (“MEs”), Core Business Lines (“CBLs”), Critical Operations (“COs”) and, for purposes of the IDI Plan, Critical Services. The 2015 US Resolution Plan lays out the resolution strategy for each ME, defined as those entities significant to the activities of a CO or CBL and demonstrates how each ME, CBL and CO, as applicable, can be resolved in a rapid and orderly manner and without systemic impact on U.S. financial stability. The US Resolution Plan also discusses the strategy for continuing Critical Services in resolution. Key factors addressed in the US Resolution Plan include how to ensure:

- Continued access to services from other U.S. and non-U.S. legal entities as well as from third parties such as payment servicers, exchanges and key vendors;
- Availability of funding from both external and internal sources;
- Retention of key employees during resolution; and
- Efficient and coordinated close-out of cross-border contracts.

The 2015 US Resolution Plan was drafted in coordination with the U.S. businesses and infrastructure groups so that it accurately reflects the business, critical infrastructure and key interconnections.

## MREL and TLAC

Under the Single Resolution Mechanism (“SRM”) Regulation, the Bank Recovery and Resolution Directive (“BRRD”) and the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, “SAG”) banks in the European Union (“EU”) are required to meet at all times a robust minimum requirement for own funds and eligible liabilities (“MREL”) which is determined on a case-by-case basis by the competent resolution authority. In addition, on November 9, 2015, the Financial Stability Board (“FSB”) published a standard that will require, when implemented as law, global systemically important banks (“G-SIBs”) to meet a new firm-specific minimum requirement for total loss-absorbing capacity (“TLAC”) starting on January 1, 2019. Both the TLAC and MREL requirements are specifically designed to require banks to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers’ money.

On 23 November 2016, the European Commission (“EC”) proposed a revision of the Capital Requirement Regulation (“CRR”) to implement TLAC into EU legislation. In addition, it proposed amendments to the BRRD and the SRM Regulation. Under the Commission’s CRR revision proposal, the loss absorbency regime for EU Global Systemically Important Institutions (“G-SIIs”) would be closely aligned with the international TLAC term sheet. The instruments which qualify under TLAC are Common Equity Tier 1 instruments, Additional Tier 1 instruments, Tier 2 instruments and certain eligible unsecured liabilities. The TLAC term sheet introduces a minimum requirement of 16 percent of Risk Weighted Assets (“RWAs”) or 6 percent of leverage exposure by 1 January 2019; and 18 percent of RWAs and 6.75 percent of leverage exposure by 2022. The resolution authority would be able to request a firm-specific add-on if deemed necessary. For non-G-SIIs banks, the MREL would still be set on a case-by-case basis.

Furthermore, under the German Banking Act, as amended by the German Resolution Mechanism Act, which was published in November 2015, senior bonds will rank junior to other senior liabilities, without constituting subordinated debt, in insolvency proceedings opened on or after January 1, 2017.

# Risk and Capital Management

## Capital Management

Our Treasury function manages solvency, capital adequacy and leverage ratios at Group level and locally in each region. Treasury implements our capital strategy, which itself is developed by the Group Risk Committee and approved by the Management Board, including issuance and repurchase of shares and capital instruments, hedging of capital ratios against foreign exchange swings, limit setting for key financial resources, design of book equity allocation, and regional capital planning. We are fully committed to maintaining our sound capitalization both from an economic and regulatory perspective. We continuously monitor and adjust our overall capital demand and supply in an effort to achieve an appropriate balance of the economic and regulatory considerations at all times and from all perspectives. These perspectives include book equity based on IFRS accounting standards, regulatory and economic capital as well as specific capital requirements from rating agencies.

Treasury manages the issuance and repurchase of capital instruments, namely Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments. Treasury constantly monitors the market for liability management trades. Such trades represent a countercyclical opportunity to create Common Equity Tier 1 capital by buying back our issuances below par.

Our core currencies are Euro, US Dollar and Pound Sterling. Treasury manages the sensitivity of our capital ratios against swings in core currencies. The capital invested into our foreign subsidiaries and branches in the other non-core currencies is largely hedged against foreign exchange swings. Treasury determines which currencies are to be hedged, develops suitable hedging strategies in close cooperation with Risk Management and finally executes these hedges.

In connection with MREL and TLAC requirements, we review our issuance portfolio of senior bonds to make them eligible under bail-in rules. We intend to comply with potential requirements as they become effective.

## Resource Limit Setting

Usage of key financial resources is influenced through the following governance processes and incentives.

Target resource capacities are reviewed in our annual strategic plan in line with our CET 1 and Leverage Ratio ambitions. In a quarterly process, the Group Risk Committee approves divisional resource limits for Total Capital Demand and leverage exposure that are based on the strategic plan but adjusted for market conditions and the short-term outlook. Limits are enforced through a close monitoring process and an excess charging mechanism.

Overall regulatory capital requirements are driven by the higher of our CET 1 ratio (solvency) and leverage ratio (leverage) requirements. In terms of order for the internal capital allocation, solvency-based allocation comes first, then an incremental leverage-driven allocation, if required. The allocation methodology utilizes a two step approach: Allocation of Shareholders Equity is solvency-based first until the externally communicated target of a 12.5 % CET 1 solvency ratio is met, and then incremental leverage capital is allocated based on pro-rata leverage exposure of divisions to satisfy the externally communicated target of a 4.5 % leverage ratio, if required. The allocation thresholds are reviewed as and when externally communicated targets for the CET 1 or leverage ratio are adjusted. In our performance measurement, our methodology also applies different rates for the cost of equity for each of the business segments, reflecting in a more differentiated way the earnings volatility of the individual business models. This enables improved performance management and investment decisions.

Regional capital plans covering the capital needs of our branches and subsidiaries across the globe are prepared on an annual basis and presented to the Group Investment Committee. Most of our subsidiaries are subject to legal and regulatory capital requirements. In developing, implementing and testing our capital and liquidity, we fully take such legal and regulatory requirements into account.

Further, Treasury is represented on the Investment Committee of the largest Deutsche Bank pension fund which sets the investment guidelines. This representation is intended to ensure that pension assets are aligned with pension liabilities, thus protecting our capital base.

## Risk Identification and Assessment

We face a variety of risks as a result of our business activities; these risks include credit risk, market risk, business risk, liquidity risk, operational risk and reputational risk as described in the following sections below. Our risk identification and assessment processes utilize our Three Lines of Defense operating model with the first line identifying the key risks and the second line complementing and aggregating identified risks into our global risk type taxonomy and assessing identified risks for their materiality. Operating processes are in place across the organization to capture relevant measures and indicators. The core aim of all processes is to provide adequate transparency and understanding of existing and emerging risk issues, and to ensure a holistic cross-risk perspective. We update the risk inventory at least once a year or at other times if needed, by running a risk identification and materiality assessment process in line with MaRisk.

To align with the Three Lines of Defense taxonomy, we categorize our material risks into financial risks and non-financial risks effective January 1, 2016. Financial risks comprise credit risk (including settlement and transfer risks), market risk (including non-trading, trading and traded default risk), liquidity risk and business (strategic) risk. Non-financial risks comprise operational risks and reputational risks with compliance risk, legal risk, model risk and information security risk captured in our operational risk framework. For all material risks common risk management standards apply including having a dedicated risk management function, defining a risk type specific risk appetite and the decision on the amount of capital to be held.

Credit risk, market risk and operational risk attract regulatory capital. As part of our internal capital adequacy assessment process, we calculate the amount of economic capital for credit, market, operational and business risk to cover risks generated from our business activities taking into account diversification effects across those risk types. Furthermore, our economic capital framework embeds additional risks, e.g. reputational risk and refinancing risk, for which no dedicated economic capital models exist. We exclude liquidity risk from economic capital.

## Credit Risk Management

### Credit Risk Framework

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower, obligor or issuer (which we refer to collectively as “counterparties”) exist, including those claims that we plan to distribute. These transactions are typically part of our traditional nontrading lending activities (such as loans and contingent liabilities). Additionally, traded bonds and debt securities form part of our direct trading activity with clients (such as OTC derivatives like foreign exchange forwards and Forward Rate Agreements). Carrying values of equity investments are also disclosed in our Credit Risk section. We manage the respective positions within our market risk and credit risk frameworks.

Based on the annual risk identification and materiality assessment, Credit Risk contains four material categories, namely default risk, industry risk, country risk, and product risk.

- Default risk, the most significant element of credit risk, is the risk that counterparties fail to meet contractual obligations in relation to the claims described above;
- Industry risk is the risk of adverse developments in the operating environment for a specific industry segment leading to deterioration in the financial profile of counterparties operating in that segment and resulting in increased credit risk across this portfolio of counterparties;
- Country risk is the risk that we may experience unexpected default or settlement risk and subsequent losses, in a given country, due to a range of macro-economic or social events primarily affecting counterparties in that jurisdiction including: a material deterioration of economic conditions, political and social upheaval, nationalization and expropriation of assets, government repudiation of indebtedness, or disruptive currency depreciation or devaluation. Country risk also includes transfer risk which arises when debtors are unable to meet their obligations owing to an inability to transfer assets to non-residents due to direct sovereign intervention; and
- Product Risk captures product-specific credit risk of transactions that could arise with respect to specific borrowers or group of borrowers. It takes into account whether obligations have a similar risk characteristics and market place behaviors.

We measure, manage/mitigate and report/monitor our credit risk using the following philosophy and principles:

- Our credit risk management function is independent from our business divisions and in each of our divisions, credit decision standards, processes and principles are consistently applied.
- A key principle of credit risk management is client credit due diligence. Our client selection is achieved in collaboration with our business division counterparts who stand as a first line of defence.
- We aim to prevent undue concentration and tail-risks (large unexpected losses) by maintaining a diversified credit portfolio. Client, industry, country and product-specific concentrations are assessed and managed against our risk appetite.
- We maintain underwriting standards aiming to avoid large credit risk on a counterparty and portfolio level. In this regard we assume unsecured cash positions and actively use hedging for risk mitigation purposes. Additionally, we strive to secure our derivative portfolio through collateral agreements and may additionally hedge concentration risks to further mitigate credit risks from underlying market movements.
- Every new credit facility and every extension or material change of an existing credit facility (such as its tenor, collateral structure or major covenants) to any counterparty requires credit approval at the appropriate authority level. We assign credit approval authorities to individuals according to their qualifications, experience and training, and we review these periodically.
- We measure and consolidate all our credit exposures to each obligor across our consolidated Group on a global basis, in line with regulatory requirements.
- We manage credit exposures on the basis of the “one obligor principle”, under which all facilities to a group of borrowers which are linked to each other (i.e., by one entity holding a majority of the voting rights or capital of another) are consolidated under one group.
- We have established within Credit Risk Management – where appropriate – specialized teams for deriving internal client ratings, analyzing and approving transactions, monitoring the portfolio or covering workout clients.

## Measuring Credit Risk

Credit risk is measured by credit rating, regulatory and internal capital demand and key credit metrics mentioned below.

The credit rating is an essential part of the Bank’s underwriting and credit process and builds the basis for risk appetite determination on a counterparty and portfolio level, credit decision and transaction pricing as well the determination of credit risk regulatory capital. Each counterparty must be rated and each rating has to be reviewed at least annually. Ongoing monitoring of counterparties helps keep ratings up-to-date. There must be no credit limit without a credit rating. For each credit rating the appropriate rating approach has to be applied and the derived credit rating has to be established in the relevant systems. Different rating approaches have been established to best reflect the specific characteristics of exposure classes, including central governments and central banks, institutions, corporates and retail.



Counterparties in our non-homogenous portfolios are rated by our independent Credit Risk Management function. Country risk related ratings are provided by ERM Risk Research.

Our rating analysis is based on a combination of qualitative and quantitative factors. When rating a counterparty we apply in-house assessment methodologies, scorecards and our 21-grade rating scale for evaluating the credit-worthiness of our counterparties.

Changes to existing credit models and introduction of new models are approved by the Regulatory Credit Risk Model Committee (RCRMC) chaired by the Head of CRM, as well as by the Head of the Model Risk Function or delegate, where appropriate before the methodologies are used for credit decisions and capital calculation for the first time or before they are significantly changed. Proposals with high impact are recommended for approval to the Management Board. Additionally, the Risk Committee of the Supervisory Board has to be informed regularly about all model changes that have been brought to the attention of the Management Board. Regulatory approval may also be required. The methodology validation is performed independently of model development by Global Model Validation and Governance. The results of the regular validation processes as stipulated by internal policies have to be brought to the attention of the RCRMF, even if the validation results do not lead to a change. The validation plan for rating methodologies is presented to RCRMF at the beginning of the calendar year and a status update is given on a quarterly basis.

For Postbank, responsibility for implementation, validation and monitoring of internal rating systems effectiveness is with Postbank's Group Risk Controlling function and overseen by the model and validation committee, chaired by Postbank's Head of Group Risk Controlling. An independent model risk and validation function has been established in 2016 in addition to the model risk development unit. All rating systems are subject to approval by Postbank's Bank Risk Committee chaired by the Chief Risk Officer. Effectiveness of rating systems and rating results are reported to the Postbank Management Board on a regular basis. Joint governance is ensured via a cross committee membership of Deutsche Bank senior managers joining Postbank committees and vice versa

We measure risk-weighted assets to determine the regulatory capital demand for credit risk using "advanced", "foundation" and "standard" approaches of which advanced and foundation are approved by our regulator.

The advanced Internal Ratings Based Approach ("IRBA") is the most sophisticated approach available under the regulatory framework for credit risk and allows us to make use of our internal credit rating methodologies as well as internal estimates of specific further risk parameters. These methods and parameters represent long-used key components of the internal risk measurement and management process supporting the credit approval process, the economic capital and expected loss calculation and the internal monitoring and reporting of credit risk. The relevant parameters include the probability of default ("PD"), the loss given default ("LGD") and the maturity ("M") driving the regulatory risk-weight and the credit conversion factor ("CCF") as part of the regulatory exposure at default ("EAD") estimation. For the majority of derivative counterparty exposures as well as securities financing transactions ("SFT"), we make use of the internal model method ("IMM") in accordance with CRR and SolvV to calculate EAD. For most of our internal rating systems more than seven years of historical information is available to assess these parameters. Our internal rating methodologies aim at point-in-time rather than a through-the-cycle rating.

We apply the foundation IRBA to the majority of our remaining foundation IRBA eligible credit portfolios at Postbank to the extent these have not been newly assigned to the advanced IRBA during 2016. The foundation IRBA is an approach available under the regulatory framework for credit risk allowing institutions to make use of their internal rating methodologies while using pre-defined regulatory values for all other risk parameters. Parameters subject to internal estimates include the probability of default ("PD") while the loss given default ("LGD") and the credit conversion factor ("CCF") are defined in the regulatory framework.

We apply the standardized approach to a subset of our credit risk exposures. The standardized approach measures credit risk either pursuant to fixed risk weights, which are predefined by the regulator, or through the application of external ratings. We assign certain credit exposures permanently to the standardized approach in accordance with Article 150 CRR. These are predominantly exposures to the Federal Republic of Germany and other German public sector entities as well as exposures to central governments of other European Member States that meet the required conditions. These exposures make up the majority of the exposures carried in the standardized approach and receive



predominantly a risk weight of zero percent. For internal purposes, however, these exposures are subject to an internal credit assessment and fully integrated in the risk management and economic capital processes.

In addition to the above described regulatory capital demand, we determine the internal capital demand for credit risk via an economic capital model.

We calculate economic capital for the default risk, country risk and settlement risk as elements of credit risk. In line with our economic capital framework, economic capital for credit risk is set at a level to absorb with a probability of 99.98 % very severe aggregate unexpected losses within one year. Our economic capital for credit risk is derived from the loss distribution of a portfolio via Monte Carlo Simulation of correlated rating migrations. The loss distribution is modeled in two steps. First, individual credit exposures are specified based on parameters for the probability of default, exposure at default and loss given default. In a second step, the probability of joint defaults is modeled through the introduction of economic factors, which correspond to geographic regions and industries. The simulation of portfolio losses is then performed by an internally developed model, which takes rating migration and maturity effects into account. Effects due to wrong-way derivatives risk (i.e., the credit exposure of a derivative in the default case is higher than in nondefault scenarios) are modeled by applying our own alpha factor when deriving the exposure at default for derivatives and securities financing transactions under the CRR. We allocate expected losses and economic capital derived from loss distributions down to transaction level to enable management on transaction, customer and business level.

Besides the credit rating the key credit risk metric we apply for managing our credit portfolio, including transaction approval and the setting of risk appetite, we establish internal limits and credit exposures under these limits. Credit limits set forth maximum credit exposures we are willing to assume over specified periods. In determining the credit limit for a counterparty we consider the counterparty's credit quality by reference to our internal credit rating. Credit limits and credit exposures are both measured on a gross and net basis where net is derived by deducting hedges and certain collateral from respective gross figures. For derivatives, we look at current market values and the potential future exposure over the lifetime of a transaction. We generally also take into consideration the Risk-Return characteristics of individual transactions and portfolios. Risk-Return metrics explain the development of client revenues as well as capital consumption. In this regard we also look at the client revenues with respect to the balance sheet consumption.

## Managing and Mitigation of Credit Risk

### Managing Credit Risk on Counterparty Level

Credit-related counterparties are principally allocated to credit officers within credit teams which are aligned to types of counterparty (such as financial institutions, corporates or private individuals) or economic area (i.e., emerging markets) and dedicated rating analyst teams. The individual credit officers have the relevant expertise and experience to manage the credit risks associated with these counterparties and their associated credit related transactions. For retail clients credit decision making and credit monitoring is highly automated for efficiency reasons. Credit Risk Management has full oversight of the respective processes and tools used in the retail credit process. It is the responsibility of each credit officer to undertake ongoing credit monitoring for their allocated portfolio of counterparties. We also have procedures in place intended to identify at an early stage credit exposures for which there may be an increased risk of loss.

In instances where we have identified counterparties where there is a concern that the credit quality has deteriorated or appears likely to deteriorate to the point where they present a heightened risk of loss in default, the respective exposure is generally placed on a "watch list". We aim to identify counterparties that, on the basis of the application of our risk management tools, demonstrate the likelihood of problems well in advance in order to effectively manage the credit exposure and maximize the recovery. The objective of this early warning system is to address potential problems while adequate options for action are still available. This early risk detection is a tenet of our credit culture and is intended to ensure that greater attention is paid to such exposures.

Credit limits are established by the Credit Risk Management function via the execution of assigned credit authorities. This also applies to settlement risk that must fall within limits pre-approved by Credit Risk Management considering risk appetite and in a manner that reflects expected settlement patterns for the subject counterparty. Credit approvals are documented by the signing of the credit report by the respective credit authority holders and retained for future reference.

Credit authority is generally assigned to individuals as personal credit authority according to the individual's professional qualification and experience. All assigned credit authorities are reviewed on a periodic basis to help ensure that they are commensurate to the individual performance of the authority holder.

Where an individual's personal authority is insufficient to establish required credit limits, the transaction is referred to a higher credit authority holder or where necessary to an appropriate credit committee. Where personal and committee authorities are insufficient to establish appropriate limits, the case is referred to the Management Board for approval.

## Mitigation of Credit Risk on Counterparty Level

In addition to determining counterparty credit quality and our risk appetite, we also use various credit risk mitigation techniques to optimize credit exposure and reduce potential credit losses. Credit risk mitigants are applied in the following forms:

- Comprehensive and enforceable credit documentation with adequate terms and conditions.
- Collateral held as security to reduce losses by increasing the recovery of obligations.
- Risk transfers, which shift the loss arising from the probability of default risk of an obligor to a third party including hedging executed by our Credit Portfolio Strategies Group.
- Netting and collateral arrangements which reduce the credit exposure from derivatives and repo- and repo-style transactions.

### Collateral

We regularly agree on collateral to be received from or to be provided to customers in contracts that are subject to credit risk. Collateral is security in the form of an asset or third-party obligation that serves to mitigate the inherent risk of credit loss in an exposure, by either substituting the counterparty default risk or improving recoveries in the event of a default. While collateral can be an alternative source of repayment, it generally does not replace the necessity of high quality underwriting standards and a thorough assessment of the debt service ability of the counterparty.

We segregate collateral received into the following two types:

- Financial and other collateral, which enables us to recover all or part of the outstanding exposure by liquidating the collateral asset provided, in cases where the counterparty is unable or unwilling to fulfill its primary obligations. Cash collateral, securities (equity, bonds), collateral assignments of other claims or inventory, equipment (i.e., plant, machinery and aircraft) and real estate typically fall into this category.
- Guarantee collateral, which complements the counterparty's ability to fulfill its obligation under the legal contract and as such is provided by third parties. Letters of credit, insurance contracts, export credit insurance, guarantees, credit derivatives and risk participations typically fall into this category.

Our processes seek to ensure that the collateral we accept for risk mitigation purposes is of high quality. This includes seeking to have in place legally effective and enforceable documentation for realizable and measureable collateral assets which are evaluated regularly by dedicated teams. The assessment of the suitability of collateral for a specific transaction is part of the credit decision and must be undertaken in a conservative way, including collateral haircuts that are applied. We have collateral type specific haircuts in place which are regularly reviewed and approved. In this regard, we strive to avoid "wrong-way" risk characteristics where the counterparty's risk is positively correlated with the risk of deterioration in the collateral value. For guarantee collateral, the process for the analysis of the guarantor's creditworthiness is aligned to the credit assessment process for counterparties.

### Risk Transfers

Risk transfers to third parties form a key part of our overall risk management process and are executed in various forms, including outright sales, single name and portfolio hedging, and securitizations. Risk transfers are conducted by the respective business units and by our Credit Portfolio Strategies Group (CPSG), in accordance with specifically approved mandates.

CPSG manages the residual credit risk of loans and lending-related commitments of the institutional and corporate credit portfolio; the leveraged portfolio and the medium-sized German companies' portfolio within our Corporate Divisions of GM and CIB.

Acting as a central pricing reference, CPSG provides the respective GM and CIB Division businesses with an observed or derived capital market rate for loan applications; however, the decision of whether or not the business can enter into the credit risk remains exclusively with Credit Risk Management.

CPSG is concentrating on two primary objectives within the credit risk framework to enhance risk management discipline, improve returns and use capital more efficiently:

- to reduce single-name credit risk concentrations within the credit portfolio and
- to manage credit exposures by utilizing techniques including loan sales, securitization via collateralized loan obligations, default insurance coverage and single-name and portfolio credit default swaps.

### Netting and Collateral Arrangements for Derivatives and Securities Financing Transactions

Netting is applicable to both exchange traded derivatives and OTC derivatives. Netting is also applied to securities financing transactions as far as documentation, structure and nature of the risk mitigation allow netting with the underlying credit risk.

All exchange traded derivatives are cleared through central counterparties ("CCPs"), which interpose themselves between the trading entities by becoming the counterparty to each of the entities. Where available and to the extent agreed with our counterparties, we also use CCP clearing for our OTC derivative transactions.

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("DFA") and related Commodity Futures Trading Commission ("CFTC") rules introduced in 2013 mandatory CCP clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps. Additionally, the CFTC adopted final rules in 2016 that require additional interest rate swaps to be cleared on a phased implementation schedule ending in October 2018. The European Regulation (EU) No 648/2012 on OTC Derivatives, Central Counterparties and Trade Repositories ("EMIR") and the Commission Delegated Regulations (EU) 2015/2205, (EU) 2015/592 and (EU) 2016/1178 based thereupon introduced mandatory CCP clearing in the EU clearing for certain standardized OTC derivatives transactions. Mandatory CCP clearing in the EU began for certain interest rate derivatives on June 21, 2016 and for certain additional interest rate derivatives on February 9, 2017. Article 4 (2) of EMIR authorizes competent authorities to exempt intragroup transactions from mandatory CCP clearing, provided certain requirements, such as full consolidation of the intragroup transactions and the application of an appropriate centralized risk evaluation, measurement and control procedure are met. The Bank successfully applied for the clearing exemption for most of its regulatory-consolidated subsidiaries with intragroup derivatives, including e.g., Deutsche Bank Securities Inc. and Deutsche Bank Luxembourg S.A. As of January 16, 2016, the Bank has obtained intragroup exemptions from the EMIR clearing obligation for 71 bilateral intragroup relationships.

The rules and regulations of CCPs typically provide for the bilateral set off of all amounts payable on the same day and in the same currency ("payment netting") thereby reducing our settlement risk. Depending on the business model applied by the CCP, this payment netting applies either to all of our derivatives cleared by the CCP or at least to those that form part of the same class of derivatives. Many CCP rules and regulations also provide for the termination, close-out and netting of all cleared transactions upon the CCP's default ("close-out netting"), which reduced our credit risk. In our risk measurement and risk assessment processes we apply close-out netting only to the extent we have satisfied ourselves of the legal validity and enforceability of the relevant CCP's close-out netting provisions.

In order to reduce the credit risk resulting from OTC derivative transactions, where CCP clearing is not available, we regularly seek the execution of standard master agreements (such as master agreements for derivatives published by the International Swaps and Derivatives Association, Inc. (ISDA) or the German Master Agreement for Financial Derivative Transactions) with our counterparts. A master agreement allows for the close-out netting of rights and obligations arising under derivative transactions that have been entered into under such a master agreement upon the counterparty's default, resulting in a single net claim owed by or to the counterparty. For parts of the derivatives business (e.g., foreign exchange transactions) we also enter into master agreements under which payment netting applies in respect to transactions covered by such master agreements, reducing our settlement risk. In our risk measurement and risk assessment processes we apply close-out netting only to the extent we have satisfied ourselves of the legal validity and enforceability of the master agreement in all relevant jurisdictions.

Also, we enter into credit support annexes ("CSA") to master agreements in order to further reduce our derivatives-related credit risk. These annexes generally provide risk mitigation through periodic, usually daily, margining of the covered exposure. The CSAs also provide for the right to terminate the related derivative transactions upon the counterparty's failure to honor a margin call. As with netting, when we believe the annex is enforceable, we reflect this in our exposure measurement.

The DFA and CFTC rules thereunder, including CFTC rules § 23.504 and § 23.158, as well as EMIR and Commission Delegated Regulation based thereupon, namely Commission Delegated Regulation (EU) 2016/2251 introduced the mandatory use of master agreements and related CSAs, which must be executed prior to or contemporaneously with entering into an uncleared OTC derivative transaction. Under U.S. margin rules adopted by U.S. prudential regulators (the OCC, Federal Reserve, FDIC, Farm Credit Administration and FHFA) and the CFTC, we are required to post and collect initial margin and variation margin for our derivatives exposures with other derivatives dealers, as well as with our counterparties that (a) are "financial end users," as that term is defined in the U.S. margin rules, and (b) have an average daily aggregate notional amount of uncleared swaps, uncleared security-based swaps, foreign exchange forwards and foreign exchange swaps exceeding U.S.\$ 8 billion in June, July and August of the previous calendar year. The U.S. margin rules additionally require us to post and collect variation margin for our derivatives with other financial end user counterparties. These margin requirements are subject to a U.S.\$ 50 million threshold for initial margin and a zero threshold for variation margin, with a combined U.S.\$ 500,000 minimum transfer amount. The U.S. margin requirements have been in effect for large banks since September 2016, with additional variation margin requirements having come into effect March 1, 2017 and additional initial margin requirements phased in on an annual basis from September 2017 through September 2020. Under EMIR the CSA must provide for daily valuation and daily variation margining based on a zero threshold and a maximum transfer amount of €500,000. For large derivative exposures exceeding €8 billion, initial margin has to be posted as well. The variation margin requirements under EMIR apply as of March 1, 2017; the initial margin requirements will be subject to a staged phase-in until September 1, 2020. Pursuant to Article 11 (5) to (10) of EMIR competent authorities are authorized to exempt intragroup transactions from the margining obligation, provided certain requirements are met. While some of those requirements are the same as for the EMIR clearing exemptions (see above), there are additional requirements such as the absence of any current or foreseen practical or legal impediment to the prompt transfer of funds or repayment of liabilities between intragroup counterparties. The Bank plans to make use of this exemption.

Certain CSAs to master agreements provide for rating-dependent triggers, where additional collateral must be pledged if a party's rating is downgraded. We also enter into master agreements that provide for an additional termination event upon a party's rating downgrade. These downgrading provisions in CSAs and master agreements usually apply to both parties but in some agreements may apply to us only. We analyze and monitor our potential contingent payment obligations resulting from a rating downgrade in our stress testing approach for liquidity risk on an ongoing basis. For an assessment of the quantitative impact of a downgrading of our credit rating please refer to table "Stress Testing Results" in the section "Liquidity Risk".

### Concentrations within Credit Risk Mitigation

Concentrations within credit risk mitigations taken may occur if a number of guarantors and credit derivative providers with similar economic characteristics are engaged in comparable activities with changes in economic or industry conditions affecting their ability to meet contractual obligations. We use a range of quantitative tools and metrics to monitor our credit risk mitigating activities. These also include monitoring of potential concentrations within collateral types supported by dedicated stress tests.

For more qualitative and quantitative details in relation to the application of credit risk mitigation and potential concentration effects please refer to the section “Maximum Exposure to Credit Risk”.

## Managing Credit Risk on Portfolio Level

On a portfolio level, significant concentrations of credit risk could result from having material exposures to a number of counterparties with similar economic characteristics, or who are engaged in comparable activities, where these similarities may cause their ability to meet contractual obligations to be affected in the same manner by changes in economic or industry conditions.

Our portfolio management framework supports a comprehensive assessment of concentrations within our credit risk portfolio in order to keep concentrations within acceptable levels.

### Industry Risk Management

To manage industry risk, we have grouped our corporate and financial institutions counterparties into various industry sub-portfolios. For each of these sub-portfolios an “Industry Batch report” is prepared, usually on an annual basis. This report highlights industry developments and risks to our credit portfolio, reviews concentration risks, analyses the risk/reward profile of the portfolio and incorporates an economic downside stress test. Finally, this analysis is used to define the credit strategies for the portfolio in question.

The Industry Batch reports have been presented to the CRM Portfolio Committee. In addition to these Industry Batch reports, the development of the industry sub-portfolios is regularly monitored during the year and is compared with the approved sub-portfolio strategies. Regular overviews have been prepared for the CRM Portfolio Committee to discuss recent developments and to agree on actions where necessary.

### Country Risk Management

Avoiding undue concentrations from a regional perspective is also an integral part of our credit risk management framework. In order to achieve this, country risk limits are applied to Emerging Markets as well as selected Developed Markets countries (based on internal country risk ratings). Emerging Markets are grouped into regions and for each region, as well as for the Higher Risk Developed Markets, a “Country Batch report” is prepared, usually on an annual basis. These reports assess key macroeconomic developments and outlook, review portfolio composition and concentration risks and analyze the risk/reward profile of the portfolio. Based on this, limits and strategies are set for countries and, where relevant, for the region as a whole. Country risk limits are approved by either our Management Board or by our Enterprise Risk Committee, pursuant to delegated authority, and by the Management Board at Postbank for respective portfolios.

In our Country Limit framework, limits are established for counterparty credit risk exposures in a given country to manage the aggregated credit risk subject to country-specific economic and political events. These limits include exposures to entities incorporated locally as well as subsidiaries of foreign multinational corporations. Separate transfer risk limits are established which apply to any cross-border exposures (credit and trading) with our clients in above countries. Also, gap risk limits are set to control the risk of loss due to intra-country wrong-way risk exposure.

Beyond credit risk, our Country Risk Framework comprises market risk in trading positions in emerging markets and is set based on the P&L impact of potential stressed market events on these positions. Furthermore we take in consideration treasury risk comprising capital positions and exposure of Deutsche Bank entities in above countries (Funding, Margin or Guarantees) which are subject to limits given the transfer risk inherent in these cross-border positions.

Our country risk ratings represent a key tool in our management of country risk. They are established by the independent ERM Risk Research function within Deutsche Bank and include:

- **Sovereign rating:** A measure of the probability of the sovereign defaulting on its foreign or local currency obligations.
- **Transfer risk rating:** A measure of the probability of a “transfer risk event”, i.e., the risk that an otherwise solvent debtor is unable to meet its obligations due to inability to obtain foreign currency or to transfer assets as a result of direct sovereign intervention.
- **Event risk rating:** A measure of the probability of major disruptions in the market risk factors relating to a country (interest rates, credit spreads, etc.). Event risks are measured as part of our event risk scenarios, as described in the section “Market Risk Monitoring” of this report.

All sovereign and transfer risk ratings are reviewed, at least quarterly, by the Enterprise Risk Committee, although more frequent reviews are undertaken when deemed necessary.

#### Product specific Risk Management

Complementary to our counterparty, industry and country risk approach, we focus on product specific risk concentrations and selectively set limits where required for risk management purposes. Specific product limits are set in particular if a concentration of transactions of a specific type might lead to significant losses under certain cases. In this respect, correlated losses might result from disruptions of the functioning of financial markets, significant moves in market parameters to which the respective product is sensitive, macroeconomic default scenarios or other factors. A key focus is put on underwriting caps in CIB and GM. These caps limit the combined risk for transactions where we underwrite commitments with the intention to sell down or distribute part of the risk to third parties. These commitments include the undertaking to fund bank loans and to provide bridge loans for the issuance of public bonds. The risk is that we may not be successful in the distribution of the facilities, meaning that we would have to hold more of the underlying risk for longer periods of time than originally intended. These underwriting commitments are additionally exposed to market risk in the form of widening credit spreads. We dynamically hedge this credit spread risk to be within the approved market risk limit framework.

Furthermore, in our PW&CC businesses, we apply product-specific strategies setting our risk appetite for sufficiently homogeneous portfolios where tailored client analysis is secondary, such as the retail portfolios of mortgages, business and consumer finance products. In Wealth Management, target levels are set for global concentrations along products as well as based on type and liquidity of collateral.

## Market Risk Management

### Market Risk Framework

The vast majority of our businesses are subject to market risk, defined as the potential for change in the market value of our trading and invested positions. Risk can arise from changes in interest rates, credit spreads, foreign exchange rates, equity prices, commodity prices and other relevant parameters, such as market volatility and market implied default probabilities.



One of the primary objectives of Market Risk Management, a part of our independent Risk function, is to ensure that our business units' risk exposure is within the approved appetite commensurate with its defined strategy. To achieve this objective, Market Risk Management works closely together with risk takers ("the business units") and other control and support groups.

We distinguish between three substantially different types of market risk:

- Trading market risk arises primarily through the market-making activities of the Global Markets Division. This involves taking positions in debt, equity, foreign exchange, other securities and commodities as well as in equivalent derivatives.
- Traded default risk arising from defaults and rating migrations relating to trading instruments.
- Nontrading market risk arises from market movements, primarily outside the activities of our trading units, in our banking book and from off-balance sheet items. This includes interest rate risk, credit spread risk, investment risk and foreign exchange risk as well as market risk arising from our pension schemes, guaranteed funds and equity compensation. Nontrading market risk also includes risk from the modeling of client deposits as well as savings and loan products.

Market Risk Management governance is designed and established to promote oversight of all market risks, effective decision-making and timely escalation to senior management.

Market Risk Management defines and implements a framework to systematically identify, assess, monitor and report our market risk. Market risk managers identify market risks through active portfolio analysis and engagement with the business areas.

## Market Risk Measurement

We aim to accurately measure all types of market risks by a comprehensive set of risk metrics reflecting economic and regulatory requirements.

In accordance with economic and regulatory requirements, we measure market risks by several internally developed key risk metrics and regulatory defined market risk approaches.

## Trading Market Risk

Our primary mechanism to manage trading market risk is the application of our Risk Appetite framework of which the limit framework is a key component. Our Management Board supported by Market Risk Management, sets group-wide value-at-risk, economic capital and portfolio stress testing limits for market risk in the trading book. Market Risk Management allocates this overall appetite to our Corporate Divisions and individual business units within them based on established and agreed business plans. We also have business aligned heads within Market Risk Management to establish business limits, by allocating the limit down to individual portfolios or geographical regions.

Value-at-risk, economic capital and Portfolio Stress Testing limits are used for managing all types of market risk at an overall portfolio level. As an additional and complementary tool for managing certain portfolios or risk types, Market Risk Management performs risk analysis and business specific stress testing. Limits are also set on sensitivity and concentration/liquidity, business-level stress testing and event risk scenarios.

Business units are responsible for adhering to the limits against which exposures are monitored and reported. The market risk limits set by Market Risk Management are monitored on a daily, weekly and monthly basis.



## Internally developed Market Risk Models

### Value-at-Risk (VaR)

VaR is a quantitative measure of the potential loss (in value) of Fair Value positions due to market movements that will not be exceeded in a defined period of time and with a defined confidence level.

Our value-at-risk for the trading businesses is based on our own internal model. In October 1998, the German Banking Supervisory Authority (now the BaFin) approved our internal model for calculating the regulatory market risk capital for our general and specific market risks. Since then the model has been continually refined and approval has been maintained.

We calculate VaR using a 99 % confidence level and a one day holding period. This means we estimate there is a 1 in 100 chance that a mark-to-market loss from our trading positions will be at least as large as the reported VaR. For regulatory purposes, which include the calculation of our capital requirements and risk-weighted assets, the holding period is ten days.

We use one year of historical market data as input to calculate VaR. The calculation employs a Monte Carlo Simulation technique, and we assume that changes in risk factors follow a well-defined distribution, e.g. normal or non-normal (t, skew-t, Skew-Normal). To determine our aggregated VaR, we use observed correlations between the risk factors during this one year period.

Our VaR model is designed to take into account a comprehensive set of risk factors across all asset classes. Key risk factors are swap/government curves, index and issuer-specific credit curves, funding spreads, single equity and index prices, foreign exchange rates, commodity prices as well as their implied volatilities. To help ensure completeness in the risk coverage, second order risk factors, e.g. CDS index vs. constituent basis, money market basis, implied dividends, option-adjusted spreads and precious metals lease rates are considered in the VaR calculation.

For each business unit a separate VaR is calculated for each risk type, e.g. interest rate risk, credit spread risk, equity risk, foreign exchange risk and commodity risk. For each risk type this is achieved by deriving the sensitivities to the relevant risk type and then simulating changes in the associated risk drivers. "Diversification effect" reflects the fact that the total VaR on a given day will be lower than the sum of the VaR relating to the individual risk types. Simply adding the VaR figures of the individual risk types to arrive at an aggregate VaR would imply the assumption that the losses in all risk types occur simultaneously.

The model incorporates both linear and, especially for derivatives, nonlinear effects through a combination of sensitivity-based and revaluation approaches on grids.

The VaR measure enables us to apply a consistent measure across all of our trading businesses and products. It allows a comparison of risk in different businesses, and also provides a means of aggregating and netting positions within a portfolio to reflect correlations and offsets between different asset classes. Furthermore, it facilitates comparisons of our market risk both over time and against our daily trading results.

When using VaR estimates a number of considerations should be taken into account. These include:

- The use of historical market data may not be a good indicator of potential future events, particularly those that are extreme in nature. This "backward-looking" limitation can cause VaR to understate risk (as in 2008), but can also cause it to be overstated.
- Assumptions concerning the distribution of changes in risk factors, and the correlation between different risk factors, may not hold true, particularly during market events that are extreme in nature. The one day holding period does not fully capture the market risk arising during periods of illiquidity, when positions cannot be closed out or hedged within one day.

- VaR does not indicate the potential loss beyond the 99<sup>th</sup> quantile.
- Intra-day risk is not reflected in the end of day VaR calculation.
- There may be risks in the trading book that are partially or not captured by the VaR model.

We are committed to the ongoing development of our internal risk models, and we allocate substantial resources to reviewing, validating and improving them. Additionally, we have further developed and improved our process of systematically capturing and evaluating risks currently not captured in our value-at-risk model. An assessment is made to determine the level of materiality of these risks and material risks are prioritized for inclusion in our internal model. Risks not in value-at-risk are monitored and assessed on a regular basis through our RNIV framework.

## Stressed Value-at-Risk

Stressed Value-at-Risk calculates a stressed value-at-risk measure based on a one year period of significant market stress. We calculate a stressed value-at-risk measure using a 99 % confidence level. The holding period is one day for internal purposes and ten days for regulatory purposes. Our stressed value-at-risk calculation utilizes the same systems, trade information and processes as those used for the calculation of value-at-risk. The only difference is that historical market data and observed correlations from a period of significant financial stress (i.e., characterized by high volatilities) is used as an input for the Monte Carlo Simulation.

The time window selection process for the stressed value-at-risk calculation is based on the identification of a time window characterized by high levels of volatility in the top value-at-risk contributors. The identified window is then further validated by comparing the SVaR results to neighboring windows using the complete DB Group portfolio.

## Incremental Risk Charge

Incremental Risk Charge captures default and credit migration risks for credit-sensitive positions in the trading book. It applies to credit products over a one-year capital horizon at a 99.9 % confidence level, employing a constant position approach. We use a Monte Carlo Simulation for calculating incremental risk charge as the 99.9 % quantile of the portfolio loss distribution and for allocating contributory incremental risk charge to individual positions.

The model captures the default and migration risk in an accurate and consistent quantitative approach for all portfolios. Important parameters for the incremental risk charge calculation are exposures, recovery rates, maturity ratings with corresponding default and migration probabilities and parameters specifying issuer correlations.

## Comprehensive Risk Measure

Comprehensive Risk Measure captures incremental risk for the correlation trading portfolio calculated using an internal model subject to qualitative minimum requirements as well as stress testing requirements. The comprehensive risk measure for the correlation trading portfolio is based on our own internal model.

We calculate the comprehensive risk measure based on a Monte Carlo Simulation technique to a 99.9 % confidence level and a capital horizon of one year. Our model is applied to the eligible corporate correlation trading positions where typical products include collateralized debt obligations, nth-to-default credit default swaps, and commonly traded index- and single-name credit default swaps.

Trades subject to the comprehensive risk measure have to meet minimum liquidity standards to be eligible. The model incorporates concentrations of the portfolio and nonlinear effects via a full revaluation approach.

For regulatory reporting purposes, the comprehensive risk measure represents the higher of the internal model spot value at the reporting dates, their preceding 12-week average calculation, and the floor, where the floor is equal to 8 % of the equivalent capital charge under the standardized approach securitization framework. Since the first quarter of 2016, the CRM RWA calculations include two regulatory-prescribed add-ons which cater for (a) stressing the implied correlation within nth-to-default baskets and (b) any stress test loss in excess of the internal model spot value.

## Market Risk Standardized Approach

Market Risk Management monitors exposures and addresses risk issues and concentrations for certain exposures under the specific Market Risk Standardized Approach ("MRSA"). We use the MRSA to determine the regulatory capital charge for the specific market risk of trading book securitizations which fall outside the scope of the regulatory correlation trading portfolio.

We also use the MRSA to determine the regulatory capital charge for longevity risk as set out in CRR/CRD 4 regulations. Longevity risk is the risk of adverse changes in life expectancies resulting in a loss in value on longevity linked policies and transactions. For risk management purposes, stress testing and economic capital allocations are also used to monitor and manage longevity risk. Furthermore, certain types of investment funds require a capital charge under the MRSA. For risk management purposes, these positions are also included in our internal reporting framework.

## Market Risk Stress Testing

Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and extreme movements in individual risk factors. It is one of the core quantitative tools used to assess the market risk of Deutsche Bank's positions and complements VaR and Economic Capital. Market Risk Management performs several types of stress testing to capture the variety of risks: Portfolio Stress Testing, individual specific stress tests, Event Risk Scenarios, and also contributes to Group-wide stress testing.

## Trading Market Risk Economic Capital (TMR EC)

Our trading market risk economic capital model - scaled Stressed VaR based EC (SVaR based EC) - comprises two core components, the "common risk" component covering risk drivers across all businesses and the "business-specific risk" component, which enriches the Common Risk via a suite of Business Specific Stress Tests (BSSTs). Both components are calibrated to historically observed severe market shocks. Common risk is calculated using a scaled version of the Regulatory SVaR framework while BSSTs is designed to capture more product/business-related bespoke risks (e.g. complex basis risks) as well as higher order risks not captured in the common risk component.

## Traded Default Risk Economic Capital (TDR EC)

TDR EC captures the relevant credit exposures across our trading and banking books. Trading book exposures are monitored by MRM via single name concentration and portfolio thresholds which are set based upon rating, size and liquidity. Single name concentration risk thresholds are set for two key metrics: Default Exposure, i.e., the P&L impact of an instantaneous default at the current recovery rate (RR), and bond equivalent Market Value (MV), i.e. default exposure at 0 % recovery. In order to capture diversification and concentration effects we perform a joint calculation for traded default risk economic capital and credit risk economic capital. Important parameters for the calculation of traded default risk are exposures, recovery rates and default probabilities as well as maturities. The probability of joint rating downgrades and defaults is determined by the default and rating correlations of the portfolio model. These correlations are specified through systematic factors that represent countries, geographical regions and industries.

## Trading Market Risk Reporting

Market Risk Management reporting creates transparency on the risk profile and facilitates the understanding of core market risk drivers to all levels of the organization. The Management Board and Senior Governance Committees receive regular reporting, as well as ad hoc reporting as required, on market risk, regulatory capital and stress testing. Senior Risk Committees receive risk information at a number of frequencies, including weekly or monthly.

Additionally, Market Risk Management produces daily and weekly Market Risk specific reports and daily limit excess reports for each asset class.

## Regulatory prudent valuation of assets carried at fair value

Pursuant to Article 34 CRR institutions shall apply the prudent valuation requirements of Article 105 CRR to all assets measured at fair value and shall deduct from CET 1 capital the amount of any additional value adjustments necessary.

We determined the amount of the additional value adjustments based on the methodology defined in the Commission Delegated Regulation (EU) 2016/101.

At December 31, 2016 the amount of the additional value adjustments was € 1.4 billion.

Based on Article 159 CRR the total amount of general and specific credit risk adjustments and additional value adjustments for exposures that are treated under the Internal Ratings Based Approach for credit risk and that are in scope of the expected loss calculation may be subtracted from the total expected loss amount related to these exposures. Any remaining positive difference must be deducted from CET 1 capital pursuant to Article 36 (1) lit. d. CRR.

At December 31, 2016 the reduction of the expected loss from subtracting the additional value adjustments was € 0.5 billion, which partly mitigated the negative impact of the additional value adjustments on our CET 1 capital.

## Nontrading Market Risk

Nontrading market risk arises primarily from outside the activities of our trading units, in our banking book and from certain off-balance sheet items. Significant market risk factors the Bank is exposed to and are overseen by risk management groups in that area are:

- Interest rate risk (including risk from embedded optionality and changes in behavioral patterns for certain product types), credit spread risk, foreign exchange risk, equity risk (including investments in public and private equity as well as real estate, infrastructure and fund assets).
- Market risks from off-balance sheet items such as pension schemes and guarantees as well as structural foreign exchange risk and equity compensation risk.

### Interest Rate Risk in the Banking Book

Interest rate risk in the banking book is the current or prospective risk, to both the Bank's capital and earnings, arising from adverse movements in interest rates, which affect the Bank's banking book exposures. This includes gap risk, which arises from the term structure of banking book instruments, basis risk, which describes the impact of relative changes in interest rates for financial instruments that are priced using different interest rate curves, as well as option risk, which arises from option derivative positions or from optional elements embedded in the Bank's on- and off-balance sheet items.

The Bank measures the impact of interest rate risk in the banking book on the Bank's economic value as well as on the Bank's earnings. Our Group Treasury division is mandated to manage on a fiduciary basis the interest rate risk centrally, with Market Risk Management acting as an independent oversight function.

The Bank employs mitigation techniques to immunize the economic value interest rate risk arising from nontrading positions. The majority of our interest rate risk arising from nontrading asset and liability positions, with the exception of some entities and portfolios, has been transferred through internal transactions to Treasury Pool Management, subject to banking book value at risk limits. Treasury Pool Management hedges the transferred net banking book risk with Global Markets trading books. Global Markets interest rate risk is managed on the basis of trading book value-at-risk, as reflected in trading portfolio figures. The treatment of interest rate risk in our trading portfolios and the application of the value-at-risk model is discussed in the "Trading Market Risk" section of this document.

The most notable exceptions from the aforementioned paragraph are in Postbank and some PW&CC entities. These entities manage interest rate risk separately through their entity specific Asset and Liability Management departments. In addition, the Group holds selected economic value risk positions managed by Treasury, predominately to mitigate earnings volatility.

The measurement and reporting of economic value interest rate risk is performed daily, earnings risk is monitored on a monthly basis.

The following table shows the variation of the economic value for our banking book positions resulting from upward and downward interest rate shocks by currency. In total, the estimated change in the economic value resulting from the impact of the regulatory required parallel yield curve shifts of (200) and +200 basis points (floored by a rate of zero) would be €(0.4) billion and €(0.3) billion, respectively, at December 31, 2016..

#### Economic value interest rate risk in the banking book by currency

in € bn.	Dec 31, 2016	
	-200 bp <sup>1</sup>	+200 bp
EUR	(0.5)	(0.1)
GBP	0	(0.1)
USD	0.2	(0.2)
JPY	0	0
Other	0	0
<b>Total</b>	<b>(0.4)</b>	<b>(0.3)</b>

<sup>1</sup> Floored at zero

A sudden parallel increase in yield curves would positively impact our earnings (net interest income) from our banking book positions. We estimate that the total one-year net interest income change resulting from parallel yield curve shifts of (200) and +200 basis points (floored by a rate of zero) would be €(0.6) billion and €2.1 billion, respectively, at December 31, 2016.

Our PW&CC and CIB businesses are subject to risk of changes in our clients' behavior with regard to their deposits as well as loan products. A main component of the economic value of our banking book positions is the maturity transformation of contractually short term deposits. The effective duration of contractually short term deposits is based upon observable client behavior, elasticity of deposit rates to market interest rates ("DRE") and the volatility of deposit balances. Additionally, we consider early prepayment behavior of our customers for loan products. The parameters are based on historical observations, statistical analyses and expert assessments. If the future evolution of balances, rates or client behavior differs from these assumptions, then this could have an impact on our interest rate risks in the banking book.

## Credit Spread Risk in the Banking Book

Deutsche Bank is exposed to credit spread risk of bonds held in the banking book. This risk category is closely associated with interest rate risk in the banking book as basis risk describing the impact of relative changes in interest rates for financial instruments that are priced using product specific curves. Within nontrading market risk the basis between a product specific bond curve and a risk free interest rate curve is represented under the category credit spread risk in the banking book.

## Foreign Exchange Risk

Foreign exchange risk arises from our nontrading asset and liability positions, denominated in currencies other than the functional currency of the respective entity. The majority of this foreign exchange risk is transferred through internal hedges to trading books within Global Markets and is therefore reflected and managed via the value-at-risk figures in the trading books. The remaining foreign exchange risks that have not been transferred are mitigated through match funding the investment in the same currency, therefore only residual risk remains in the portfolios. Small exceptions to above approach follow the general MRM monitoring and reporting process, as outlined for the trading portfolio.

The bulk of nontrading foreign exchange risk is related to unhedged structural foreign exchange exposure, mainly in our U.S., U.K. and China entities. Structural foreign exchange exposure arises from local capital (including retained earnings) held in the Bank's consolidated subsidiaries and branches and from investments accounted for at equity. Change in foreign exchange rates of the underlying functional currencies result in revaluation of capital and retained earnings and are recognized in other comprehensive income booked as Currency Translation Adjustments ("CTA").

The primary objective for managing our structural foreign exchange exposure is to stabilize consolidated capital ratios from the effects of fluctuations in exchange rates. Therefore the exposure remains unhedged for a number of core currencies with considerable amounts of risk-weighted assets denominated in that currency in order to avoid volatility in the capital ratio for the specific entity and the Group as a whole.

## Investment Risk

Nontrading market risk from investment exposure is predominantly the equity risk arising from our non-consolidated investment holdings in the banking book categorized into strategic and alternative investment assets.

Strategic investments typically relate to acquisitions made to support our business franchise and are undertaken with a medium to long-term investment horizon. Alternative assets are comprised of principal investments and other non-strategic investment assets. Principal investments are direct investments in private equity (including leveraged buy-out fund commitments and equity bridge commitments), real estate (including mezzanine debt) and venture capital, undertaken for capital appreciation. In addition, principal investments are made in hedge funds and mutual funds in order to establish a track record for sale to external clients. Other non-strategic investment assets comprise assets recovered in the workout of distressed positions or other legacy investment assets in private equity and real estate of a non-strategic nature.

## Pension Risk

We are exposed to market risk from a number of defined benefit pension schemes for past and current employees. The ability of the pension schemes to meet the projected pension payments, is maintained through investments and ongoing plan contributions. Market risk materializes due to a potential decline in the market value of the assets or an increase in the liability of each of the pension plans. Market Risk Management monitors and reports all market risks both on the asset and liability side of our defined benefit pension plans including interest rate risk, inflation risk, credit spread risk, equity risk and longevity risk. For details on our defined benefit pension obligation see additional Note 36 "Employee Benefits".

## Other Risks

In addition to the above risks, Market Risk Management has the mandate to monitor and manage market risks that arise from capital, funding and liquidity risk management activities of our Treasury department. Besides the structural foreign exchange capital hedging process, this includes market risks arising from our equity compensation plans.

Market risks in our asset management activities in Deutsche AM, primarily results from principal guaranteed funds or accounts, but also from co-investments in our funds.

## Nontrading market risk measurement

Non-trading market risk economic capital is being calculated either by applying the standard traded market risk EC methodology (SVaR based EC model) or through the use of non-traded market risk models that are specific to each risk class and which consider, among other factors, large historically observed market moves, the liquidity of each asset class, and changes in client's behavior in relation to products with behavioral optionalities.

# Operational Risk Management

## Operational Risk Framework

Operational Risk means the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk. Operational risk excludes business and reputational risk.

Group Operational Risk Management (“Group ORM”) has the responsibility for the design, implementation and maintenance of the Operational Risk Management Framework (“ORMF”) including the associated governance structures. Group ORM also has the responsibility for providing a cross-risk assessment and aggregation of risks to provide a holistic portfolio view of the non-financial risk profile of the Bank, which includes oversight of risk and control mitigation plans to return risk within risk appetite, where required.

We take decisions to manage operational risks, both strategically as well as in day-to-day business. Four principles form the foundation of the Operational Risk Management Framework (“ORMF”) at Deutsche Bank:

Operational Risk Principle I: Risk owners have full accountability for their operational risks and have to manage against a defined risk specific appetite. Risk owners are defined to be: First Line of Defence (“LoD”) (GM, CIB, Deutsche AM, PW&CC, NCOU and first LoD Infrastructure Functions), for all of their operational risks, and second LoD control functions (Infrastructure Functions), for the operational risks that arise in their own activities and processes.

Risk owners are accountable for managing all operational risks in their business/processes with an end-to-end process view, within a defined operational risk specific appetite and for identifying, establishing and maintaining risk owner (i.e. Level 1) controls. In addition they mitigate identified and assessed risk within the risk specific appetite through remediation actions, insurance or by ceasing/reducing business activities.

Divisional Control Officers, or the equivalent in infrastructure functions, support the risk owners. They are responsible for embedding the ORMF within the relevant business division or infrastructure function. They assess the effectiveness of the Level 1 Controls, monitor the aggregated risk profile and put the appropriate control and mitigating actions in place within the relevant division. The Divisional Control Officers also establish appropriate governance forums to oversee the operational risk profile and are involved in decision making processes.

Operational Risk Principle II: Risk Type Controllers are independent second LoD control functions that control specific risk types as identified in the Operational Risk Type Taxonomy.

Risk Type Controllers are responsible for establishing an effective risk management framework for the risk type they control. They define risk type taxonomy and minimum control standards and set the risk specific appetite. Risk Type Controllers challenge, assess and report the risks in their remit and perform Level 2 Controls, complementary to the Level 1 Controls. Finally they establish independent operational risk governance, and prepare aggregated reporting into the Group Non-Financial Risk Committee.

Operational Risk Principle III: Group ORM establishes and maintains the Group Operational Risk Management Framework. Group ORM develops and maintains the Group’s framework, defining the roles and responsibilities for the management of operational risk across the Bank and the process to identify, assess, mitigate, monitor, report and escalate operational risks. Group ORM also maintains the operational risk type taxonomy and oversees the completeness of coverage of risk types identified in the taxonomy by second LoD control functions, in line with the Group wide risk taxonomy standards. It also provides the tools for, and monitors execution and results of, the Group’s Risk and Control Assessment process.



Group ORM also provides independent challenge of the Group's operational risk profile providing independent risk views to facilitate forward looking management of the risks. The function independently reviews, monitors and assesses material risks and key controls at a divisional and infrastructure level across the Bank. It further monitors and reports on the Group's operational risk profile in comparison to the Group Risk Appetite, to systematically identify operational risk themes and concentrations, and to oversee that risk mitigating measures and priorities have been agreed. Group ORM establishes reporting and escalating procedures up to the Management Board for risk assessment results and identified material control gaps, while informing Group Audit of material control gaps.

Operational Risk Principle IV: Group Operational Risk Management aims to maintain sufficient capital to underpin operational risk. Group ORM is accountable for the design, implementation and maintenance of an appropriate approach to determine a sufficient level of capital demand for operational risk for recommendation to the Management Board. To fulfill this requirement Group ORM is accountable for the calculation and allocation of operational risk capital demand and Expected Loss planning under the Advanced Measurement Approach ("AMA"). Group ORM is also accountable for the facilitation of the annual operational risk capital planning and monthly review process.

## Organizational & Governance Structure

Group Operational Risk Management is part of the Group Risk function which is headed by the Chief Risk Officer. The Chief Risk Officer appoints the Head of Group Operational Risk Management.

Within Group ORM the Head of Group Operational Risk Management is accountable for the design, implementation and maintenance of an effective and efficient Group ORMF, including the operational risk capital model.

The Non-Financial Risk Committee, which is co-chaired by the Chief Risk Officer and the Chief Regulatory Officer, is responsible for the oversight, governance and coordination of the management of operational risk in the Group on behalf of the Management Board by establishing a cross-risk and holistic perspective of the key operational risks of the Group. Its decision-making and policy related authorities include the review, advice and management of all operational risk issues which may impact the risk profile of our business divisions and infrastructure functions.

The Head of Group Operational Risk Management is fully accountable for the setup and maintenance of the ORMF, including the adherence to all applicable legal and regulatory requirements. He is the owner of the Group's operational risk capital model and oversees its ongoing development as well as the capital calculation process. As the Model Owner, he manages relevant model risks and sets up appropriate controls. He approves quantitative and qualitative changes impacting the Group's regulatory or economic capital, within the limits defined by the Chief Risk Officer.

While the day-to-day management of operational risk is the primary responsibility of our business divisions and infrastructure functions, Group ORM oversees the Group-wide management of operational risks, identifies and reports risk concentrations and promotes a consistent application of the ORMF across the Bank.

In 2016, we further embedded and refined our "Three Lines of Defence" model across the Bank. Our core areas of focus were on business leaders continuing to assume primary accountability for the risks and controls in their units and the second LoD Risk Type Controllers developing their risk management capabilities via the implementation of minimum standards.

## Managing Our Operational Risk

We manage operational risk using the ORMF which enables us to determine our operational risk profile in comparison to our risk appetite, to systematically identify operational risk themes and concentrations, and to define risk mitigating measures and priorities.

In order to cover the broad range of risk types underlying operational risk, our framework contains a number of operational risk management techniques. These aim to efficiently manage the operational risk in our business and are used to identify, assess and mitigate operational risks:

- Loss Data Collection: The continuous collection of operational risk loss events, as a prerequisite for operational risk management, includes analyses and provision of timely information to senior management. All losses above €10,000 are collected in our incident reporting system (dbIRS).
- The Lessons Learned process is triggered for events, including near misses, starting from €500 thousand. This process includes, but is not limited to:
  - systematic risk analyses, including a description of the business environment in which the loss occurred, previous events, near misses and event-specific Key Risk Indicators,
  - root cause analysis,
  - review of control improvements and other actions to prevent or mitigate the recurrence, and
  - assessment of the residual risk exposure.
 The execution of corrective actions identified in this process are systematically tracked and reported monthly to senior management.
- Scenario Analyses: We complete our risk profile using a set of scenarios including relevant external cases provided by a public database and additional internal scenarios. We thereby systematically utilize information on external loss events occurring in the banking industry to prevent similar incidents from happening to us, for example through particular deep dive analyses or risk profile reviews.
- Emerging Risk Identification: We assess and approve the impact of changes on our risk profile as a result of new products, outsourcing activities, strategic initiatives, acquisitions and divestments as well as material systems and process changes. Once operational risks are identified and assessed, they are compared to the relevant specific risk appetite statement and either mitigated or accepted. Risks that violate applicable national or international regulations and legislation cannot be accepted; once identified, such risks must always be mitigated.
- Read-across Analysis: We continuously seek to enhance the process to assess whether identified issues require a broader approach across multiple entities and locations within the Bank. A review of material findings is performed in order to assess their relevance to areas of the Bank other than where they originated. We are developing business intelligence software to identify risk clusters across the Bank accessing various sources of information. We aim to increase our predictive analysis and clustering capabilities and to identify risk concentrations in a timely manner through the use of this tool.
- Risk Mitigation: When we implement risk mitigating measures, we systematically monitor their resolution. Residual operational risks rated “significant” or above, which the risk owner decides not to remediate, need to be formally risk accepted by the risk owner of the risk bearing division. The decision is reviewed by relevant second LoD functions and Group ORM. The Non-Financial Risk Committee has the right to veto the decision.
- We perform Top Risk Analyses in which the results of the aforementioned activities are considered. The Top Risk Analyses are a primary input for the annual operational risk management strategy and planning process and aim to identify our most critical risks in terms of probability and severity.
- Key Risk Indicators are used to monitor the operational risk profile and alert the organization to impending problems in a timely fashion. Key Risk Indicators enable the monitoring of the Bank's control culture and business environment and trigger risk mitigating actions. They facilitate the forward looking management of operational risks, based on early warning signals.
- In our bottom-up Self-Assessment process areas with high risk potential are highlighted, and risk mitigating measures to resolve issues are identified. On a regular basis we conduct risk workshops aiming to evaluate risks specific to local legal entities and the countries we operate in, and take appropriate risk mitigating actions. We are in the course of replacing this existing Self-Assessment process by an enhanced Risk and Control Assessment process, supported by a group wide IT tool. During 2016, business divisions and infrastructure control functions have completed Risk and Control Assessments to achieve over 90 % risk coverage. We will complete the remaining assessments to achieve 100 % coverage with a target date of end of first quarter 2017.

Additional functions, methodologies and tools implemented by the responsible second LoD Risk Type Controllers are utilized to complement the ORMF and address specific risk types. These include:

- Compliance Risk is the current or prospective risk to earnings and capital arising from violations or non-compliance with laws, rules, regulations, agreements, prescribed practices or ethical standards and can lead to fines, damages and/ or the voiding of contracts and can diminish an institution's reputation. Compliance Risk is managed by the Bank's Compliance department (supported by the Bank's business divisions and infrastructure functions) through identification of the adherence to material rules and regulations where non-compliance could lead to endangerment of the Bank's assets as well as acting to implement effective procedures for compliance and the setup of the corresponding controls. The Compliance department further provides advisory services on the above and performs monitoring activities in relation to the coverage of new or changed material rules and regulations and assesses the corresponding control environment; regularly reporting the results to the Management Board and Supervisory Board.
- Financial Crime risks are managed by our Anti-Financial Crime ("AFC") function via maintenance and development of a dedicated program. The AFC program is based on regulatory and supervisory requirements. AFC has defined roles and responsibilities and established dedicated functions for the identification and management of financial crime risks resulting from money laundering, terrorism financing, non-compliance with sanctions & embargoes as well as other criminal activities including fraud, corruption and other crimes. AFC assures further update of its strategy on financial crime prevention via regular development of internal policies and procedures, institution-specific risk analysis and staff training.
- The Legal Department, with the assistance of its Legal Risk Management ("LRM") function, is committed to the management of the Bank's legal risk. On behalf of Legal, LRM undertakes a broad variety of tasks aimed at proactively managing legal risk, including: oversight of Legal's participation in the Risk and Control Assessment in respect of those risks for which Legal is Risk Type Controller; agreeing and participating in resulting portfolio reviews and mitigation plans; overseeing the Legal Lessons Learned process; and conducting quality assurance reviews on Legal's processes, thereby assessing the robustness of the legal control framework and identifying control enhancements.
- Information and Resilience Risk Management ("IRRM") is Risk Type Controller for a number of risks in our Operational Risk Type Taxonomy. These include controls over infrastructure risks to prevent technology or process disruption, maintain information security and ensure businesses have robust plans in place to recover critical business processes and functions in the event of disruption from technical or building outage, or the effects of cyber-attack or natural disaster. IRRM also manages the risks arising from the Bank's outsourced activities via the provision of a comprehensive vendor risk management framework.
- Model Risk has been classified as a material risk for the Bank and is managed by a dedicated second LoD model risk function. For further details, please refer to the standalone section on Model Risk Management in this report.

## Measuring Our Operational Risks

We calculate and measure the regulatory and economic capital requirements for operational risk using the Advanced Measurement Approach ("AMA") methodology. Our AMA capital calculation is based upon the Loss Distribution Approach. Gross losses from historical internal and external loss data (Operational Riskdata eXchange Association consortium data) and external scenarios from a public database (IBM OpData) complemented by internal scenario data are used to estimate the risk profile (i.e., a loss frequency and a loss severity distribution). Our Loss Distribution Approach model includes conservatism by recognizing losses on events that arise over multiple years as single events in our historical loss profile.

Within the Loss Distribution Approach model, the frequency and severity distributions are combined in a Monte Carlo simulation to generate potential losses over a one year time horizon. Finally, the risk mitigating benefits of insurance are applied to each loss generated in the Monte Carlo simulation. Correlation and diversification benefits are applied to the net losses in a manner compatible with regulatory requirements to arrive at a net loss distribution at Group level, covering expected and unexpected losses. Capital is then allocated to each of the business divisions after considering qualitative adjustments and expected loss.

The regulatory capital requirement for operational risk is derived from the 99.9 % percentile. The economic capital is set at a level to absorb at a 99.98 % percentile very severe aggregate unexpected losses within one year. Both regulatory and economic capital requirements are calculated for a time horizon of one year.

The Regulatory and Economic Capital demand calculations are performed on a quarterly basis. Group ORM aims to ensure that for the approach for capital demand quantification appropriate development, validation and change governance processes are in place, whereby the validation is performed by an independent validation function and in line with the Group's model risk management process.

## Drivers for Operational Risk Capital Development

In 2016, our operational risk losses have been predominantly driven by losses and provisions arising from civil litigation and regulatory enforcement. Such losses account for more than 90 % of operational risk losses and account for the majority of operational risk regulatory and economic capital demand. For a description of our current legal and regulatory proceedings, please see section "Current Individual Proceedings" in Note 30 "Provisions". Our non-legal operational risk losses were lower compared to 2015.

Our operational risk management fosters a forward-looking risk management with regard to monitoring of potential profits and losses, focusing on regular review of civil litigations and regulatory enforcement matters, trend analysis based upon available losses and key risk indicator data.

This is particularly reflected in the management and measurement of our open civil litigation and regulatory enforcement matters where the bank relies both on information from internal as well as external data sources to consider developments in legal matters that affect the Bank specifically but also the banking industry as a whole. Reflecting the multi-year nature of legal proceedings the measurement of these risks furthermore takes into account changing levels of certainty by capturing the risks at various stages throughout the lifecycle of a legal matter.

Conceptually the Bank measures operational risk including legal risk by determining the maximum loss that will not be exceeded with a given probability. This maximum loss amount includes a component that due to the IFRS criteria is reflected in our financial statements and a component that is expressed as regulatory or economic capital demand that is above the amount reflected as provisions within our financial statements.

- The legal losses which the Bank expects with a likelihood of more than 50 % are already reflected in our IFRS group financial statements. These losses include net changes in provisions for existing and new cases in a specific period where the loss is deemed probable and is reliably measurable in accordance with IAS 37. The development of our legal provisions for civil litigations and regulatory enforcement is outlined in detail in Note 30 "Provisions" to our consolidated financial statements.
- Uncertain legal losses which are not reflected in our financial statements as provisions because they do not meet the recognition criteria under IAS 37 are expressed as "regulatory or economic capital demand" reflecting our risk exposure that consumes regulatory and economic capital.

To quantify the litigation losses in the AMA model the Bank takes into account historic losses, provisions, contingent liabilities and legal forecasts. Legal forecasts are generally comprised of ranges of potential losses from legal matters that are not deemed probable but are reasonably possible. Reasonably possible losses may result from ongoing and new legal matters which are reviewed at least quarterly by the attorneys handling the legal matters.

We include the legal forecasts in the "Relevant Loss Data" used in our AMA model. Hereby the projection range of the legal forecasts is not restricted to the one year capital time horizon but goes beyond and conservatively assumes early settlement of the underlying losses in the reporting period - thus considering the multi-year nature of legal matters. This reflection of legal forecasts within the AMA model has been in place since 2014 as part of a proactive implementation of a model change request that was approved by our European supervisory authority, the ECB, in August 2016.

## Liquidity Risk Management

Liquidity risk is the risk arising from our potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs. The objective of the Group's liquidity risk management framework is to ensure that the Group can fulfill its payment obligations at all times and can manage liquidity and funding risks within its risk appetite. The framework considers relevant and significant drivers of liquidity risk, whether on-balance sheet or off-balance sheet.

### Liquidity Risk Management Framework

In accordance with the ECB's Supervisory Review and Evaluation Process (SREP), Deutsche Bank has implemented an annual Internal Liquidity Adequacy Assessment Process ("ILAAP"), which is reviewed and approved by the Management Board. The ILAAP provides comprehensive documentation of the Bank's Liquidity Risk Management framework, including: identifying the key liquidity and funding risks to which the Group is exposed; describing how these risks are identified, monitored and measured and describing the techniques and resources used to manage and mitigate these risks.

The Management Board defines the liquidity and funding risk strategy for the bank, as well as the risk appetite, based on recommendations made by the Group Risk Committee ("GRC"). At least annually the Management Board reviews and approves the limits which are applied to the Group to measure and control liquidity risk as well as our long-term funding and issuance plan.

Treasury is mandated to manage the overall liquidity and funding position of the bank, with Liquidity Risk Control acting as an independent control function, responsible for reviewing the liquidity risk framework, proposing the risk appetite to GRC and the validation of Liquidity Risk models which are developed by Treasury, to measure and manage the Group's liquidity risk profile.

Treasury manages liquidity and funding, in accordance with the Management Board-approved risk appetite across a range of relevant metrics, and implements a number of tools to monitor these and ensure compliance. In addition, Treasury works closely in conjunction with Liquidity Risk Control ("LRC"), and the business, to analyze and understand the underlying liquidity characteristics of the business portfolios. These parties are engaged in regular and frequent dialogue to understand changes in the Bank's position arising from business activities and market circumstances. Dedicated business targets are allocated to ensure the Group meets its overall liquidity and funding appetite.

The Management Board is informed of performance against the risk appetite metrics, via a weekly Liquidity Scorecard. As part of the annual strategic planning process, we project the development of the key liquidity and funding metrics based on the underlying business plans to ensure that the plan is in compliance with our risk appetite.

### Capital Markets Issuance

Deutsche Bank has a wide range of funding sources, including retail and institutional deposits, unsecured and secured wholesale funding and debt issuance in the capital markets. Debt issuance, encompassing senior unsecured bonds, covered bonds as well as capital securities, is a key source of term funding for the Bank and is managed directly by Treasury. At least once a year Treasury submits an annual long-term Funding Plan to the GRC for recommendation and then to the Management Board for approval. This plan is driven by global and local funding and liquidity requirements based on expected business development. Our capital markets portfolio is dynamically managed through our yearly issuance plans to avoid excessive maturity concentrations.

## Short-term Liquidity and Wholesale Funding

Deutsche Bank tracks all contractual cash flows from wholesale funding sources, on a daily basis, over a 12-month horizon. For this purpose, we consider wholesale funding to include unsecured liabilities raised primarily by Treasury Pool Management, as well as secured liabilities raised by our Markets Division. Our wholesale funding counterparties typically include corporates, banks and other financial institutions, governments and sovereigns.

The Group has implemented a set of Management Board approved limits to restrict DB's exposure to wholesale counterparties, which have historically shown to be the most susceptible to market stress. These wholesale funding limits are calibrated against monthly stress-testing results, to ensure the Group remains liquid under our most severe stress scenario, even if limits are fully utilized.

The wholesale funding limits are monitored daily, and apply to the total combined currency amount of all wholesale funding currently outstanding, both secured and unsecured with specific tenor limits covering the first 8 weeks. Our Liquidity Reserves are the primary mitigant against potential stress in short-term wholesale funding market.

The tables starting on page 195 show the contractual maturity of our short-term wholesale funding and capital markets issuance.

## Liquidity Stress Testing and Scenario Analysis

Global liquidity stress testing and scenario analysis is one of the key tools for measuring liquidity risk and evaluating the Group's short-term liquidity position within the liquidity framework. It complements the intraday operational liquidity management process and the long-term liquidity strategy, represented by the Funding Matrix.

Our global liquidity stress testing process is managed by Treasury in accordance with the Management Board approved risk appetite. Treasury is responsible for the design of the overall methodology, including the definition of the stress scenarios, the choice of liquidity risk drivers and the determination of appropriate assumptions (parameters) to translate input data into model results. Liquidity Risk Control is responsible for the independent validation of liquidity risk models. Treasury Reporting & Analysis (LTRA) is responsible for implementing these methodologies in conjunction with Treasury and IT as well as for the stress test calculation.

We use stress testing and scenario analysis to evaluate the impact of sudden and severe stress events on our liquidity position. The scenarios we apply are based on historic events, such as the 2008 financial markets crisis.

Deutsche Bank has selected five scenarios to calculate the Group's stressed Net Liquidity Position ("sNLP"). These scenarios capture the historical experience of Deutsche Bank during periods of idiosyncratic and/or market-wide stress and are assumed to be both plausible and sufficiently severe as to materially impact the Group's liquidity position. A global market crisis, for example, is covered by a specific stress scenario (systemic market risk) that models the potential consequences observed during the financial crisis of 2008. Additionally, we have introduced regional market stress scenarios. Under each of the scenarios we assume a high degree of maturing loans to non-wholesale customers is rolled-over, to support our business franchise. Wholesale funding, from the most risk sensitive counterparties (including banks, and money-market mutual funds) is assumed to roll-off at contractual maturity or even be bought back, in the acute phase of the stress.

In addition, we include the potential funding requirements from contingent liquidity risks which might arise, including credit facilities, increased collateral requirements under derivative agreements, and outflows from deposits with a contractual rating linked trigger.



We then model the actions we would take to counterbalance the outflows incurred. Countermeasures include utilizing the Liquidity Reserve and generating liquidity from unencumbered, marketable assets.

Stress testing is conducted at a global level and for defined individual legal entities. In addition to the global stress test, stress tests for material currencies (EUR, USD and GBP) are performed. We review our stress-testing assumptions on a regular basis and have made further enhancements to the methodology and severity of certain parameters through the course of 2016.

We run the liquidity stress test over an eight-week horizon, which we consider the most critical time span in a liquidity crisis, and apply the relevant stress assumptions to risk drivers from on-balance sheet and off-balance sheet products on a daily basis. Beyond the eight week time horizon, we analyze the impact of a more prolonged stress period, extending to twelve months. This stress testing analysis is performed daily and on a monthly basis considering additional balance sheet information.

Our internal risk appetite through 2016 was to maintain a surplus of at least €5 billion throughout the 8 week stress horizon under all scenarios for our monthly aggregate currency stress test. The target minimum risk appetite surplus has been increased to €10 billion from January 2017.

The table on page 191 shows the results of our internal liquidity stress test under the various different scenarios.

## Liquidity Coverage Ratio

In addition to our internal stress test result, the Group has a Management Board approved risk appetite for the Liquidity Coverage Ratio ("LCR"). Finalized by the Basel Committee in January 2013, the LCR is intended to promote the short-term resilience of a bank's liquidity risk profile over a 30 day stress scenario. The ratio is defined as the amount of High Quality Liquid Assets ("HQLA") that could be used to raise liquidity, measured against the total volume of net cash outflows, arising from both actual and contingent exposures, in a stressed scenario.

This requirement has been implemented into European law, via the Commission Delegated Regulation (EU) 2015/61, adopted in October 2014. Compliance with the LCR was required in the EU from October 1, 2015. The Liquidity Coverage Ratio is subject to a transitional phase-in period, of 70 % from January 1, 2016, rising to 80 % in 2017 and 100 % in 2018.

The LCR complements the internal stress testing framework. By maintaining a ratio in excess of minimum regulatory requirements, the LCR seeks to ensure that the Group holds adequate liquidity resources to mitigate a short-term liquidity stress.

Our internal risk appetite is to maintain a LCR ratio of at least 105 %.

Key differences between the liquidity stress test and LCR include the time horizon (eight weeks versus 30 days), classification and haircut differences between Liquidity Reserves and the LCR HQLA, outflow rates for various categories of funding, and inflow assumption for various assets (for example, loan repayments). Our liquidity stress test also includes outflows related to intraday liquidity assumptions, which the LCR excludes.



## Funding Risk Management

### Structural Funding

Deutsche Bank's primary tool for monitoring and managing funding risk is the Funding Matrix. The Funding Matrix assesses the Group's structural funding profile for the greater than one year time horizon. To produce the Funding Matrix, all funding-relevant assets and liabilities are mapped into time buckets corresponding to their contractual or modeled maturities. This allows the Group to identify expected excesses and shortfalls in term liabilities over assets in each time bucket, facilitating the management of potential liquidity exposures.

The liquidity maturity profile is based on contractual cash flow information. If the contractual maturity profile of a product does not adequately reflect the liquidity maturity profile, it is replaced by modeling assumptions. Short-term balance sheet items (<1yr) or matched funded structures (asset and liabilities directly matched with no liquidity risk) can be excluded from the term analysis.

The bottom-up assessment by individual business line is combined with a top-down reconciliation against the Group's IFRS balance sheet. From the cumulative term profile of assets and liabilities beyond 1 year, any long-funded surpluses or short-funded gaps in the Group's maturity structure can be identified. The cumulative profile is thereby built up starting from the above 10 year bucket down to the above 1 year bucket.

The strategic liquidity planning process, which incorporates the development of funding supply and demand across business units, together with the bank's targeted key liquidity and funding metrics, provides the key input parameter for our annual capital markets issuance plan. Upon approval by the Management Board the capital markets issuance plan establishes issuing targets for securities by tenor, volume and instrument. We also maintain a stand-alone U.S. dollar and GBP funding matrix which limits the maximum short position in any time bucket (more than 1 year to more than 10 years) to €10 billion and €5 billion respectively. This supplements the risk appetite for our aggregate currency funding matrix which requires us to maintain a positive funding position in any time bucket (more than 1 year to more than 10 years).

### Net Stable Funding Ratio

The Net Stable Funding Ratio ("NSFR") was proposed as part of Basel 3, as the regulatory metric for assessing a bank's structural funding profile. The NSFR is intended to reduce medium to long-term funding risks by requiring banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities. The ratio is defined as the amount of Available Stable Funding (the portion of capital and liabilities expected to be a stable source of funding), relative to the amount of Required Stable Funding (a function of the liquidity characteristics of various assets held).

Although the NSFR is scheduled to become a minimum standard internationally, by January 1, 2018, the ratio is subject to national implementation. In the EU, on November 23, 2016, the Commission published a legislative proposal to amend the CRR. The proposal defines, inter alia, a mandatory quantitative NSFR requirement and which would apply two years after the proposal's entry into force. The proposal remains subject to change in the EU legislative process. Therefore, for banks domiciled in the EU, the final definition of the ratio and associated implementation timeframe has not yet been confirmed.

We are currently in the process of assessing the impacts of the NSFR, and would expect to formally embed this metric within our overall liquidity risk management framework, once the relevant rules and timing within the EU have been finally determined.

## Funding Diversification

Diversification of our funding profile in terms of investor types, regions, products and instruments is an important element of our liquidity risk management framework. Our most stable funding sources come from capital markets and equity, retail, and transaction banking clients. Other customer deposits and secured funding and shorts are additional sources of funding. Unsecured wholesale funding represents unsecured wholesale liabilities sourced primarily by our Treasury Pool division. Given the relatively short-term nature of these liabilities, they are primarily used to fund cash and liquid trading assets.

To promote the additional diversification of our refinancing activities, we hold a Pfandbrief license allowing us to issue mortgage Pfandbriefe. In addition, we have established a program for the purpose of issuing Covered Bonds under Spanish law (Cedulas).

Unsecured wholesale funding comprises a range of unsecured products, such as Certificates of Deposit (CDs), Commercial Paper (CP) as well as term, call and overnight deposits across tenors primarily up to one year.

To avoid any unwanted reliance on these short-term funding sources, and to promote a sound funding profile, which complies with the defined risk appetite, we have implemented limits (across tenors) on these funding sources, which are derived from our monthly stress testing analysis. In addition, we limit the total volume of unsecured wholesale funding to manage the reliance on this funding source as part of the overall funding diversification.

The chart on page 188 shows the composition of our external funding sources that contribute to the liquidity risk position, both in EUR billion and as a percentage of our total external funding sources.

## Funds Transfer Pricing

The funds transfer pricing framework applies to all businesses and regions and promotes pricing of (i) assets in accordance with their underlying liquidity risk, (ii) liabilities in accordance with their liquidity value and funding maturity and (iii) contingent liquidity exposures in accordance with the cost of providing for commensurate liquidity reserves to fund unexpected cash requirements.

Deutsche Bank's funds transfer pricing framework reflects regulatory principles and guidelines. Within this framework all funding and liquidity risk costs and benefits are allocated to the firm's business units based on market rates. Those market rates reflect the economic costs of liquidity for Deutsche Bank. Treasury might set further financial incentives in line with the Bank's liquidity risk guidelines. While the framework promotes a diligent group-wide allocation of the Bank's funding costs to the liquidity users, it also provides an incentive based compensation framework for businesses generating stable long-term and stress compliant funding. Funding relevant transactions are subject to liquidity (term) premiums and/or other funds transfer pricing mechanisms depending on market conditions. Liquidity premiums are set by Treasury and reflected in a segregated Treasury liquidity account which is the aggregator of liquidity costs and benefits. The management and allocation of the liquidity account cost base is the key variable for funds transfer pricing within Deutsche Bank.

## Liquidity Reserves

Liquidity reserves comprise available cash and cash equivalents, highly liquid securities (includes government, agency and government guaranteed) as well as other unencumbered central bank eligible assets.

The volume of our liquidity reserves is a function of our expected daily stress result, both at an aggregate level as well as at an individual currency level. To the extent we receive incremental short-term wholesale liabilities which attract a high stress roll-off, we will largely keep the proceeds of such liabilities in cash or highly liquid securities as a stress mitigant. Accordingly, the total volume of our liquidity reserves will fluctuate as a function of the level of short-term wholesale liabilities held, although this has no material impact on our overall liquidity position under stress. Our liquidity reserves include only assets that are freely transferable within the Group, or can be applied against local entity stress outflows. We hold the vast majority of our liquidity reserves centrally, at our parent and our foreign branches with further reserves held at key locations in which we are active. While we hold our reserves across major currencies, their size and composition are subject to regular senior management review.

## Asset Encumbrance

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. We generally encumber loans to support long-term capital markets secured issuance such as Pfandbriefe or other self-securitization structures, while financing debt and equity inventory on a secured basis is a regular activity for our Global Markets business. Additionally, in line with the EBA technical standards on regulatory asset encumbrance reporting, we consider assets placed with settlement systems, including default funds and initial margins as encumbered, as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks. We also include derivative margin receivable assets as encumbered under these EBA guidelines.

## Business (Strategic) Risk Management

Strategic risk is the risk of suffering operating income shortfall due to a decrease in revenues which cannot be compensated by cost reduction. It is a material risk type that may arise from our failure to execute our strategy, our failure to position the Bank strategically, or our ineffective response to material negative plan deviations caused by external or internal factors.

The management of strategic risk involves minimizing potential operating income shortfall that can have an adverse impact on Group capital. This is accomplished using risk controls at the Group level and at our different business units.

## Reputational Risk Management

Within our risk management process, we define reputational risk as the risk of possible damage to our brand and reputation, and the associated risk to earnings, capital or liquidity, arising from any association, action or inaction which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with DB's values and beliefs.

Our reputational risk is governed by the Reputational Risk Framework (the Framework). The Framework was established to provide consistent standards for the identification, assessment and management of reputational risk issues. While every employee has a responsibility to protect our reputation, the primary responsibility for the identification, assessment, management, monitoring and, if necessary, referring or reporting, of reputational risk matters lies with our Business Divisions. Each employee is under an obligation, within the scope of his or her activities, to be alert to any potential causes of reputational risk and to address them according to the Framework.

If a potential reputational risk is identified, it is required to be referred for further consideration within the Business Division through their Unit Reputational Risk Assessment Process. In the event that a matter is deemed to carry a material reputational risk and/or meets one of the mandatory referral criteria, it must be referred through to one of the four Regional Reputational Risk Committees (RRRCs) for further review as the 2<sup>nd</sup> line of defence. The RRRCs are sub-committees of the Group Reputational Risk Committee (GRRRC), which is itself a sub-committee of the Group Risk Committee (GRC), and are responsible for the oversight, governance and coordination of the management of reputational risk in their respective regions of Deutsche Bank on behalf of the Management Board. In exceptional circumstances, matters can also be referred by the RRRCs to the GRRRC.

The modeling and quantitative measurement of reputational risk internal capital is implicitly covered in our economic capital framework primarily within operational and strategic risk.

## Model Risk Management

Model risk is the potential for adverse consequences from incorrect or misused model outputs and reports using these outputs. Model risk can lead to financial loss, poor business or strategic decision making, or damage our reputation. In this context, the term 'model' refers to a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates.

Model risk is managed across Pricing models, Risk & Capital models, and other models:

- Pricing models are used to generate asset and liability fair value measurements reported in official books and records and/or risk sensitivities which feed Market Risk Management (MRM) processes;
- Risk & Capital models are related to risks used for regulatory or internal capital requirements, e.g. VaR, IMM, Stress tests etc;
- Other models are those outside of the Bank's Pricing and Risk & Capital models.

Model risk appetite is aligned to the Group's qualitative statements, ensuring that model risk management is embedded in a strong risk culture and that risks are minimized to the extent possible.

The management of Model risk includes:

- Performing robust independent model validation that provides effective challenge to the model development process and includes identification of conditions for use, methodological limitations that may require adjustments or overlays, and validation findings that require remediation;
- Establishing a strong model risk management and governance framework, including senior forums for monitoring and escalation of model risk related topics;
- Creating Bank-wide model risk related policies, aligned to regulatory requirements with clear roles and responsibilities for key stakeholders across the model life cycle; and
- Assessing the model control environment and reporting to the Management Board on a periodic basis.

## Insurance Specific Risk Management

Following the sale of Abbey Life, our exposure to insurance risk relates primarily to our defined benefit pension obligations which are described in greater detail in the additional Note 36 “Employee Benefits”. In our risk management framework, we consider insurance-related risks from pension obligations as non-trading market risk. In addition, there is also some insurance-related risk within the Pensions and Insurance Risk Markets business which we consider as trading market risk. We monitor the underlying assumptions in the calculation of these risks regularly and seek risk mitigating measures such as reinsurances. Within the Pensions and Insurance Risk Markets business, most insurance-related risks are hedged so that the bank is exposed to residual risks only. Risks arise primarily from:

- Longevity risk: the risk of faster or slower than expected improvements in life expectancy on immediate and deferred annuity products;
- Mortality and morbidity risks: the risks of a higher or lower than expected number of death or disability claims on insurance products and of an occurrence of one or more large claims; and
- Persistency risk: the risk of a higher or lower than expected percentage of lapsed policies.

## Risk Concentration and Risk Diversification

### Risk Concentrations

Risk concentrations refer to clusters of the same or similar risk drivers within specific risk types (intra-risk concentrations in credit, market, operational, liquidity and other risks) as well as across different risk types (inter-risk concentrations). They could occur within and across counterparties, businesses, regions/countries, industries and products. The management of concentrations is integrated as part of the management of individual risk types and monitored on an ongoing basis. The key objective is to avoid any undue concentrations in the portfolio, which is achieved through a quantitative and qualitative approach, as follows:

- Intra-risk concentrations are assessed, monitored and mitigated by the individual risk disciplines (credit, market, operational, liquidity risk management and others). This is supported by limit setting on different levels and/or management according to risk type.
- Inter-risk concentrations are managed through quantitative top-down stress-testing and qualitative bottom-up reviews, identifying and assessing risk themes independent of any risk type and providing a holistic view across the bank.

The most senior governance body for the oversight of risk concentrations throughout 2016 was the Enterprise Risk Committee (ERC), which is a subcommittee of the Group Risk Committee (GRC).

### Risk Type Diversification Benefit

The risk type diversification benefit quantifies diversification effects between credit, market, operational and strategic risk in the economic capital calculation. To the extent correlations between these risk types fall below 1.0, a risk type diversification benefit results. The calculation of the risk type diversification benefit is intended to ensure that the standalone economic capital figures for the individual risk types are aggregated in an economically meaningful way.

# Risk and Capital Performance

## Capital and Leverage Ratio

### Regulatory Capital

The calculation of our regulatory capital incorporates the capital requirements following the “Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms” (Capital Requirements Regulation or “CRR”) and the “Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms” (Capital Requirements Directive 4 or “CRD 4”) as implemented into German law. The information in this section as well as in the section “Development of risk-weighted Assets” is based on the regulatory principles of consolidation.

When referring to results according to full application of the final CRR/CRD 4 framework (without consideration of applicable transitional methodology) we use the term “CRR/CRD 4 fully loaded”. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. These relate, e.g., to the risk weighting of certain categories of assets and include rules permitting the grandfathering of equity investments at a risk-weight of 100 %. In this regard, we assume in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions that the impact of the expiration of these transitional rules will be mitigated through sales of the underlying assets or other measures prior to the expiration of the grandfathering provisions by end of 2017.

This section refers to the capital adequacy of the group of institutions consolidated for banking regulatory purposes pursuant to the CRR and the German Banking Act (“Kreditwesengesetz” or “KWG”). Therein not included are insurance companies or companies outside the finance sector. Our insurance companies are included in an additional capital adequacy (also “solvency margin”) calculation under the German Solvency Regulation for Financial Conglomerates. Our solvency margin as a financial conglomerate remains dominated by our banking activities.

The total regulatory capital pursuant to the effective regulations as of year-end 2016 comprises Tier 1 and Tier 2 (T2) capital. Tier 1 capital is subdivided into Common Equity Tier 1 (CET 1) capital and Additional Tier 1 (AT1) capital.

Common Equity Tier 1 (CET 1) capital consists primarily of common share capital (reduced by own holdings) including related share premium accounts, retained earnings (including losses for the financial year, if any) and accumulated other comprehensive income, subject to regulatory adjustments (i.e. prudential filters and deductions). Prudential filters for CET 1, according to Articles 32 to 35 CRR, include (i) securitization gain on sale, (ii) cash flow hedges and changes in the value of own liabilities, and (iii) additional value adjustments. CET 1 capital deductions comprise (i) intangible assets, (ii) deferred tax assets that rely on future profitability, (iii) negative amounts resulting from the calculation of expected loss amounts, (iv) net defined benefit pension fund assets, (v) reciprocal cross holdings in the capital of financial sector entities and, (vi) significant and non-significant investments in the capital (CET 1, AT1, T2) of financial sector entities above certain thresholds. All items not deducted (i.e., amounts below the threshold) are subject to risk-weighting.

Additional Tier 1 (AT1) capital consists of AT1 capital instruments and related share premium accounts as well as noncontrolling interests qualifying for inclusion in consolidated AT1, and during the transitional period grandfathered instruments eligible under earlier frameworks. To qualify as AT1 under CRR/CRD 4, instruments must have principal loss absorption through a conversion to common shares or a write-down mechanism allocating losses at a trigger point and must also meet further requirements (perpetual with no incentive to redeem; institution must have full dividend/coupon discretion at all times, etc.).

Tier 2 (T2) capital comprises eligible capital instruments, the related share premium accounts and subordinated long-term debt, certain loan loss provisions and noncontrolling interests that qualify for inclusion in consolidated T2. To qualify as T2, capital instruments or subordinated debt must have an original maturity of at least five years. Moreover, eligible capital instruments may inter alia not contain an incentive to redeem, a right of investors to accelerate repayment, or a credit sensitive dividend feature.

Capital instruments that no longer qualify as AT1 or T2 capital under the CRR/CRD 4 fully loaded rules are subject to grandfathering rules during transitional period and are phased out from 2013 to 2022 with their recognition capped at 60 % in 2016 and the cap decreasing by 10 % every year.

## Capital Instruments

The 2015 Annual General Meeting granted our Management Board the authority to buy back up to 137.9 million shares before the end of April 2020. Thereof 69.0 million shares can be purchased by using derivatives. These authorizations replaced the authorizations of the 2014 Annual General Meeting. We have received approval for compensation related share buybacks from the BaFin for 2015 and from the ECB for 2016 according to new CRR/CRD 4 rules. During the period from the 2015 Annual General Meeting until the 2016 Annual General Meeting (May 19, 2016), we purchased 37.9 million shares, of which 4.7 million shares through exercise of call options. The shares purchased were used for equity compensation purposes in the same period or were to be used in the upcoming period so that the number of shares held in Treasury from buybacks was 12.1 million as of the 2016 Annual General Meeting.

The 2016 Annual General Meeting granted our Management Board the approval to buy back up to 137.9 million shares before the end of April 2021. Thereof 69.0 million shares can be purchased by using derivatives. These authorizations substitute the authorizations of the previous year. During the period from the 2016 Annual General Meeting until December 31, 2016, 0.9 million shares have been repurchased. The shares purchased were used for equity compensation purposes in the same period so that no shares from buybacks were held in Treasury as of December 31, 2016.

Since the 2015 Annual General Meeting, and as of December 31, 2016, authorized capital available to the Management Board was €1,760 million (688 million shares). As of December 31, 2016, the conditional capital stood at €486 million (190 million shares).

Our legacy Hybrid Tier 1 capital instruments (substantially all noncumulative trust preferred securities) are not fully recognized under fully loaded CRR/CRD 4 rules, mainly because they have no write-down or equity conversion feature. However, they are to a large extent recognized as Additional Tier 1 capital under CRR/CRD 4 transitional provisions and can still be partially recognized as Tier 2 capital under the fully loaded CRR/CRD 4 rules. During the transitional phase-out period the maximum recognizable amount of Additional Tier 1 instruments from Basel 2.5 compliant issuances as of December 31, 2012 will be reduced at the beginning of each financial year by 10 % or €1.3 billion, through 2022. For December 31, 2016, this resulted in eligible Additional Tier 1 instruments of €11.1 billion (i.e. €4.6 billion newly issued AT1 Notes plus €6.5 billion of legacy Hybrid Tier 1 instruments recognizable during the transition period). One Hybrid Tier 1 capital instrument with a notional of \$ 0.2 billion and an eligible equivalent amount of €0.1 billion had been called in 2016. €6.0 billion of the legacy Hybrid Tier 1 instruments can still be recognized as Tier 2 capital under the fully loaded CRR/CRD 4 rules. Additional Tier 1 instruments recognized after regulatory adjustments under fully loaded CRR/CRD 4 rules amounted to €4.6 billion as of December 31, 2016.

On May 19, 2016, we issued fixed rate subordinated Tier 2 notes with an aggregate amount of €750 million. The notes have a denomination of €100,000 and are due April 19, 2026. They were issued in transactions outside of the United States, not subject to the registration requirements of the US Securities Act of 1933, as amended, and were not offered or sold in the United States.



Furthermore, we issued fixed rate subordinated Tier 2 notes with an aggregate amount of €31 million on June 15, 2016. The notes have a denomination of €100,000 and are due June 15, 2026. They were issued in transactions outside of the United States, not subject to the registration requirements of the US Securities Act of 1933, as amended, and were not offered or sold in the United States.

The total of our Tier 2 capital instruments as of December 31, 2016 recognized after regulatory adjustments during the transition period under CRR/CRD 4 was €6.7 billion. As of December 31, 2016, there are no further legacy Hybrid Tier 1 instruments that are counted as Tier 2 capital under transitional rules. The gross notional value of the Tier 2 capital instruments was €8.0 billion. No Tier 2 capital instrument had been called in 2016. Tier 2 instruments recognized under fully loaded CRR/CRD 4 rules amounted to €12.7 billion as of December 31, 2016 (including the €6.0 billion legacy Hybrid Tier 1 capital instruments only recognizable as Additional Tier 1 capital during the transitional period).

## Minimum capital requirements and additional capital buffers

The Pillar 1 CET 1 minimum capital requirement applicable to the Group is 4.50 % of risk-weighted assets (RWA). The Pillar 1 total capital requirement of 8.00 % demands further resources that may be met with up to 1.50 % Additional Tier 1 capital and up to 2.00 % Tier 2 capital.

Failure to meet minimum capital requirements can result in supervisory measures such as restrictions of profit distributions or limitations on certain businesses such as lending. We complied with the regulatory capital adequacy requirements in 2016. Our subsidiaries which were not included in our regulatory consolidation due to their immateriality did not have to comply with own minimum capital standards in 2016.

In addition to these minimum capital requirements, the following combined capital buffer requirements have been phased in since 2016 (other than the systemic risk buffer, if any, which is not subject to any phase-in) and will become fully effective from 2019 onwards. The buffer requirements must be met in addition to the Pillar 1 minimum capital requirements, but can be drawn down in times of economic stress.

In March 2015, Deutsche Bank was designated as a G-SII by the German Federal Financial Supervisory Authority (BaFin) in agreement with Deutsche Bundesbank resulting in a G-SII buffer requirement of 2.00 % CET 1 capital of RWA in 2019. This is in line with the Financial Stability Board (FSB) assessment of systemic importance based on the indicators as published in 2015. The additional buffer requirement of 2.00 % for G-SIIs was phased in with 0.50 % in 2016 and in 2017 amounts to 1.00 %. We will continue to publish our indicators on our website.

The capital conservation buffer is implemented in Section 10c German Banking Act based on Article 129 CRD 4 and equals a requirement of 2.50 % CET 1 capital of RWA. The additional buffer requirement of 2.50 % was phased in with 0.625 % in 2016 and in 2017 amounts to 1.25 %.

The countercyclical capital buffer is deployed in a jurisdiction when excess credit growth is associated with an increase in system-wide risk. It may vary between 0 % and 2.50 % CET 1 capital of RWA by 2019. In exceptional cases, it could also be higher than 2.50 %. The institution specific countercyclical buffer that applies to Deutsche Bank is the weighted average of the countercyclical capital buffers that apply in the jurisdictions where our relevant credit exposures are located. As per December 31, 2016 (and currently), the institution-specific countercyclical capital buffer was at 0.01 %.

In addition to the aforementioned buffers, national authorities, such as the BaFin, may require a systemic risk buffer to prevent and mitigate long-term non-cyclical systemic or macro-prudential risks that are not covered by the CRR. They can require an additional buffer of up to 5.00 % CET 1 capital of RWA. As of the year-end 2016 (and currently), no systemic risk buffer applied to Deutsche Bank.

Additionally, Deutsche Bank AG has been classified by BaFin as other systemically important institution (O-SII) with an additional buffer requirement of 2.00 % that has to be met on a consolidated level. For Deutsche Bank, the O-SII buffer is applied in steps of 0.66 % in 2017, 1.32 % in 2018 and 2.00 % in 2019. As of the year-end 2016, no O-SII buffer applied to Deutsche Bank.

Unless certain exceptions apply, only the higher of the systemic risk buffer, G-SII buffer and O-SII buffer must be applied. Accordingly, the O-SII buffer is currently not applied because it is lower than the G-SII buffer.

In addition, pursuant to the Pillar 2 Supervisory Review and Evaluation Process (SREP), the European Central Bank (ECB) may impose capital requirements on individual banks which are more stringent than statutory requirements (so-called Pillar 2 requirement). On December 4, 2015, the ECB informed Deutsche Bank that the consolidated Group has to keep a CET 1 ratio of at least 10.25 % on a phase-in basis under applicable transitional rules under CRR/CRD 4 at all times. Considering the G-SII buffer of 0.50 % and the countercyclical buffer of 0.01 %, our overall CET 1 requirements amounted to 10.76 % as of December 31, 2016. Correspondingly the requirements for Deutsche Bank's Tier 1 capital ratio were at 12.26 % and total capital ratio at 14.26 % as of December 31, 2016.

On December 8, 2016, Deutsche Bank has been informed by the ECB of its decision regarding prudential minimum capital requirements for 2017, following the results of the 2016 SREP. The decision requires Deutsche Bank to maintain a phase-in CET 1 ratio of at least 9.51 % on a consolidated basis, beginning on January 1, 2017. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50 %, the Pillar 2 requirement (SREP Add-on) of 2.75 %, the phase-in capital conservation buffer of 1.25 %, the countercyclical buffer (currently 0.01 %) and the phase-in G-SII buffer following Deutsche Bank's designation as a global systemically important institution ("G-SII") of 1.00 %. The new CET 1 capital requirement of 9.51 % for 2017 is lower than the CET 1 capital requirement of 10.76 %, which was applicable to Deutsche Bank in 2016. Correspondingly, 2017 requirements for Deutsche Bank's Tier 1 capital ratio are at 11.01 % and for its total capital ratio at 13.01 %. Also, following the results of the 2016 SREP, the ECB communicated to us an individual expectation to hold a further "Pillar 2" CET 1 capital add-on, commonly referred to as the "Pillar 2" guidance'. The capital add-on pursuant to the "Pillar 2" guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the "Pillar 2" guidance although it is not legally binding, and failure to meet the "Pillar 2" guidance does not automatically trigger legal action.

The following table gives an overview of the different Pillar 1 and Pillar 2 minimum capital requirements (but excluding the "Pillar 2" guidance) as well as capital buffer requirements applicable to Deutsche Bank in the years 2016 and 2017 (articulated on a phase-in basis):

#### Overview total capital requirements and capital buffers

	2016	2017
<b>Pillar 1</b>		
Minimum CET1 requirement	4.50 %	4.50 %
Capital Conservation Buffer	0.625 %	1.25 %
Countercyclical Buffer	0.01 %	0.01 % <sup>1</sup>
G-SII Buffer <sup>3</sup>	0.50 %	1.00 %
O-SII Buffer <sup>3</sup>	0.00 %	0.66 %
Systemic Risk Buffer <sup>3</sup>	0.00 %	0.00 % <sup>2</sup>
<b>Pillar 2</b>		
Pillar 2 SREP Add-on of CET1 capital (excluding the "Pillar 2" guidance)	5.125 %	2.75 %
SREP CET1 Requirement	10.25 %	8.50 %
<b>Total CET1 requirement from Pillar 1 and 2<sup>4</sup></b>	<b>10.76 %</b>	<b>9.51 %</b>
<b>Total Tier 1 requirement from Pillar 1 and 2</b>	<b>12.26 %</b>	<b>11.01 %</b>
<b>Total capital requirement from Pillar 1 and 2</b>	<b>14.26 %</b>	<b>13.01 %</b>

<sup>1</sup> Deutsche Bank's countercyclical buffer requirement is subject to country-specific buffer rates decreed by EBA and the Basel Committee of Banking Supervision (BCBS) as well as Deutsche Bank's relevant credit exposures as per respective reporting date. The countercyclical buffer rate for 2017 has been assumed to be 0.01 % due to unavailability of 2017 data.

<sup>2</sup> The systemic risk buffer has been assumed to remain at 0 % for the projected year 2017, subject to changes based on further directives.

<sup>3</sup> Unless certain exceptions apply only the higher of the systemic risk buffer, G-SII and O-SII buffer must be applied.

<sup>4</sup> The total Pillar 1 and Pillar 2 CET 1 requirement (excluding the "Pillar 2" guidance) is calculated as the sum of the SREP requirement, the higher of the G-SII, O-SII and systemic risk buffer requirement as well as the countercyclical buffer requirement.

## Development of regulatory capital

Our CRR/CRD 4 Tier 1 capital as of December 31, 2016 amounted to €55.5 billion, consisting of a Common Equity Tier 1 (CET 1) capital of €47.8 billion and Additional Tier 1 (AT1) capital of €7.7 billion. The CRR/CRD 4 Tier 1 capital was €2.7 billion lower than at the end of 2015, primarily driven by a decrease in CET 1 capital of €4.6 billion since year end 2015 while AT1 capital increased by €1.9 billion in the same period.

The €4.6 billion decrease of CRR/CRD 4 CET 1 capital was largely the result of increased regulatory adjustments due to the higher phase-in rate of 60 % in 2016 compared to 40 % in 2015 and the net loss attributable to Deutsche Bank shareholders and additional equity components of €1.4 billion in 2016. The Decision (EU) (2015/4) of the ECB requires the recognition of the year end loss in CET 1 capital. On March 5, 2017 the Management Board decided to recommend a dividend of €0.19 for 2015 and 2016 to the 2017 Annual General Meeting scheduled to take place in May 2017, taking into account expected shares following the Bank's proposed capital increase. Based on this new decision, regulatory capital as of year end 2016 was impacted by an accrual deduction of €0.4 billion. This dividend accrual is in line with ECB Decision (EU) (2015/4) on the recognition of interim or year-end profits in CET 1 capital. The positive year-on-year effect of €0.6 billion under the CRR/CRD 4 transitional rules resulting from the reversal of the 15 % threshold related deductions due to the sale of our participation in Hua Xia Bank was more than offset by a number of negative effects including remeasurement losses relating to defined benefit pension plans of €0.5 billion as well as an additional capital deduction of €0.3 billion that was imposed on Deutsche Bank effective from October 2016 onwards based on a notification by the ECB pursuant to Article 16(1)(c), 16(2)(b) and (j) of Regulation (EU) No 1024/2013.

The €1.9 billion increase in CRR/CRD 4 AT1 capital was mainly the result of reduced regulatory adjustments (€1.9 billion lower than at year end 2015) that were phased out from AT1 capital. These items reflect the residual amount of certain CET 1 deductions that are subtracted from CET 1 capital under fully loaded rules, but are allowed to reduce AT1 capital during the transitional period. The phase-in rate for these deductions on the level of CET 1 capital increased to 60 % in 2016 (40 % in 2015) and decreased correspondingly on the level of AT1 capital to 40 % in 2016 (60 % in 2015).

Our fully loaded CRR/CRD 4 Tier 1 capital as of December 31, 2016 was €46.8 billion, compared to €48.7 billion at the end of 2015. Our fully loaded CRR/CRD 4 CET 1 capital amounted to €42.3 billion as of December 31, 2016, compared to €44.1 billion as of December 31, 2015. Our fully loaded CRR/CRD 4 Additional Tier 1 capital amounted to €4.6 billion as per end of December 2016, unchanged compared to year end 2015.

The decrease of our fully loaded CET 1 capital of €1.8 billion compared to year end 2015 capital was largely the result of our negative net income of €1.4 billion and the dividend accrual of €0.4 billion. The positive year-on-year effect of €1.8 billion resulting from the reversal of the 15 % threshold-related deductions due to the sale of our participation in Hua Xia Bank was almost entirely offset by a number of negative effects including higher CET 1 capital deductions of deferred tax assets on unused tax losses of €0.5 billion, remeasurement losses related to defined benefit pension plans of €0.5 billion, the additional capital deduction of €0.3 billion that was imposed on Deutsche Bank effective from October 2016 onwards and a further decrease of €0.5 billion mainly driven by net unrealized losses on financial assets available for sale.

## Transitional template for regulatory capital, RWA and capital ratios

in € m.	Dec 31, 2016		Dec 31, 2015	
	CRR/CRD 4 fully loaded	CRR/CRD 4	CRR/CRD 4 fully loaded	CRR/CRD 4
<b>Common Equity Tier 1 (CET 1) capital: instruments and reserves</b>				
Capital instruments and the related share premium accounts	37,290	37,290	37,088	37,088
Retained earnings	20,113	20,113	27,607	27,607
Accumulated other comprehensive income (loss), net of tax	3,708	3,645	4,096	4,281
Independently reviewed interim profits net of any foreseeable charge or dividend <sup>1</sup>	(2,023)	(2,023)	(7,025)	(7,025)
Other	0	79	0	92
<b>Common Equity Tier 1 (CET 1) capital before regulatory adjustments</b>	<b>59,088</b>	<b>59,104</b>	<b>61,766</b>	<b>62,042</b>
<b>Common Equity Tier 1 (CET 1) capital: regulatory adjustments</b>				
Additional value adjustments (negative amount)	(1,398)	(1,398)	(1,877)	(1,877)
Other prudential filters (other than additional value adjustments)	(639)	(428)	(622)	(330)
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(8,436)	(5,062)	(8,439)	(3,376)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (negative amount)	(3,854)	(2,312)	(3,310)	(1,324)
Negative amounts resulting from the calculation of expected loss amounts	(297)	(188)	(106)	(58)
Defined benefit pension fund assets (negative amount)	(945)	(567)	(1,173)	(469)
Direct, indirect and synthetic holdings by an institution of own CET 1 instruments (negative amount)	(59)	(41)	(76)	(39)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10 % / 15 % thresholds and net of eligible short positions) (negative amount)	0	0	(818)	(278)
Deferred tax assets arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (amount above the 10 % / 15 % thresholds) (negative amount)	(590)	(354)	(953)	(324)
Other regulatory adjustments <sup>2</sup>	(591)	(971)	(291)	(1,537)
<b>Total regulatory adjustments to Common Equity Tier 1 (CET 1) capital</b>	<b>(16,810)</b>	<b>(11,321)</b>	<b>(17,665)</b>	<b>(9,613)</b>
<b>Common Equity Tier 1 (CET 1) capital</b>	<b>42,279</b>	<b>47,782</b>	<b>44,101</b>	<b>52,429</b>
<b>Additional Tier 1 (AT1) capital: instruments</b>				
Capital instruments and the related share premium accounts	4,676	4,676	4,676	4,676
Amount of qualifying items referred to in Art. 484 (4) CRR and the related share premium accounts subject to phase out from AT1	N/M	6,516	N/M	6,482
<b>Additional Tier 1 (AT1) capital before regulatory adjustments</b>	<b>4,676</b>	<b>11,191</b>	<b>4,676</b>	<b>11,157</b>
<b>Additional Tier 1 (AT1) capital: regulatory adjustments</b>				
Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(125)	(51)	(125)	(48)
Residual amounts deducted from AT1 capital with regard to deduction from CET 1 capital during the transitional period pursuant to Art. 472 CRR	N/M	(3,437)	N/M	(5,316)
Other regulatory adjustments	0	0	0	0
<b>Total regulatory adjustments to Additional Tier 1 (AT1) capital</b>	<b>(125)</b>	<b>(3,488)</b>	<b>(125)</b>	<b>(5,365)</b>
<b>Additional Tier 1 (AT1) capital</b>	<b>4,551</b>	<b>7,703</b>	<b>4,551</b>	<b>5,793</b>
<b>Tier 1 capital (T1 = CET 1 + AT1)</b>	<b>46,829</b>	<b>55,486</b>	<b>48,651</b>	<b>58,222</b>
<b>Tier 2 (T2) capital</b>	<b>12,673</b>	<b>6,672</b>	<b>12,325</b>	<b>6,299</b>
<b>Total capital (TC = T1 + T2)</b>	<b>59,502</b>	<b>62,158</b>	<b>60,976</b>	<b>64,522</b>
<b>Total risk-weighted assets</b>	<b>357,518</b>	<b>356,235</b>	<b>396,714</b>	<b>397,382</b>
<b>Capital ratios</b>				
Common Equity Tier 1 capital ratio (as a percentage of risk-weighted assets)	11.8	13.4	11.1	13.2
Tier 1 capital ratio (as a percentage of risk-weighted assets)	13.1	15.6	12.3	14.7
Total capital ratio (as a percentage of risk-weighted assets)	16.6	17.4	15.4	16.2

N/M – Not meaningful

<sup>1</sup> Reflects the Management Board's decision to propose a dividend per share of €0.19 for 2015 and 2016 taking into consideration the expected shares to be issued before the Annual General Meeting in May 2017.<sup>2</sup> Including an additional capital deduction of €0.3 billion that was imposed on Deutsche Bank effective from October 2016 onwards based on a notification by the ECB pursuant to Article 16(1)(c), 16(2)(b) and (j) of Regulation (EU) No 1024/2013 as well as the additional filter for funds for home loans and savings protection ("Fonds für baupartechnische Absicherung") of €0.2 billion.

## Reconciliation of shareholders' equity to regulatory capital

in € m.	Dec 31, 2016 CRR/CRD 4	Dec 31, 2015 CRR/CRD 4
<b>Total shareholders' equity per accounting balance sheet</b>	<b>59,833</b>	<b>62,678</b>
Deconsolidation/Consolidation of entities	(123)	(681)
Thereof:		
Additional paid-in capital	(6)	(5)
Retained earnings	(276)	(369)
Accumulated other comprehensive income (loss), net of tax	159	(307)
<b>Total shareholders' equity per regulatory balance sheet</b>	<b>59,710</b>	<b>61,997</b>
Noncontrolling interest based on transitional rules	79	92
Accrual for dividend and AT1 coupons <sup>1</sup>	(621)	(231)
Reversal of deconsolidation/consolidation of the position Accumulated other comprehensive income (loss), net of tax, during transitional period	(63)	184
<b>Common Equity Tier 1 (CET 1) capital before regulatory adjustments</b>	<b>59,104</b>	<b>62,042</b>
Additional value adjustments	(1,398)	(1,877)
Other prudential filters (other than additional value adjustments)	(428)	(330)
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 467 and 468 CRR	(380)	(1,246)
Goodwill and other intangible assets (net of related tax liabilities)	(5,062)	(3,376)
Deferred tax assets that rely on future profitability	(2,666)	(1,648)
Defined benefit pension fund assets	(567)	(469)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	(278)
Other regulatory adjustments	(820)	(389)
<b>Common Equity Tier 1 capital</b>	<b>47,782</b>	<b>52,429</b>

<sup>1</sup> Reflects the Management Board's decision to propose a dividend per share of €0.19 for 2015 and 2016 taking into consideration the expected shares to be issued before the Annual General Meeting in May 2017.

## Development of regulatory capital

in € m.	CRR/CRD 4	
	Dec 31, 2016	Dec 31, 2015
<b>Common Equity Tier 1 (CET 1) capital - opening amount</b>	<b>52,429</b>	<b>60,103</b>
Common shares, net effect	0	0
Additional paid-in capital	192	(53)
Retained earnings	(1,826)	(6,097)
Common shares in treasury, net effect/(+) sales (-) purchase	10	(3)
Movements in accumulated other comprehensive income	231	2,759
Accrual for dividend and Additional Tier 1 (AT1) coupons <sup>1</sup>	(621)	(231)
Additional value adjustments	479	(1,877)
Goodwill and other intangible assets (net of related tax liabilities)	(1,686)	(780)
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	(988)	(800)
Negative amounts resulting from the calculation of expected loss amounts	(130)	89
Defined benefit pension fund assets	(97)	(277)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	278	(194)
Securitization positions not included in risk-weighted assets	0	0
Deferred tax assets arising from temporary differences (amount above 10 % and 15 % threshold, net of related tax liabilities where the conditions in Art. 38 (3) CRR are met)	(30)	(191)
Other, including regulatory adjustments	(457)	(19)
<b>Common Equity Tier 1 (CET 1) capital - closing amount</b>	<b>47,782</b>	<b>52,429</b>
<b>Additional Tier 1 (AT1) Capital – opening amount</b>	<b>5,793</b>	<b>3,794</b>
New Additional Tier 1 eligible capital issues	0	0
Matured and called instruments	(76)	(4,289)
Transitional arrangements	1,879	5,529
Thereof:		
Goodwill and other intangible assets (net of related tax liabilities)	1,689	5,320
Other, including regulatory adjustments	108	759
<b>Additional Tier 1 (AT1) Capital – closing amount</b>	<b>7,703</b>	<b>5,793</b>
<b>Tier 1 capital</b>	<b>55,486</b>	<b>58,222</b>
<b>Tier 2 (T2) capital – closing amount</b>	<b>6,672</b>	<b>6,299</b>
<b>Total regulatory capital</b>	<b>62,158</b>	<b>64,522</b>

<sup>1</sup> Reflects the Management Board's decision to propose a dividend per share of € 0.19 for 2015 and 2016 taking into consideration the expected shares to be issued before the Annual General Meeting in May 2017.

## Development of risk-weighted assets

The table below provides an overview of RWA broken down by model approach and business division. They include the aggregated effects of the segmental reallocation of infrastructure related positions, if applicable, as well as reallocations between the segments.

Within credit risk, the line item "Other" in advanced IRBA reflects RWA from securitization positions in the banking book, specific equity positions and other non-credit obligation assets. Within the Standardized Approach, the line item "Other" includes RWA from banking book securitizations as well as exposures assigned to the further exposure classes apart from central governments or central banks, institutions, corporates and retail.

Risk-weighted assets by model approach and business division according to transitional rules

	Dec 31, 2016							
in € m.	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjustments and Other	Total
Credit Risk	61,288	62,997	36,161	3,758	36,561	4,075	15,505	220,345
Segment reallocation	1,594	2,397	990	191	0	77	(5,249)	0
Advanced IRBA	52,218	58,214	31,924	1,713	29,901	2,318	19,167	195,454
Central Governments and Central Banks	1,840	1,023	39	1	10	0	14,523	17,436
Institutions	7,903	3,168	140	31	1,205	47	778	13,272
Corporates	34,237	47,541	8,678	234	7,450	466	1,785	100,392
Retail	124	28	22,237	0	18,507	421	0	41,317
Other	8,114	6,454	830	1,447	2,729	1,383	2,081	23,038
Foundation IRBA	2,021	190	0	0	3,505	0	0	5,716
Central Governments and Central Banks	0	0	0	0	0	0	0	0
Institutions	0	0	0	0	6	0	0	6
Corporates	2,021	190	0	0	3,499	0	0	5,710
Standardized Approach	5,270	2,196	3,247	1,854	3,035	1,678	1,587	18,867
Central Governments or Central Banks	22	0	2	0	50	0	0	75
Institutions	430	5	11	0	40	1	23	509
Corporates	2,136	1,351	1,103	834	731	697	1,096	7,948
Retail	1	187	1,543	0	1,656	83	0	3,470
Other	2,681	652	587	1,020	558	898	468	6,866
Risk exposure amount for default funds contributions	185	1	0	0	121	0	0	308
Settlement Risk	36	0	0	0	0	0	0	36
Credit Valuation Adjustment (CVA)	8,846	39	43	139	252	90	8	9,416
Internal Model Approach	8,808	39	25	139	242	90	4	9,347
Standardized Approach	38	0	18	0	10	0	3	69
Market Risk	29,409	788	0	0	62	3,502	0	33,762
Internal Model Approach	25,595	788	0	0	0	2,780	0	29,163
Standardized Approach	3,814	0	0	0	62	722	0	4,599
Operational Risk	58,032	15,578	7,362	4,957	5,334	1,413	0	92,675
Advanced measurement approach	58,032	15,578	7,362	4,957	5,334	1,413	0	92,675
<b>Total</b>	<b>157,612</b>	<b>79,403</b>	<b>43,565</b>	<b>8,854</b>	<b>42,209</b>	<b>9,079</b>	<b>15,512</b>	<b>356,235</b>



	Dec 31, 2015							
in € m.	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjustments and Other	Total
Credit Risk	61,132	70,748	41,310	8,194	37,553	11,558	11,524	242,019
Segment reallocation	(93)	2,016	1,133	272	5	71	(3,404)	0
Advanced IRBA	53,512	63,054	36,009	6,243	30,177	7,424	13,805	210,223
Central Governments and Central Banks	3,569	993	26	1	13	6	10,013	14,619
Institutions	7,744	3,948	111	78	1,293	342	633	14,149
Corporates	32,853	53,313	7,661	277	7,701	2,620	1,034	105,459
Retail	176	39	20,877	0	18,234	655	0	39,980
Other	9,170	4,761	7,334	5,888	2,937	3,801	2,125	36,016
Foundation IRBA	2,082	175	1	0	3,075	0	0	5,333
Central Governments and Central Banks	0	0	0	0	0	0	0	0
Institutions	0	0	0	0	5	0	0	5
Corporates	2,082	175	1	0	3,070	0	0	5,329
Standardized Approach	4,812	5,501	4,167	1,679	4,186	4,063	1,123	25,530
Central Governments or Central Banks	14	30	3	0	144	0	10	202
Institutions	538	34	14	1	81	2	0	671
Corporates	2,268	3,713	946	715	918	736	587	9,884
Retail	6	239	2,499	0	1,763	512	0	5,018
Other	1,985	1,485	705	962	1,279	2,813	525	9,755
Risk exposure amount for default funds contributions	820	2	0	0	111	0	0	933
Settlement Risk	9	0	0	0	0	0	0	9
Credit Valuation Adjustment (CVA)	11,971	8	74	309	391	3,082	41	15,877
Internal Model Approach	11,949	8	55	307	378	3,081	2	15,780
Standardized Approach	22	0	19	2	14	1	40	97
Market Risk	32,502	1,191	6	1,262	32	14,286	275	49,553
Internal Model Approach	27,643	1,032	6	367	0	8,741	275	38,063
Standardized Approach	4,860	159	0	895	32	5,545	0	11,491
Operational Risk	54,777	14,165	8,518	2,739	5,266	3,972	487	89,923
Advanced measurement approach	54,777	14,165	8,518	2,739	5,266	3,972	487	89,923
<b>Total</b>	<b>160,391</b>	<b>86,112</b>	<b>49,909</b>	<b>12,504</b>	<b>43,242</b>	<b>32,898</b>	<b>12,326</b>	<b>397,382</b>

The RWA according to CRR/CRD 4 were €356.2 billion as of December 31, 2016, compared to €397.4 billion at the end of 2015. The overall decrease of €41.1 billion largely reflects decreases in credit and market risk RWA. Credit Risk RWA are €21.7 billion lower mainly resulting from the sales of our Hua Xia and Abbey Life stakes as well as from continued de-risking activities in the Non-Core Operations Unit and optimization initiatives in Corporate & Investment Banking, including securitizations, hold book reductions and client portfolio optimization. Lower exposures mainly in Corporate & Investment Banking and Global Markets also contributed to the decrease. The decrease in RWA for market risk since December 31, 2015 was primarily driven by a reduction in risk levels predominantly in the Non-Core Operations Unit and to lesser extent from lower levels of exposure in Global Markets. The €6.5 billion reduction in RWA for CVA was mainly driven by further de-risking of the portfolio and changes resulting from model refinements. The increase in Operational Risk RWA was mainly driven by large operational risk events which are reflected in our AMA model, such as settlements of regulatory matters by financial institutions partially offset by a slight decrease in GM.

RWA calculated on CRR/CRD 4 fully loaded basis were €357.5 billion as of December 31, 2016 compared with €396.7 billion at the end of 2015. The decrease was driven by the same movements as outlined for the transitional rules. The fully loaded RWA were €1.3 billion higher than the risk-weighted assets under the transitional rules due to the application under the transition rules of the equity investment grandfathering rule according to Article 495 CRR, pursuant to which certain equity investments receive a 100 % risk weight instead of a risk weight between 190 % and 370 % determined based on Article 155 CRR that would apply under the CRR/CRD 4 fully loaded rules.

Despite this grandfathering rule not applying under full application of the CRR/CRD 4 framework, we continue to apply it in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions, based on our intention to mitigate the impact of the expiration of the grandfathering rule through sales of the underlying assets or other measures prior to its expiration at end of 2017. Our portfolio of transactions for which we will continue to apply the equity investment grandfathering rule until year end 2017 consisted of 15 transactions as of year-end 2016 amounting to € 220 million in exposures which will receive a 100 % risk weight instead of a risk weight between 190 % and 370 % in our CRR/CRD 4 fully loaded RWA figure. We are closely monitoring the market and potential impacts from illiquid markets or other similar difficulties which could make it unfeasible to exit these positions. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been not more than € 816 million, and thus our Group fully loaded RWA would have been not more than € 358.1 billion, as of December 31, 2016, rather than the Group fully loaded RWA of € 357.5 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2016 using RWAs of € 358.1 billion, such capital ratios would have remained unchanged (due to rounding) at the 11.8 %, 13.1 % and 16.6 %, respectively that we reported on a fully loaded basis with application of the grandfathering rule.

As of December 31, 2015, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA amounted to € 1.5 billion in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been not more than € 5.4 billion, and thus our Group fully loaded RWA would have been not more than € 400.7 billion as of December 31, 2015, rather than the Group fully loaded RWA of € 396.7 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2015 using RWAs of € 400.7 billion, such capital ratios would have been 11.0 %, 12.1 % and 15.2 %, respectively, instead of the 11.1 %, 12.3 % and 15.4 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

The following tables provide an analysis of key drivers for RWA movements observed for credit risk, thereof counterparty credit risk, market and operational risk and CVA in the reporting period. The classifications of key drivers are fully aligned with the recommendations of the Enhanced Disclosure Task Force (EDTF).

#### Development of Risk-weighted Assets for Credit Risk including Counterparty Credit Risk

in € m.	Dec 31, 2016		Dec 31, 2015	
	Credit risk RWA	Capital requirements	Credit risk RWA	Capital requirements
Credit risk RWA balance, beginning of year	242,019	19,362	244,128	19,531
Book size	(8,085)	(647)	(4,822)	(386)
Book quality	(3,827)	(306)	(2,103)	(168)
Model updates	2,328	186	728	58
Methodology and Policy	(1,280)	(102)	(3,346)	(268)
Acquisition and Disposals	(12,701)	(1,016)	(206)	(16)
Foreign exchange movements	350	28	10,378	830
Other	1,539	123	(2,738)	(219)
Credit risk RWA balance, end of year	220,345	17,628	242,019	19,362

#### Thereof: Development of Risk-weighted Assets for Counterparty Credit Risk

in € m.	Dec 31, 2016		Dec 31, 2015	
	Counterparty credit risk RWA	Capital requirements	Counterparty credit risk RWA	Capital requirements
Counterparty credit risk RWA balance, beginning of year	37,276	2,982	41,117	3,289
Book size	(2,740)	(219)	(6,224)	(498)
Book quality	511	41	(95)	(8)
Model updates	1,439	115	0	0
Methodology and Policy	(60)	(5)	0	0
Acquisition and Disposals	(707)	(57)	0	0
Foreign exchange movements	(106)	(8)	2,479	198
Other	0	0	0	0
Counterparty credit risk RWA balance, end of year	35,614	2,849	37,276	2,982

Organic changes in our portfolio size and composition are considered in the category “Book size”. The category “Book quality” mainly represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage activities. “Model updates” include model refinements and advanced model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the “Methodology and Policy” section. “Acquisition and Disposals” is reserved to show significant exposure movements which can be clearly assigned to new businesses or disposal-related activities. Changes that cannot be attributed to the above categories are reflected in the category “Other”.

The decrease in RWA for credit risk by 9 % or € 21.7 billion since December 31, 2015 is predominantly driven by reductions in “Acquisition and Disposals” and “Book Size”. “Acquisition and Disposal” largely reflects the sale of our Hua Xia and Abbey Life stakes. The reduction in “Book size” is driven by our ongoing de-risking activities in the NCOU as well as general exposure reductions and optimization initiatives in Global Markets and Corporate & Investment Banking. Process enhancements as well as the impact from recalibrations of our risk parameters shown in the category “Book quality” also contributed to the reduction.

The increase in “Model updates” within the counterparty credit risk table corresponds predominantly to a revised treatment of the applicable margin period of risk and general wrong way risk of specific derivatives portfolios, which was partially offset by a refinement in the calculation of effective maturity for collateralized counterparties. The increase in the category “Other” was mainly driven from the reversal of the 15 % threshold deduction due to the sale of our participation in Hua Xia Bank resulting in higher risk weighted assets for our deferred tax assets that rely on future profitability and arise from temporary differences.

#### Development of Risk-weighted Assets for Credit Valuation Adjustment

in € m.	Dec 31, 2016		Dec 31, 2015	
	CVA RWA	Capital requirements	CVA RWA	Capital requirements
CVA RWA balance, beginning of year	<b>15,877</b>	<b>1,270</b>	21,203	1,696
Movement in risk levels	(5,600)	(448)	(5,591)	(447)
Market data changes and recalibrations	278	22	(1,552)	(124)
Model updates	(1,000)	(80)	0	0
Methodology and policy	0	0	(77)	(6)
Acquisitions and disposals	0	0	0	0
Foreign exchange movements	(139)	(11)	1,894	152
CVA RWA balance, end of year	<b>9,416</b>	<b>753</b>	15,877	1,270

The development of CVA RWA is broken down into a number of categories: movement in risk levels, which includes changes to the portfolio size and composition; market data changes and calibrations, which includes changes in market data levels and volatilities as well as recalibrations; model updates refers to changes to either the IMM credit exposure models or the value-at-risk models that are used for CVA RWA; methodology and policy relates to changes to the regulation. Any significant business acquisitions or disposals would be highlighted on their own.

As of December 31, 2016, the RWA for CVA amounted to € 9.4 billion, representing a decrease of € 6.5 billion (40 %) compared with € 15.9 billion for December 31, 2015. The decrease was mainly driven by further de-risking of the portfolio and a model update impacting the ratings used within the value at risk calculation.

## Development of Risk-weighted Assets for Market Risk

in € m.	Dec 31, 2016						Total capital requirements
	VaR	SVaR	IRC	CRM	Other	Total RWA	
Market risk RWA balance, beginning of year	6,931	17,146	11,608	2,378	11,491	49,553	3,964
Movement in risk levels	(655)	(1,547)	(2,716)	(3,553)	(8,852)	(17,323)	(1,386)
Market data changes and recalibrations	403	0	0	0	2,018	2,421	194
Model updates/changes	(57)	237	(230)	0	0	(50)	(4)
Methodology and policy	(665)	(1,565)	0	1,475	0	(754)	(60)
Acquisitions and disposals	0	0	0	0	0	0	0
Foreign exchange movements	0	0	0	(27)	(58)	(84)	(7)
Other	0	0	0	0	0	0	0
Market risk RWA balance, end of year	5,957	14,271	8,662	273	4,599	33,762	2,701

in € m.	Dec 31, 2016	Dec 31, 2015
Market risk RWA balance, beginning of year	49,553	64,209
Movement in risk levels	(17,323)	(27,671)
Market data changes and recalibrations	2,421	3,919
Model updates	(50)	1,501
Methodology and policy	(754)	5,707
Acquisitions and disposals	0	0
Foreign exchange movements	(84)	1,888
Market risk RWA balance, end of year	33,762	49,553

The analysis for market risk covers movements in our internal models for value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure as well as results from the market risk standardized approach, which are captured in the table under the category “Other”. The market risk standardized approach covers trading securitizations and nth-to-default derivatives, longevity exposures, relevant Collective Investment Undertakings and market risk RWA from Postbank.

The market risk RWA movements due to changes in market data levels, volatilities, correlations, liquidity and ratings are included under the “Market data changes and recalibrations” category. Changes to our market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of “Model updates”. In the “Methodology and policy” category we reflect regulatory driven changes to our market risk RWA models and calculations. Significant new businesses and disposals would be assigned to the line item “Acquisition and disposals”. The impacts of “Foreign exchange movements” are only calculated for the CRM and Standardized approach methods.

As of December 31, 2016 the RWA for market risk was €33.8 billion. The €15.8 billion (32 %) RWA decrease for market risk since December 31, 2015 was primarily driven by a reduction in risk levels. This resulted from significant de-risking in the Non-Core Operations Unit, particularly impacting both the comprehensive risk measure and the market risk standardized approach for securitizations. In addition, lower levels of exposure in Global Markets also contributed to the decrease in “Movement in risk levels” across the other market risk components.

## Development of Risk-weighted Assets for Operational Risk

in € m.	Dec 31, 2016		Dec 31, 2015	
	Operational risk RWA	Capital requirements	Operational risk RWA	Capital requirements
Operational risk RWA balance, beginning of year	89,923	7,194	67,082	5,367
Loss profile changes (internal and external)	7,048	564	24,170	1,934
Expected loss development	(1,798)	(144)	(2,216)	(177)
Forward looking risk component	(1,140)	(91)	163	13
Model updates	(358)	(29)	724	58
Methodology and policy	(1,000)	(80)	0	0
Acquisitions and disposals	0	0	0	0
Operational risk RWA balance, end of year	92,675	7,414	89,923	7,194

Changes of internal and external loss events are reflected in the category “loss profile changes”. The category “expected loss development” is based on divisional business plans and is deducted from the AMA capital figure within certain constraints. The category “forward looking risk component” reflects qualitative adjustment and as such the effectiveness and performance of the day-to-day operational risk management activities via Key Risk Indicators and Self-Assessment scores, focusing on the business environment and internal control factors. The category “model updates” covers model refinements such as the implementation of model changes. The category “methodology and policy” represents externally driven changes such as regulatory add-ons. The category “acquisition and disposals” represents significant exposure movements which can be clearly assigned to new or disposed businesses.

The overall RWA increase of € 2.8 billion was mainly driven by large operational risk events which are reflected in our AMA model as part of “loss profile changes”, in particular through settlements of regulatory matters by financial institutions. The impact of the Bank’s settlement with the Department of Justice in the United States to resolve civil claims in connection with the bank’s issuance and underwriting of residential mortgage-backed securities and related securitization activities between 2005 and 2007, which was announced on December 23, 2016, has been analyzed alongside other changes to our operational risk profile in 2016 to confirm the adequacy of our capital requirements.

We have successfully implemented a model change in the first quarter concerning the modeling of the frequency distribution underlying our AMA capital model replacing a previous capital add-on as shown under “model updates” in the fourth quarter. Similarly in the fourth quarter, we have decommissioned an add-on in relation to IT risks after obtaining supervisory approval to use refined scenarios describing potential risks in our IT environment within our model as disclosed under “methodology and policy”.

Further impacts from the AMA model enhancements on the other operational risk RWA components are expected to materialize alongside the implementation of model changes recently approved by the Joint Supervisory Team.

## Economic Capital

### Internal Capital Adequacy

As the primary measure of our Internal Capital Adequacy Assessment Process (ICAAP) we assess our internal capital adequacy based on our “gone concern approach” as the ratio of our total capital supply divided by our total capital demand as shown in the table below. Our capital supply definition has been further aligned with the CRR/CRD 4 capital framework in the first quarter 2016. Consequently, goodwill and other intangible assets are now deducted from Pillar 2 capital supply, instead of being added to the capital demand. The prior year information has been revised.

#### Total capital supply and demand

in € m.

(unless stated otherwise)

	Dec 31, 2016	Dec 31, 2015
<b>Capital supply</b>		
Shareholders' equity	59,833	62,678
Fair value gains on own debt and debt valuation adjustments, subject to own credit risk <sup>1</sup>	(440)	(407)
Defined benefit pension fund assets <sup>2</sup>	(945)	(1,173)
Deferred tax assets	(8,666)	(7,762)
Additional valuation adjustments <sup>3</sup>	(1,398)	(1,877)
Expected loss shortfall	(297)	(106)
Home loans and savings protection	(231)	(291)
Holdings of own capital instruments	(45)	(62)
Fair value adjustments for assets reclassified where no matched funding is available <sup>4</sup>	(557)	(147)
Noncontrolling interests <sup>5</sup>	0	0
Intangible assets	(8,982)	(10,078)
Hybrid tier 1 capital instruments	11,259	11,962
Tier 2 capital instruments	8,003	8,016
<b>Capital supply</b>	<b>57,534</b>	<b>60,754</b>
<b>Total economic capital demand</b>		
Credit risk	13,105	13,685
Market risk	14,593	17,436
Operational risk	10,488	10,243
Business risk	5,098	5,931
Diversification benefit	(7,846)	(8,852)
<b>Capital demand</b>	<b>35,438</b>	<b>38,442</b>
<b>Internal capital adequacy ratio</b>	<b>162 %</b>	<b>158 %</b>

<sup>1</sup> Includes deduction of fair value gains on own credit-effect relating to own liabilities designated under the fair value option as well as the debt valuation adjustments.

<sup>2</sup> Reported as net assets (assets minus liabilities) of a defined pension fund, i.e. applicable for overfunded pension plans.

<sup>3</sup> As applied in the regulatory capital section.

<sup>4</sup> Includes fair value adjustments for assets reclassified in accordance with IAS 39 and for banking book assets where no matched funding is available. A positive adjustment is not considered.

<sup>5</sup> Includes noncontrolling interest up to the economic capital requirement for each subsidiary.

A ratio of more than 100 % signifies that the total capital supply is sufficient to cover the capital demand determined by the risk positions. This ratio was 162 % as of December 31, 2016, compared with 158 % as of December 31, 2015. The change of the ratio was due to the fact that capital supply decreased proportionately less than the capital demand did. Shareholders' equity decreased by €2.8 billion mainly driven by lower net income attributable to our shareholders. Hybrid Tier 1 capital instruments decreased by €703 million mainly driven by the redemption of instruments. The decrease in capital demand was driven by lower economic capital requirements as explained in the section “Risk Profile”.

The above capital adequacy measures apply to the consolidated Group as a whole (including Postbank) and form an integral part of our Risk and Capital Management framework.

## Leverage Ratio

We manage our balance sheet on a Group level and, where applicable, locally in each region. In the allocation of financial resources we favor business portfolios with the highest positive impact on our profitability and shareholder value. We monitor and analyze balance sheet developments and track certain market-observed balance sheet ratios. Based on this we trigger discussion and management action by the Group Risk Committee (GRC). Following the publication of the CRR/CRD 4 framework, we established a leverage ratio calculation according to that framework.

### Leverage Ratio according to revised CRR/CRD 4 framework (fully loaded)

The CRR/CRD 4 framework introduced a non-risk based leverage ratio that is intended to act as a supplementary measure to the risk based capital requirements. Its objectives are to constrain the build-up of leverage in the banking sector, helping avoid destabilizing deleveraging processes which can damage the broader financial system and the economy, and to reinforce the risk based requirements with a simple, non-risk based “backstop” measure. While the CRR/CRD 4 framework currently does not provide for a mandatory minimum leverage ratio to be complied with by the relevant financial institutions, a legislative proposal published by the European Commission on November 23, 2016 suggests introducing a minimum leverage ratio of 3 %. The legislative proposal provides that the leverage ratio applies two years after the proposal’s entry into force and remains subject to political discussion among EU institutions.

We calculate our leverage ratio exposure on a fully loaded basis in accordance with Article 429 of the CRR as per Delegated Regulation (EU) 2015/62 of October 10, 2014 published in the Official Journal of the European Union on January 17, 2015 amending Regulation (EU) No 575/2013.

Our total leverage ratio exposure consists of the components derivatives, securities financing transactions (SFTs), off-balance sheet exposure and other on-balance sheet exposure (excluding derivatives and SFTs).

The leverage exposure for derivatives is calculated by using the regulatory mark-to-market method for derivatives comprising the current replacement cost plus a regulatory defined add-on for the potential future exposure. Variation margin received in cash from counterparties is deducted from the current replacement cost portion of the leverage ratio exposure measure and variation margin paid to counterparties is deducted from the leverage ratio exposure measure related to receivables recognized as an asset on the balance sheet, provided certain conditions are met. Deductions of receivables assets for cash variation margin provided in derivatives transactions are shown under derivative exposure in table leverage ratio common disclosure. The effective notional amount of written credit derivatives, i.e., the notional reduced by any negative fair value changes that have been incorporated in Tier 1 capital is included in the leverage ratio exposure measure; the resulting exposure measure is further reduced by the effective notional amount of a purchased credit derivative on the same reference name provided certain conditions are met.

The SFT component includes the gross receivables for SFTs, which are netted with SFT payables if specific conditions are met. In addition to the gross exposure a regulatory add-on for the counterparty credit risk is included.

The off-balance sheet exposure component follows the credit risk conversion factors (CCF) of the standardized approach for credit risk (0 %, 20 %, 50 %, or 100 %), which depend on the risk category subject to a floor of 10 %.

The other on-balance sheet exposure component (excluding derivatives and SFTs) reflects the accounting values of the assets (excluding derivatives and SFTs) as well as regulatory adjustments for asset amounts deducted in determining Tier 1 capital.

The following tables show the leverage ratio exposure and the leverage ratio, both on a fully loaded basis, on the disclosure tables of the implementing technical standards (ITS) which were adopted by the European Commission via Commission Implementing Regulation (EU) 2016/200 published in the Official Journal of the European Union on February 16, 2016:



## Summary reconciliation of accounting assets and leverage ratio exposures

in € bn.	Dec 31, 2016	Dec 31, 2015
<b>Total assets as per published financial statements</b>	<b>1,591</b>	<b>1,629</b>
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	0	3
Adjustments for derivative financial instruments	(276)	(263)
Adjustment for securities financing transactions (SFTs)	20	25
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	102	109
Other adjustments	(90)	(107)
<b>Leverage ratio total exposure measure</b>	<b>1,348</b>	<b>1,395</b>

## Leverage ratio common disclosure

in € bn. (unless stated otherwise)	Dec 31, 2016	Dec 31, 2015
Total derivative exposures	177	215
Total securities financing transaction exposures	135	164
Total off-balance sheet exposures	102	109
Other Assets	948	924
Asset amounts deducted in determining Tier 1 capital fully loaded	(15)	(17)
 Tier 1 capital fully loaded	 46.8	 48.7
Total Exposures	1,348	1,395
Leverage Ratio – using a fully loaded definition of Tier 1 capital (in %)	3.5	3.5

## Description of the factors that had an impact on the leverage ratio in 2016

As of December 31, 2016, our fully loaded CRR/CRD 4 leverage ratio was 3.5 % compared to 3.5 % as of December 31, 2015, taking into account as of December 31, 2016 a fully loaded Tier 1 capital of €46.8 billion over an applicable exposure measure of €1,348 billion (€48.7 billion and €1,395 billion as of December 31, 2015, respectively).

Our CRR/CRD 4 leverage ratio according to transitional provisions was 4.1 % as of December 31, 2016, calculated as Tier 1 capital according to transitional rules of €55.5 billion over an applicable exposure measure of €1,350 billion. The exposure measure under transitional rules is €2 billion higher compared to the fully loaded exposure measure as the asset amounts deducted in determining Tier 1 capital are lower under transitional rules.

Over the year 2016, our leverage ratio exposure decreased by €48 billion to €1,348 billion. This principally reflects a decrease in derivative exposures of €38 billion primarily related to lower add-ons for potential future exposure and effective notional amounts of written credit derivatives after offsetting. Furthermore, there was a decrease of €29 billion in SFT exposures reflecting the overall decrease on the balance sheet in the SFT related items (securities purchased under resale agreements and securities borrowed, under both accrual and fair value accounting, and receivables from prime brokerage). In addition, off-balance sheet exposures decreased by €7 billion corresponding to lower notional amounts for irrevocable lending commitments and contingent liabilities. The mentioned decreases in leverage ratio exposure are partly offset by an increase of €25 billion in other assets, principally from higher cash and central bank balances on our balance sheet partly offset by reductions on our balance sheet in non-derivative trading assets, loans and financial assets available for sale.

The decrease of the leverage ratio exposure in 2016 includes foreign exchange impacts of €11 billion mainly due to the depreciation of the euro against the U.S. dollar which was partly offset by its appreciation against the pound sterling.

Our leverage ratio calculated as the ratio of total assets under IFRS to total equity under IFRS was 25 as of December 31, 2016 compared to 24 as of December 31, 2015.

For main drivers of the Tier 1 capital development please refer to section “Regulatory Capital” in this report.

## Credit Risk Exposure

Counterparty credit exposure arises from our traditional nontrading lending activities which include elements such as loans and contingent liabilities, as well as from our direct trading activity with clients in certain instruments including OTC derivatives like foreign exchange forwards and Forward Rate Agreements. A default risk also arises from our positions in equity products and traded credit products such as bonds.

We define our credit exposure by taking into account all transactions where losses might occur due to the fact that counterparties may not fulfill their contractual payment obligations.

### Maximum Exposure to Credit Risk

The maximum exposure to credit risk table shows the direct exposure before consideration of associated collateral held and other credit enhancements (netting and hedges) that do not qualify for offset in our financial statements for the periods specified. The netting credit enhancement component includes the effects of legally enforceable netting agreements as well as the offset of negative mark-to-markets from derivatives against pledged cash collateral. The collateral credit enhancement component mainly includes real estate, collateral in the form of cash as well as securities related collateral. In relation to collateral we apply internally determined haircuts and additionally cap all collateral values at the level of the respective collateralized exposure.

#### Maximum Exposure to Credit Risk

in € m. <sup>1</sup>	Maximum exposure to credit risk <sup>2</sup>	Dec 31, 2016			
		Credit Enhancements			
		Netting	Collateral	Guarantees and Credit derivatives <sup>3</sup>	Total credit enhancements
Cash and central bank balances	181,364	0	0	0	0
Interbank balances (w/o central banks)	11,606	0	0	25	25
Central bank funds sold and securities purchased under resale agreements	16,287	0	15,944	0	15,944
Securities borrowed	20,081	0	19,193	0	19,193
Financial assets at fair value through profit or loss <sup>4</sup>	667,411	389,475	139,274	1,241	529,990
Trading assets	95,410	0	3,601	1,007	4,607
Positive market values from derivative financial instruments	485,150	386,727	64,438	164	451,329
Financial assets designated at fair value through profit or loss	86,850	2,748	71,235	70	74,054
thereof:					
Securities purchased under resale agreement	47,404	2,748	44,591	0	47,339
Securities borrowed	21,136	0	20,918	0	20,918
Financial assets available for sale <sup>4</sup>	54,275	0	560	28	589
Loans <sup>5</sup>	413,455	0	210,776	30,189	240,965
Securities held to maturity	3,206	0	0	0	0
Other assets subject to credit risk	76,036	39,567	1,061	80	40,708
Financial guarantees and other credit related contingent liabilities <sup>6</sup>	52,341	0	5,094	8,661	13,756
Irrevocable lending commitments and other credit related commitments <sup>6</sup>	166,063	0	8,251	7,454	15,705
<b>Maximum exposure to credit risk</b>	<b>1,662,125</b>	<b>429,042</b>	<b>400,153</b>	<b>47,679</b>	<b>876,874</b>

<sup>1</sup> All amounts at carrying value unless otherwise indicated.

<sup>2</sup> Does not include credit derivative notional sold (€ 744,159 million) and credit derivative notional bought protection.

<sup>3</sup> Bought credit protection is reflected with the notional of the underlying.

<sup>4</sup> Excludes equities, other equity interests and commodities.

<sup>5</sup> Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.

<sup>6</sup> Figures are reflected at notional amounts.

in € m. <sup>1</sup>	Maximum exposure to credit risk <sup>2</sup>	Dec 31, 2015			
		Credit Enhancements			
		Netting	Collateral	Guarantees and Credit derivatives <sup>3</sup>	Total credit enhancements
Cash and central bank balances	96,940	0	22	–	22
Interbank balances (w/o central banks)	12,842	0	57	13	70
Central bank funds sold and securities purchased under resale agreements	22,456	0	22,037	0	22,037
Securities borrowed	33,557	0	32,031	0	32,031
Financial assets at fair value through profit or loss <sup>4</sup>	734,449	409,317	152,858	699	562,874
Trading assets	119,991	0	4,615	519	5,134
Positive market values from derivative financial instruments	515,594	407,171	69,008	106	476,285
Financial assets designated at fair value through profit or loss	98,864	2,146	79,235	74	81,455
thereof:					
Securities purchased under resale agreement	51,073	2,146	47,664	0	49,811
Securities borrowed	21,489	0	21,154	0	21,154
Financial assets available for sale <sup>4</sup>	71,368	0	760	–	760
Loans <sup>5</sup>	432,777	0	207,923	30,188	238,111
Other assets subject to credit risk	78,978	58,478	386	365	59,229
Financial guarantees and other credit related contingent liabilities <sup>6</sup>	57,325	0	5,730	8,166	13,897
Irrevocable lending commitments and other credit related commitments <sup>6</sup>	174,549	0	6,973	6,275	13,248
<b>Maximum exposure to credit risk</b>	<b>1,715,241</b>	<b>467,795</b>	<b>428,777</b>	<b>45,707</b>	<b>942,279</b>

<sup>1</sup> All amounts at carrying value unless otherwise indicated.

<sup>2</sup> Does not include credit derivative notional sold (€655,584 million) and credit derivative notional bought protection.

<sup>3</sup> Bought credit protection is reflected with the notional of the underlying.

<sup>4</sup> Excludes equities, other equity interests and commodities.

<sup>5</sup> Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.

<sup>6</sup> Figures are reflected at notional amounts.

The overall decrease in maximum exposure to credit risk for December 31, 2016 was driven by a €30.4 billion decrease in positive market values from derivative financial instruments, €24.6 billion decrease in trading assets, €19.3 billion decrease in loans, €17.1 billion decrease in financial assets available for sale and €12.0 billion decrease in financial assets designated at fair value through profit or loss during the period, partly offset by a €84.4 billion increase in cash and central bank balances.

Included in the category of trading assets as of December 31, 2016, were traded bonds of €81.3 billion (€103.2 billion as of December 31, 2015) that is over 81 % investment-grade (over 79 % as of December 31, 2015). The above mentioned financial assets available for sale category primarily reflected debt securities of which more than 98 % were investment-grade (more than 95 % as of December 31, 2015).

Credit Enhancements are split into three categories: netting, collateral, guarantees and credit derivatives. A prudent approach is taken with respect to haircuts, parameter setting for regular margin calls as well as expert judgments for collateral valuation to prevent market developments from leading to a build-up of uncollateralized exposures. All categories are monitored and reviewed regularly. Overall credit enhancements received are diversified and of adequate quality being largely cash, highly rated government bonds and third-party guarantees mostly from well rated banks and insurance companies. These financial institutions are mainly domiciled in Western European countries and the United States. Furthermore we have collateral pools of highly liquid assets and mortgages (principally consisting of residential properties mainly in Germany) for the homogeneous retail portfolio.

## Credit Quality of Financial Instruments neither Past Due nor Impaired

We derive our credit quality from internal ratings and group our exposures into classes as shown below. Please refer to section “Measuring Credit Risk” for more details about our internal ratings.

### Credit Quality of Financial Instruments neither Past Due nor Impaired

	Dec 31, 2016						
in € m. <sup>1</sup>	iAAA–iAA	iA	iBBB	iBB	iB	iCCC and below	Total
Cash and central bank balances	174,978	4,241	1,778	238	81	47	181,364
Interbank balances (w/o central banks)	5,546	3,452	1,612	689	112	195	11,606
Central bank funds sold and securities purchased under resale agreements	3,542	7,734	1,028	2,624	1,338	22	16,287
Securities borrowed	16,036	2,882	802	343	18	0	20,081
Financial assets at fair value through profit or loss <sup>2</sup>	277,645	258,627	61,162	52,904	11,183	5,889	667,411
Trading assets	46,398	10,956	12,024	17,729	5,833	2,471	95,410
Positive market values from derivative financial instruments	188,037	234,491	38,113	19,138	3,297	2,073	485,150
Financial assets designated at fair value through profit or loss	43,211	13,180	11,024	16,037	2,053	1,344	86,850
thereof:							
Securities purchased under resale agreement	13,622	10,684	7,401	13,667	1,165	866	47,404
Securities borrowed	18,697	1,498	937	4	0	0	21,136
Financial assets available for sale <sup>2</sup>	42,808	6,616	2,106	577	72	254	52,433
Loans <sup>3</sup>	44,116	52,421	127,682	121,213	42,941	14,273	402,645
thereof:							
IAS 39 reclassified loans	54	28	341	26	68	87	604
Securities held to maturity	3,206	0	0	0	0	0	3,206
Other assets subject to credit risk	26,594	25,791	9,656	13,091	630	273	76,036
Financial guarantees and other credit related contingent liabilities <sup>4</sup>	5,699	13,712	16,753	9,663	4,477	2,038	52,341
Irrevocable lending commitments and other credit related commitments <sup>4</sup>	21,479	45,635	47,480	29,274	18,173	4,022	166,063
<b>Total</b>	<b>621,650</b>	<b>421,112</b>	<b>270,058</b>	<b>230,615</b>	<b>79,025</b>	<b>27,013</b>	<b>1,649,473</b>

<sup>1</sup> All amounts at carrying value unless otherwise indicated.

<sup>2</sup> Excludes equities, other equity interests and commodities.

<sup>3</sup> Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.

<sup>4</sup> Figures are reflected at notional amounts.

	Dec 31, 2015						
in € m. <sup>1</sup>	iAAA–iAA	iA	iBBB	iBB	iB	iCCC and below	Total
Cash and central bank balances	91,154	2,377	1,918	1,311	68	111	96,940
Interbank balances (w/o central banks)	4,606	5,450	877	957	18	935	12,842
Central bank funds sold and securities purchased under resale agreements	3,607	15,590	1,870	1,234	37	118	22,456
Securities borrowed	24,306	5,380	1,461	2,361	49	0	33,557
Financial assets at fair value through profit or loss <sup>2</sup>	287,102	302,873	65,479	59,148	13,177	6,669	734,449
Trading assets	55,319	14,526	15,837	24,971	5,558	3,780	119,991
Positive market values from derivative financial instruments	184,183	271,328	36,100	17,265	4,894	1,824	515,594
Financial assets designated at fair value through profit or loss	47,601	17,019	13,543	16,912	2,724	1,065	98,864
thereof:							
Securities purchased under resale agreement	15,371	10,120	10,053	13,699	968	863	51,073
Securities borrowed	17,629	3,819	8	33	0	0	21,489
Financial assets available for sale <sup>2</sup>	59,157	4,519	2,070	3,404	159	219	69,528
Loans <sup>3</sup>	52,022	59,376	123,334	136,404	40,348	9,387	420,871
thereof:							
IAS 39 reclassified loans	1,672	461	878	627	76	397	4,110
Other assets subject to credit risk	30,724	26,465	6,924	13,615	941	308	78,978
Financial guarantees and other credit related contingent liabilities <sup>4</sup>	6,384	15,464	18,283	10,827	4,668	1,700	57,325
Irrevocable lending commitments and other credit related commitments <sup>4</sup>	23,035	46,220	44,603	37,643	21,212	1,834	174,549
<b>Total</b>	<b>582,099</b>	<b>483,714</b>	<b>266,820</b>	<b>266,904</b>	<b>80,678</b>	<b>21,282</b>	<b>1,701,495</b>

<sup>1</sup> All amounts at carrying value unless otherwise indicated.

<sup>2</sup> Excludes equities, other equity interests and commodities.

<sup>3</sup> Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.

<sup>4</sup> Figures are reflected at notional amounts.

The overall decline in total credit exposure of €52.0 billion for December 31, 2016 is mainly due to an decrease in positive market value from derivative financial instruments in investment-grade rating categories, mainly in the category iA.

## Main Credit Exposure Categories

The tables in this section show details about several of our main credit exposure categories, namely loans, irrevocable lending commitments, contingent liabilities, over-the-counter ("OTC") derivatives, traded loans, traded bonds, debt securities available for sale and repo and repo-style transactions:

- "Loans" are net loans as reported on our balance sheet at amortized cost but before deduction of our allowance for loan losses.
- "Irrevocable lending commitments" consist of the undrawn portion of irrevocable lending-related commitments.
- "Contingent liabilities" consist of financial and performance guarantees, standby letters of credit and other similar arrangements (mainly indemnity agreements).
- "OTC derivatives" are our credit exposures from over-the-counter derivative transactions that we have entered into, after netting and cash collateral received. On our balance sheet, these are included in financial assets at fair value through profit or loss or, for derivatives qualifying for hedge accounting, in other assets, in either case, before netting and cash collateral received.
- "Traded loans" are loans that are bought and held for the purpose of selling them in the near term, or the material risks of which have all been hedged or sold. From a regulatory perspective this category principally covers trading book positions.

- “Traded bonds” include bonds, deposits, notes or commercial paper that are bought and held for the purpose of selling them in the near term. From a regulatory perspective this category principally covers trading book positions.
- “Debt securities available for sale” include debentures, bonds, deposits, notes or commercial paper, which are issued for a fixed term and redeemable by the issuer, which we have classified as available for sale.
- “Repo and repo-style transactions” consist of reverse repurchase transactions, as well as securities or commodities borrowing transactions before application of netting and collateral received.

Although considered in the monitoring of maximum credit exposures, the following are not included in the details of our main credit exposure: brokerage and securities related receivables, cash and central bank balances, interbank balances (without central banks), assets held for sale, accrued interest receivables, traditional securitization positions as well as equity investments.

#### Main Credit Exposure Categories by Business Divisions

	Dec 31, 2016								
in € m.	Loans <sup>1</sup>	Irrevocable lending commit- ments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Traded Loans	Traded Bonds	Debt securities <sup>4</sup>	Repo and repo-style transactions <sup>5</sup>	Total
Global Markets	62,567	22,006	656	42,711	11,240	72,180	3,296	91,561	306,216
Corporate & Investment Banking	82,620	126,593	48,123	520	1,756	162	272	6,574	266,619
Private, Wealth and Commercial Clients	159,658	9,139	2,664	317	0	1	139	0	171,918
Deutsche Asset Management	343	55	21	27	7	2,569	26	0	3,047
Postbank	104,728	7,837	320	420	0	0	17,220	4,290	134,816
Non-Core Operations Unit	3,133	131	434	175	191	257	0	34	4,355
Consolidation & Adjustments and Other	407	302	123	24	0	6,124	33,768	2,450	43,197
Total	413,455	166,063	52,341	44,193	13,193	81,293	54,722	104,909	930,169

<sup>1</sup> Includes impaired loans amounting to € 7.4 billion as of December 31, 2016.

<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of € 10.3 billion as of December 31, 2016.

<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.

<sup>4</sup> Includes debt securities on financial assets available for sale and securities held to maturity.

<sup>5</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

	Dec 31, 2015								
in € m.	Loans <sup>1</sup>	Irrevocable lending commit- ments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Traded Loans	Traded Bonds	Debt securities available for sale	Repo and repo-style transactions <sup>4</sup>	Total
Global Markets	58,092	25,467	1,292	44,824	13,905	85,454	3,454	110,581	343,069
Corporate & Investment Banking	97,280	129,420	51,005	503	1,176	147	326	9,986	289,843
Private, Wealth and Commercial Clients	163,772	11,383	3,738	314	0	13	161	0	179,381
Deutsche Asset Management	265	63	22	406	10	4,296	3,281	0	8,343
Postbank	103,525	5,798	336	344	0	0	17,128	7,132	134,263
Non-Core Operations Unit	9,335	1,642	784	2,625	368	6,934	1,932	14	23,634
Consolidation & Adjustments and Other	508	775	149	37	0	6,368	41,985	862	50,684
<b>Total</b>	<b>432,777</b>	<b>174,549</b>	<b>57,325</b>	<b>49,053</b>	<b>15,459</b>	<b>103,212</b>	<b>68,266</b>	<b>128,575</b>	<b>1,029,215</b>

<sup>1</sup> Includes impaired loans amounting to €8.2 billion as of December 31, 2015.

<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €9.2 billion as of December 31, 2015.

<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.

<sup>4</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

As part of our resegmentation all Treasury activities have been moved in 2016 into Consolidation & Adjustments. The main contributor to the credit exposures included in Consolidation & Adjustments is Treasury liquidity reserves. Financial resources associated with Treasury activities are allocated to the divisional total assets and not at an individual asset line. This allocation in the main credit exposure categories would reduce the total credit exposure in Consolidation & Adjustment to €8.9 billion as of December 31, 2016 and €9.2 billion as of December 31, 2015 and would increase the other divisional totals respectively.

Our main credit exposure decreased by €99.0 billion.

- From a divisional perspective decreases in exposure are observed across all divisions except Postbank. Our exposure in Global Markets decreased by €36.9 billion and in Corporate & Investment Banking by €23.2 billion. Our Non-Core Operations Unit achieved a managed reduction of €19.3 billion.
- From a product perspective strong exposure reductions have been observed for repo and repo-style transactions, traded bonds, loans, and debt securities.



## Main Credit Exposure Categories by Industry Sectors

Dec 31, 2016

in € m.	Loans <sup>1</sup>	Irrevocable lending commit- ments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Traded Loans	Traded Bonds	Debt securities <sup>4</sup>	Repo and repo-style transactions <sup>5</sup>	Total
Financial intermediation	49,630	31,296	10,189	22,554	3,115	19,580	16,452	104,095	256,911
Fund management activities	26,062	6,843	53	1,441	115	1,322	183	59	36,077
Manufacturing	29,932	41,801	15,067	2,850	1,658	2,368	302	2	93,980
Wholesale and retail trade	16,733	10,473	5,607	518	443	556	30	0	34,360
Households	187,862	9,936	1,267	652	105	2	0	0	199,825
Commercial real estate activities	27,324	4,372	512	1,780	2,015	861	78	67	37,008
Public sector	15,707	1,795	189	6,457	629	47,265	35,515	480	108,037
Other	60,206	59,548	19,456	7,941	5,114	9,339	2,162	205	163,972
<b>Total</b>	<b>413,455</b>	<b>166,063</b>	<b>52,341</b>	<b>44,193</b>	<b>13,193</b>	<b>81,293</b>	<b>54,722</b>	<b>104,909</b>	<b>930,169</b>

<sup>1</sup> Includes impaired loans amounting to €7.4 billion as of December 31, 2016.<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €10.3 billion as of December 31, 2016.<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.<sup>4</sup> Includes debt securities on financial assets available for sale and securities held to maturity.<sup>5</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

Dec 31, 2015

in € m.	Loans <sup>1,2</sup>	Irrevocable lending commit- ments <sup>2,3</sup>	Contingent liabilities	OTC derivatives <sup>4</sup>	Traded Loans	Traded Bonds	Debt securities available for sale	Repo and repo-style transactions <sup>5</sup>	Total
Financial intermediation	61,357	33,391	11,717	26,539	3,815	24,761	23,772	124,340	309,692
Fund management activities	25,923	8,952	381	1,601	118	2,303	461	237	39,976
Manufacturing	27,937	40,969	17,192	2,885	1,500	2,341	314	–	93,137
Wholesale and retail trade	18,209	12,594	5,424	1,038	499	564	95	1	38,423
Households	200,818	11,638	2,013	719	128	–	0	34	215,350
Commercial real estate activities <sup>5,6</sup>	22,578	4,803	681	1,812	3,429	738	205	40	34,285
Public sector	17,113	2,510	280	6,170	491	55,774	39,085	2,242	123,664
Other	58,842	59,692	19,636	8,289	5,478	16,731	4,333	1,680	174,688
<b>Total</b>	<b>432,777</b>	<b>174,549</b>	<b>57,325</b>	<b>49,053</b>	<b>15,459</b>	<b>103,212</b>	<b>68,266</b>	<b>128,575</b>	<b>1,029,215</b>

<sup>1</sup> Includes impaired loans amounting to €8.2 billion as of December 31, 2015.<sup>2</sup> Comparatives have been restated to reflect changes in industry sectors.<sup>3</sup> Includes irrevocable lending commitments related to consumer credit exposure of €9.2 billion as of December 31, 2015.<sup>4</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.<sup>5</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

The above table gives an overview of our credit exposure by industry, allocated based on the NACE code of the counterparty we are doing business with.

From an industry perspective, our credit exposure is lower compared with last year mainly due to a decrease in Financial intermediation of €52.8 billion and Public sector of €15.6 billion, driven by lower Repo and repo style transactions and traded bonds exposure, as well as decrease in the Households category by €15.5 billion mainly attributable to reduced loan exposure.

Loan exposures to the industry sectors financial intermediation, manufacturing and public sector comprise predominantly investment-grade loans. The portfolio is subject to the same credit underwriting requirements stipulated in our “Principles for Managing Credit Risk”, including various controls according to single name, country, industry and product-specific concentration.

Material transactions, such as loans underwritten with the intention to syndicate, are subject to review by senior credit risk management professionals and (depending upon size) an underwriting credit committee and/or the Management

Board. High emphasis is placed on structuring such transactions so that de-risking is achieved in a timely and cost effective manner. Exposures within these categories are mostly to good quality borrowers and also subject to further risk mitigation as outlined in the description of our Credit Portfolio Strategies Group's activities.

Our household loans exposure amounting to €187.9 billion as of December 31, 2016 (€200.8 billion as of December 2015) is principally associated with our PCC and Postbank portfolios. €150.6 billion (80 %) of the portfolio comprises mortgages, of which €119.5 billion are held in Germany. The remaining exposures (€37.6 billion, 20 %) are predominantly consumer finance business related. Given the largely homogeneous nature of this portfolio, counterparty credit worthiness and ratings are predominately derived by utilizing an automated decision engine.

Mortgage business is principally the financing of owner occupied properties sold by various business channels in Europe, primarily in Germany but also in Spain, Italy and Poland, with exposure normally not exceeding real estate value. Consumer finance is divided into personal installment loans, credit lines and credit cards. Various lending requirements are stipulated, including (but not limited to) maximum loan amounts and maximum tenors and are adapted to regional conditions and/or circumstances of the borrower (i.e., for consumer loans a maximum loan amount taking into account household net income). Interest rates are mostly fixed over a certain period of time, especially in Germany. Second lien loans are not actively pursued.

The level of credit risk of the mortgage loan portfolio is determined by assessing the quality of the client and the underlying collateral. The loan amounts are generally larger than consumer finance loans and they are extended for longer time horizons. Consumer finance loan risk depends on client quality. Given that they are uncollateralized, compared with mortgages they are also smaller in value and are extended for shorter time. Based on our underwriting criteria and processes, diversified portfolio (customers/properties) and low loan-to-value (LTV) ratios, the mortgage portfolio is categorized as lower risk and consumer finance medium risk.

Our commercial real estate loans, primarily in the US and Europe, are generally secured by first mortgages on the underlying real estate property. Credit underwriting policy guidelines provide that LTV ratios of generally less than 75 % are maintained. Additionally, given the significance of the underlying collateral independent external appraisals are commissioned for all secured loans by our valuation team (part of the independent Credit Risk Management function) which is also responsible for reviewing and challenging the reported real estate values regularly.

The Commercial Real Estate Group only in exceptional cases retains mezzanine or other junior tranches of debt (although we do underwrite mezzanine loans), also the Postbank portfolio holds an insignificant sub-portfolio of junior tranches. Loans originated for distribution are carefully monitored under a pipeline limit. Securitized loan positions are entirely sold (except where regulation requires retention of economic risk), while we frequently retain a portion of syndicated bank loans. This hold portfolio, which is held at amortized cost, is also subject to the aforementioned principles and policy guidelines. We also participate in conservatively underwritten unsecured lines of credit to well-capitalized real estate investment trusts and other public companies, which are generally investment-grade. We provide both fixed rate (generally securitized product) and floating rate loans, with interest rate exposure subject to hedging arrangements. In addition, sub-performing and non-performing loans and pools of loans are acquired from other financial institutions at generally substantial discounts to both the notional amounts and current collateral values. The underwriting process for these is stringent and the exposure is managed under separate portfolio limits. Exposures within NCOU have been further reduced over the course of the year and account for less than 3 % of the entire Commercial Real Estate portfolio as of December 31, 2016. Commercial real estate property valuations and rental incomes can be significantly impacted by macro-economic conditions and underlying properties to idiosyncratic events. Accordingly, the portfolio is categorized as higher risk and hence subject to the aforementioned tight restrictions on concentration.

The category Other loans, with exposure of €60.2 billion as of December 31, 2016 (€58.8 billion as of December 31, 2015) relates to numerous smaller industry sectors with no individual sector greater than 6 % of total loans.

Our credit exposure to our ten largest counterparties accounted for 7 % of our aggregated total credit exposure in these categories as of December 31, 2016 compared with 6 % as of December 31, 2015. Our top ten counterparty exposures were with well-rated counterparties or otherwise related to structured trades which show high levels of risk mitigation.

Our credit exposure to each of the focus industries “Oil and Gas”, “Metals, Mining & Steel” and “Shipping” is less than 2 % of our total credit exposure.

Our loan exposure to the “Oil & Gas” industry is approximately €8 billion. Around 50 % of our credit exposure is to investment-grade rated borrowers, mainly in the more resilient segments Oil Majors and National Oil & Gas companies. Less than 25 % of our “Oil & Gas” credit portfolio is to sectors that we consider higher risk and more impacted by the low oil price, namely sub-investment-grade Exploration & Production (predominantly senior secured) and Oil & Gas Services & Equipment segments.

Our loan exposure in our “Metals, Mining and Steel” portfolio is approximately €6 billion. This portfolio is of lower quality compared to our overall Corporate credit portfolio, and has an investment-grade ratio of just 27 %. In line with the structure of the industry, a significant share of our portfolio is in Emerging Markets countries. Our strategy is to reduce this credit portfolio due to elevated risks of this industry, namely material oversupply with resulting pressure on prices and margins.

Our loan exposure to “Shipping” accounts for approximately €5 billion and is largely collateralized. The portfolio is diversified across ship types with global associated risks due to diversified trading income though the counterparties mainly domiciled in Europe. A high proportion of the portfolio is sub investment grade rated in reflection of the prolonged challenging market conditions over recent years. Exposure to the German “KG” sector (non-recourse financing of vessels via closed end funds) is less than 10 % of the total Shipping exposure.

#### Main credit exposure categories by geographical region

Dec 31, 2016

in € m.	Loans <sup>1</sup>	Irrevocable lending commit- ments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Traded Loans	Traded Bonds	Debt securities <sup>4</sup>	Repo and repo-style transactions <sup>5</sup>	Total
Germany	197,368	27,954	11,511	2,636	236	3,070	12,970	5,571	261,316
Western Europe (excluding Germany) thereof:	96,297	36,496	15,798	22,852	2,800	19,565	26,755	18,811	239,375
France	2,703	5,854	1,373	1,436	216	2,255	4,866	1,830	20,534
Luxembourg	19,312	2,998	575	1,521	330	1,228	7,179	372	33,515
Netherlands	8,934	6,370	1,749	3,270	224	2,164	4,143	474	27,328
United Kingdom	7,942	7,331	1,422	7,925	519	4,224	1,929	9,327	40,620
Eastern Europe thereof:	9,664	1,475	1,437	456	1,121	1,288	1,713	36	17,191
Poland	7,402	702	208	65	6	281	1,542	0	10,205
Russia	836	432	425	38	645	174	77	0	2,626
North America thereof:	69,921	92,699	12,013	12,162	6,471	36,332	11,444	61,771	302,814
Canada	2,247	2,288	163	1,723	112	628	249	95	7,505
Cayman Islands	2,993	1,045	86	725	37	1,215	24	11,679	17,804
U.S.	56,567	87,503	11,336	9,307	6,181	30,961	10,843	47,528	260,225
Central and South America thereof:	5,338	1,113	1,196	1,020	621	1,975	202	890	12,356
Brazil	1,655	178	626	207	61	843	179	594	4,342
Mexico	618	414	170	299	73	561	0	10	2,145
Asia/Pacific thereof:	31,644	5,782	9,958	4,753	1,606	18,525	1,425	17,515	91,208
China	2,953	722	1,113	446	11	687	0	1,945	7,877
Japan	888	299	350	941	95	3,932	17	9,002	15,522
South Korea	1,393	59	767	692	0	1,609	0	0	4,521
Africa	2,045	421	387	164	335	419	0	314	4,085
Other	1,178	122	40	150	3	119	212	0	1,825
<b>Total</b>	<b>413,455</b>	<b>166,063</b>	<b>52,341</b>	<b>44,193</b>	<b>13,193</b>	<b>81,293</b>	<b>54,722</b>	<b>104,909</b>	<b>930,169</b>

<sup>1</sup> Includes impaired loans amounting to €7.4 billion as of December 31, 2016.

<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €10.3 billion as of December 31, 2016.

<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.

<sup>4</sup> Includes debt securities on financial assets available for sale and securities held to maturity.

<sup>5</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

Dec 31, 2015									
in € m.	Loans <sup>1</sup>	Irrevocable lending commitments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Traded Loans	Traded Bonds	Debt securities available for sale	Repo and repo-style transactions <sup>4</sup>	Total
Germany	203,387	23,621	11,663	3,044	530	5,065	20,080	6,568	273,957
Western Europe (excluding Germany)	100,414	42,700	17,525	21,156	3,237	21,463	37,684	30,240	274,420
thereof:									
France	2,335	5,904	1,535	1,015	279	3,445	6,875	3,514	24,901
Luxembourg	19,890	3,140	648	1,629	481	1,746	9,937	318	37,790
Netherlands	10,405	5,851	2,348	3,498	297	2,508	6,243	456	31,606
United Kingdom	8,828	9,880	1,608	6,161	508	4,614	4,762	16,352	52,713
Eastern Europe	10,319	1,946	1,650	450	1,409	2,738	244	55	18,811
thereof:									
Poland	7,434	705	281	50	–	1,640	85	–	10,195
Russia	1,295	533	583	42	953	113	–	1	3,520
North America	72,008	96,310	14,154	14,468	6,784	50,842	7,890	74,061	336,517
thereof:									
Canada	1,481	2,391	590	1,764	54	1,016	659	1,676	9,631
Cayman Islands	2,882	1,931	91	919	149	1,724	62	12,459	20,216
U.S.	60,991	90,773	12,966	11,367	6,146	47,786	7,158	58,496	295,683
Central and South America	6,506	1,111	1,218	1,706	731	2,345	25	1,240	14,883
thereof:									
Brazil	2,267	344	587	458	53	1,191	4	526	5,430
Mexico	731	102	91	331	107	363	19	378	2,121
Asia/Pacific	37,202	7,685	10,321	7,901	2,201	20,372	2,075	14,794	102,551
thereof:									
China	5,646	1,005	954	571	32	976	–	964	10,149
Japan	848	336	357	1,348	41	3,930	22	5,556	12,438
South Korea	2,158	16	919	1,000	0	1,359	8	–	5,460
Africa	2,123	501	537	300	227	324	100	351	4,464
Other	817	674	258	29	340	62	166	1,266	3,612
<b>Total</b>	<b>432,777</b>	<b>174,549</b>	<b>57,325</b>	<b>49,053</b>	<b>15,459</b>	<b>103,212</b>	<b>68,266</b>	<b>128,575</b>	<b>1,029,215</b>

<sup>1</sup> Includes impaired loans amounting to €8.2 billion as of December 31, 2015.

<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €9.2 billion as of December 31, 2015.

<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.

<sup>4</sup> Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

The above table gives an overview of our credit exposure by geographical region, allocated based on the counterparty's country of domicile, see also section "Credit Exposure to Certain Eurozone Countries" of this report for a detailed discussion of the "country of domicile view".

Our largest concentration of credit risk within loans from a regional perspective is in our home market Germany, with a significant share in households, which includes the majority of our mortgage lending business.

Within the OTC derivatives business, tradable assets as well as repo and repo-style transactions, our largest concentrations from a regional perspective were in Western Europe (excluding Germany) and North America. From the industry perspective, exposures from OTC derivative as well as repo and repo-style transactions have a significant share in highly rated financial intermediation companies. For tradable assets, a large proportion of exposure is also with public sector companies.

As of December 31, 2016, our loan book decreased to €413.5 billion (compared to €432.8 billion as of December 31, 2015) mainly as a result of lower levels of exposures in Germany and Asia Pacific. Our households and financial intermediation loan books experienced the largest decreases. The decrease in loans in Germany and United States was mainly driven by managed reductions in Corporate & Investment Banking and Non-Core Operations Unit that were conducted in order to reduce risk weighted assets. Repo and Repo style transactions decreased by €23.7 billion mainly in North America and Western Europe (excluding Germany). This decline was driven by reductions in both our client balance sheet and firm financing needs as well as by reduced short coverage requirements.

## Credit Exposure to Certain Eurozone Countries

Certain eurozone countries are presented within the table below due to concerns relating to sovereign risk.

In our “country of domicile view” we aggregate credit risk exposures to counterparties by allocating them to the domicile of the primary counterparty, irrespective of any link to other counterparties, or in relation to credit default swaps underlying reference assets from, these eurozone countries. Hence we also include counterparties whose group parent is located outside of these countries and exposures to special purpose entities whose underlying assets are from entities domiciled in other countries.

The following table, which is based on the country of domicile view, presents our gross position, the included amount thereof of undrawn exposure and our net exposure to these eurozone countries. The gross exposure reflects our net credit risk exposure grossed up for net credit derivative protection purchased with underlying reference assets domiciled in one of these countries, guarantees received and collateral. Such collateral is particularly held with respect to the retail portfolio, but also for financial institutions predominantly based on derivative margining arrangements, as well as for corporates. In addition the amounts also reflect the allowance for credit losses. In some cases, our counterparties' ability to draw on undrawn commitments is limited by terms included in the specific contractual documentation. Net credit exposures are presented after effects of collateral held, guarantees received and further risk mitigation, including net notional amounts of credit derivatives for protection sold/(bought). The provided gross and net exposures to certain European countries do not include credit derivative tranches and credit derivatives in relation to our correlation business which, by design, is structured to be credit risk neutral. Additionally the tranche and correlated nature of these positions does not allow a meaningful disaggregated notional presentation by country, e.g., as identical notional exposures represent different levels of risk for different tranche levels.

### Gross position, included undrawn exposure and net exposure to certain eurozone countries – Country of Domicile View

in € m.	Sovereign		Financial Institutions		Corporates		Retail		Other		Total	
	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016 <sup>1</sup>	Dec 31, 2015
<b>Greece</b>												
Gross	89	0	743	732	986	1,539	6	7	0	0	1,824	2,277
Undrawn	0	0	31	23	21	118	0	0	0	0	52	142
Net	83	0	258	237	15	95	1	1	0	0	357	333
<b>Ireland</b>												
Gross	826	459	908	998	9,280	8,752	31	35	3,263 <sup>2</sup>	4,361 <sup>2</sup>	14,308	14,605
Undrawn	0	0	42	23	2,000	2,568	1	0	172 <sup>2</sup>	393 <sup>2</sup>	2,214	2,984
Net	569	28	352	528	5,374	5,327	5	5	3,459 <sup>2</sup>	4,347 <sup>2</sup>	9,759	10,235
<b>Italy</b>												
Gross	2,735	4,048	3,051	2,421	10,591	10,642	17,122	17,841	358	470	33,857	35,421
Undrawn	32	25	74	73	4,730	4,622	208	148	26	24	5,069	4,892
Net	438	507	920	754	7,514	7,093	7,288	6,989	344	448	16,504	15,792
<b>Portugal</b>												
Gross	61	112	127	260	1,424	1,509	1,674	1,743	65	59	3,352	3,684
Undrawn	0	0	12	22	232	210	12	25	0	0	256	258
Net	79	64	73	181	1,205	1,111	143	202	65	59	1,564	1,616
<b>Spain</b>												
Gross	1,325	729	1,947	1,292	8,340	9,350	9,770	9,928	112	257	21,493	21,556
Undrawn	0	0	261	203	4,310	4,235	283	298	3	14	4,858	4,750
Net	1,195	757	971	516	6,643	6,838	1,935	1,872	265	476	11,009	10,458
<b>Total gross</b>	<b>5,037</b>	<b>5,348</b>	<b>6,776</b>	<b>5,703</b>	<b>30,621</b>	<b>31,792</b>	<b>28,603</b>	<b>29,553</b>	<b>3,797</b>	<b>5,147</b>	<b>74,835</b>	<b>77,544</b>
<b>Total undrawn</b>	<b>33</b>	<b>25</b>	<b>419</b>	<b>344</b>	<b>11,292</b>	<b>11,754</b>	<b>504</b>	<b>472</b>	<b>202</b>	<b>431</b>	<b>12,449</b>	<b>13,026</b>
<b>Total net<sup>3</sup></b>	<b>2,364</b>	<b>1,356</b>	<b>2,574</b>	<b>2,216</b>	<b>20,751</b>	<b>20,463</b>	<b>9,371</b>	<b>9,069</b>	<b>4,133</b>	<b>5,330</b>	<b>39,194</b>	<b>38,434</b>

<sup>1</sup> Approximately 68 % of the overall exposure as per December 31, 2016 will mature within the next 5 years.

<sup>2</sup> Other exposures to Ireland include exposures to counterparties where the domicile of the group parent is located outside of Ireland as well as exposures to special purpose entities whose underlying assets are from entities domiciled in other countries.

<sup>3</sup> Total net exposure excludes credit valuation reserves for derivatives amounting to €281 million as of December 31, 2016 and €159 million as of December 31, 2015.

Total net exposure to the above selected eurozone countries increased by €760 million in 2016 driven by exposure increases in Italy and Spain, partly offset by a decrease in Ireland.

## Sovereign Credit Risk Exposure to Certain Eurozone Countries

The amounts below reflect a net “country of domicile view” of our sovereign exposure.

### Sovereign credit risk exposure to certain eurozone countries

in € m.	Dec 31, 2016				Dec 31, 2015			
	Direct Sovereign exposure <sup>1</sup>	Net Notional of CDS referencing sovereign debt	Net sovereign exposure	Memo Item: Net fair value of CDS referencing sovereign debt <sup>2</sup>	Direct Sovereign exposure <sup>1</sup>	Net Notional of CDS referencing sovereign debt	Net sovereign exposure	Memo Item: Net fair value of CDS referencing sovereign debt <sup>2</sup>
Greece	89	(6)	83	2	0	0	0	0
Ireland	569	0	569	74	55	(28)	28	1
Italy	2,662	(2,223)	438	398	3,989	(3,482)	507	36
Portugal	61	17	79	(8)	112	(48)	64	(9)
Spain	1,322	(127)	1,195	279	725	32	757	(12)
<b>Total</b>	<b>4,703</b>	<b>(2,339)</b>	<b>2,364</b>	<b>744</b>	<b>4,881</b>	<b>(3,526)</b>	<b>1,356</b>	<b>17</b>

<sup>1</sup> Includes sovereign debt classified as financial assets/liabilities at fair value through profit or loss, available for sale and loans carried at amortized cost.

<sup>2</sup> The amounts reflect the net fair value in relation to credit default swaps referencing sovereign debt of the respective country representing the counterparty credit risk.

The increase of €1.0 billion in net sovereign exposure compared with year-end 2015 mainly reflects increases in debt securities in Ireland and Spain.

The above represents direct sovereign exposure included the carrying value of loans held at amortized cost to sovereigns, which as of December 31, 2016, amounted to €261 million for Italy and €401 million for Spain and as of December 31, 2015 amounted to €273 million for Italy and €478 million for Spain.

## Credit Exposure Classification

We also classify our credit exposure under two broad headings: consumer credit exposure and corporate credit exposure.

- Our consumer credit exposure consists of our smaller-balance standardized homogeneous loans, primarily in Germany, Italy and Spain, which include personal loans, residential and non-residential mortgage loans, overdrafts and loans to self-employed and small business customers of our private and retail business.
- Our corporate credit exposure consists of all exposures not defined as consumer credit exposure.

## Corporate Credit Exposure

The tables below show our Corporate Credit Exposure by product types and internal rating bands. Please refer to section "Measuring Credit Risk" for more details about our internal ratings.

### Main corporate credit exposure categories according to our internal creditworthiness categories of our counterparties – gross

in € m.

(unless stated otherwise)

Dec 31, 2016

Ratingband	Probability of default in % <sup>1</sup>	Loans	Irrevocable lending commitments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Debt securities <sup>4</sup>	Total
iAAA–iAA	> 0.00 ≤ 0.04	43,149	21,479	5,699	16,408	46,014	132,749
iA	> 0.04 ≤ 0.11	39,734	45,635	13,712	12,566	6,616	118,264
iBBB	> 0.11 ≤ 0.5	57,287	47,480	16,753	8,300	1,696	131,515
iBB	> 0.5 ≤ 2.27	46,496	29,274	9,663	5,333	366	91,132
iB	> 2.27 ≤ 10.22	22,920	18,173	4,477	1,053	9	46,631
iCCC and below	> 10.22 ≤ 100	15,069	4,022	2,038	533	21	21,683
<b>Total</b>		<b>224,655</b>	<b>166,063</b>	<b>52,341</b>	<b>44,193</b>	<b>54,722</b>	<b>541,974</b>

<sup>1</sup> Reflects the probability of default for a one year time horizon.

<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €10.3 billion as of December 31, 2016.

<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable.

<sup>4</sup> Includes debt securities on financial assets available for sale and securities held to maturity.



in € m.

(unless stated otherwise)

Dec 31, 2015

Ratingband	Probability of default in % <sup>1</sup>	Loans	Irrevocable lending commitments <sup>2</sup>	Contingent liabilities	OTC derivatives <sup>3</sup>	Debt securities available for sale	Total
iAAA–iAA	> 0.00 ≤ 0.04	50,712	23,035	6,384	22,753	59,157	162,042
iA	> 0.04 ≤ 0.11	49,197	46,220	15,464	10,998	4,515	126,394
iBBB	> 0.11 ≤ 0.5	62,044	44,603	18,283	7,871	1,911	134,711
iBB	> 0.5 ≤ 2.27	51,454	37,643	10,827	5,358	2,621	107,904
iB	> 2.27 ≤ 10.22	20,610	21,212	4,668	1,558	57	48,105
iCCC and below	> 10.22 ≤ 100	9,853	1,834	1,700	515	4	13,906
<b>Total</b>		<b>243,871</b>	<b>174,548</b>	<b>57,325</b>	<b>49,053</b>	<b>68,266</b>	<b>593,063</b>

<sup>1</sup> Reflects the probability of default for a one year time horizon.<sup>2</sup> Includes irrevocable lending commitments related to consumer credit exposure of €9.2 billion as of December 31, 2015.<sup>3</sup> Includes the effect of netting agreements and cash collateral received where applicable.

The above table shows an overall decrease in our corporate credit exposure in 2016 of €51.1 billion or 8.6 %. Loans decreased by €19.2 billion, mainly attributable to Germany and Asia/Pacific. The decrease is mainly due to managed reductions in Corporate & Investment Banking and our Non-Core Operations Unit with the aim to reduce risk weighted assets. Debt securities decreased by €13.5 billion, almost entirely related to the top rating band, mainly driven by sale activity in Strategic Liquidity Reserve bond positions with the intention of reducing risk weighted assets. The decrease in irrevocable lending commitments of €8.5 billion was primarily attributable to Western Europe (excluding Germany), North America and Asia/Pacific partly offset by an increase in Germany. The quality of the corporate credit exposure before risk mitigation has remained stable at 71 % share of investment-grade rated exposures compared to December 31, 2015.

We use risk mitigation techniques as described above to optimize our corporate credit exposure and reduce potential credit losses. The tables below disclose the development of our corporate credit exposure net of collateral, guarantees and hedges.

#### Main corporate credit exposure categories according to our internal creditworthiness categories of our counterparties – net

in € m.

(unless stated otherwise)

Dec 31, 2016<sup>1</sup>

Rating band	Probability of default in % <sup>2</sup>	Loans	Irrevocable lending commitments	Contingent liabilities	OTC derivatives	Debt securities	Total
iAAA–iAA	> 0.00 ≤ 0.04	32,305	19,653	4,351	10,480	46,014	112,802
iA	> 0.04 ≤ 0.11	24,970	41,435	11,393	10,032	6,616	94,448
iBBB	> 0.11 ≤ 0.5	28,369	43,659	13,845	7,439	1,672	94,984
iBB	> 0.5 ≤ 2.27	19,573	27,206	5,932	4,034	361	57,105
iB	> 2.27 ≤ 10.22	8,090	16,745	2,176	1,020	9	28,041
iCCC and below	> 10.22 ≤ 100	5,954	2,872	889	509	21	10,246
<b>Total</b>		<b>119,261</b>	<b>151,571</b>	<b>38,586</b>	<b>33,514</b>	<b>54,694</b>	<b>397,626</b>

<sup>1</sup> Net of eligible collateral, guarantees and hedges based on IFRS requirements.<sup>2</sup> Reflects the probability of default for a one year time horizon.

in € m.

(unless stated otherwise)

Dec 31, 2015<sup>1</sup>

Rating band	Probability of default in % <sup>2</sup>	Loans	Irrevocable lending commitments	Contingent liabilities	OTC derivatives	Debt securities available for sale	Total
iAAA–iAA	> 0.00 ≤ 0.04	37,450	20,567	4,963	14,844	59,157	136,982
iA	> 0.04 ≤ 0.11	31,446	42,466	13,256	7,983	4,515	99,666
iBBB	> 0.11 ≤ 0.5	31,706	41,190	15,230	6,848	1,911	96,885
iBB	> 0.5 ≤ 2.27	23,865	35,173	6,811	4,139	2,621	72,609
iB	> 2.27 ≤ 10.22	8,698	20,309	2,411	1,516	57	32,990
iCCC and below	> 10.22 ≤ 100	4,532	1,670	759	514	4	7,479
<b>Total</b>		<b>137,696</b>	<b>161,375</b>	<b>43,429</b>	<b>35,844</b>	<b>68,266</b>	<b>446,610</b>

<sup>1</sup> Net of eligible collateral, guarantees and hedges based on IFRS requirements.<sup>2</sup> Reflects the probability of default for a one year time horizon.



The corporate credit exposure net of collateral amounted to €397.6 billion as of December 31, 2016 resulting in a risk mitigation of 27 % or €144.3 billion compared to the corporate gross exposure. This includes a more significant reduction of 47 % for our loans exposure which includes a reduction by 60 % for the lower-rated sub-investment-grade rated loans and 39 % for the higher-rated investment-grade rated loans. The risk mitigation for the total exposure in the weakest rating band was 53 %, which was significantly higher than 15 % in the strongest rating band.

The risk mitigation of €144.3 billion is split into 29 % guarantees and hedges and 71 % other collateral.

## CPSG Risk Mitigation for the Corporate Credit Exposure

Our Credit Portfolio Strategies Group ("CPSG") helps mitigate the risk of our corporate credit exposures. The notional amount of CPSG's risk reduction activities decreased from €45.0 billion as of December 31, 2015, to €43.3 billion as of December 31, 2016

As of year-end 2016, CPSG mitigated the credit risk of €42.2 billion of loans and lending-related commitments as of December 31, 2016, through synthetic collateralized loan obligations supported predominantly by financial guarantees. This position totaled €41.4 billion as of December 31, 2015.

CPSG also held credit derivatives with an underlying notional amount of €1.1 billion. The position totaled €3.6 billion as of December 31, 2015. The credit derivatives used for our portfolio management activities are accounted for at fair value.

CPSG has elected to use the fair value option under IAS 39 to report loans and commitments at fair value, provided the criteria for this option are met. The notional amount of CPSG loans and commitments reported at fair value decreased during the year to €3.9 billion as of December 31, 2016, from €8.2 billion as of December 31, 2015.

## Consumer Credit Exposure

In our consumer credit exposure we monitor consumer loan delinquencies in terms of loans that are 90 days or more past due and net credit costs, which are the annualized net provisions charged after recoveries.

### Consumer credit exposure, consumer loan delinquencies and net credit costs

	Total exposure in € m. <sup>1</sup>		90 days or more past due as a % of total exposure <sup>1</sup>		Net credit costs as a % of total exposure <sup>2</sup>	
	Dec 31, 2016	Dec 31, 2015 <sup>3</sup>	Dec 31, 2016	Dec 31, 2015 <sup>3</sup>	Dec 31, 2016	Dec 31, 2015 <sup>3</sup>
Consumer credit exposure Germany:	150,639	149,748	0.75	0.87	0.13	0.16
Consumer and small business financing	20,316	20,326	2.45	2.77	0.99	0.89
Mortgage lending	130,324	129,422	0.48	0.57	0.00	0.05
Consumer credit exposure outside Germany	38,162	39,158	4.22	4.89	0.68	0.54
Consumer and small business financing	13,663	13,259	8.44	9.55	0.98	1.18
Mortgage lending	24,499	25,898	1.87	2.50	0.51	0.21
<b>Total consumer credit exposure</b>	<b>188,801</b>	<b>188,906</b>	<b>1.45</b>	<b>1.70</b>	<b>0.24</b>	<b>0.24</b>

<sup>1</sup> Includes impaired loans amounting to €3.1 billion as of December 31, 2016 and €3.6 billion as of December 31, 2015.

<sup>2</sup> Net credit costs for the twelve months period ended at the respective balance sheet date divided by the exposure at that balance sheet date.

<sup>3</sup> Retrospective as of December 31, 2015, about €454 million Postbank mortgage loans are no longer assigned to Germany but rather Mortgage lending outside Germany. These mortgage loans were in the context of a securitization, which was cancelled in 2016, previously reported as mortgage loans Germany.

The volume of our consumer credit exposure decreased from year-end 2015 to December 31, 2016 by €105 million, or 0.1 %, driven by reductions in our loan books in Italy (€-1.0 billion), in Spain (€-147 million) and in Poland (€-105 million), which were partly compensated by increases in Germany (€+890 million) and in India (€+319 million). The volume changes in Italy, Germany, Spain and Poland were influenced by selective non-performing loan portfolio sales. Additionally the reduction in Poland was affected by FX effects.

The 90 days or more past due ratio of our consumer credit exposure decreased from 1.70 % as of year-end 2015 to 1.45 % as of December 31, 2016. The total net credit costs as a percentage of our consumer credit exposure stayed unchanged at 0.24 %. This ratio was positively affected by the further improved and stabilized environment in countries in which we operate and by aforementioned non-performing loan portfolio sale in Italy and negatively affected by non-performing loan portfolio sales in Spain (mainly NCOU unit).

#### Consumer mortgage lending exposure grouped by loan-to-value buckets<sup>1</sup>

	Dec 31, 2016	Dec 31, 2015
≤ 50 %	68 %	68 %
> 50 ≤ 70 %	16 %	16 %
> 70 ≤ 90 %	9 %	9 %
> 90 ≤ 100 %	3 %	3 %
> 100 ≤ 110 %	2 %	2 %
> 110 ≤ 130 %	1 %	1 %
> 130 %	1 %	2 %

<sup>1</sup> When assigning the exposure to the corresponding LTV buckets, the exposure amounts are distributed according to their relative share of the underlying assessed real estate value.

The LTV expresses the amount of exposure as a percentage of assessed value of real estate.

Our LTV ratios are calculated using the total exposure divided by the current assessed value of the respective properties. These values are updated on a regular basis. The exposure of transactions that are additionally backed by liquid collaterals is reduced by the respective collateral values, whereas any prior charges increase the corresponding total exposure. The LTV calculation includes exposure which is secured by real estate collaterals. Any mortgage lending exposure that is collateralized exclusively by any other type of collateral is not included in the LTV calculation.

The creditor's creditworthiness, the LTV and the quality of collateral is an integral part of our risk management when originating loans and when monitoring and steering our credit risks. In general, we are willing to accept higher LTV's, the better the creditor's creditworthiness is. Nevertheless, restrictions of LTV apply for countries with negative economic outlook or expected declines of real estate values.

As of December 31, 2016, 68 % of our exposure related to the mortgage lending portfolio had a LTV ratio below or equal to 50 %, unchanged to the previous year.

## Credit Exposure from Derivatives

All exchange traded derivatives are cleared through central counterparties (“CCPs”), the rules and regulations of which provide for daily margining of all current and future credit risk positions emerging out of such transactions. To the extent possible, we also use CCP services for OTC derivative transactions (“OTC clearing”); we thereby benefit from the credit risk mitigation achieved through the CCP’s settlement system.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (“DFA”) provides for an extensive framework for the regulation of OTC derivatives, including mandatory clearing, exchange trading and transaction reporting of certain OTC derivatives, as well as rules regarding the registration of, and capital, margin and business conduct standards for, swap dealers, security-based swap dealers, major swap participants and major security-based swap participants. The DFA and related Commodity Futures Trading Commission (“CFTC”) rules introduced in 2013 mandatory OTC clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps. The European Regulation (EU) No 648/2012 on OTC Derivatives, Central Counterparties and Trade Repositories (“EMIR”) introduced a number of risk mitigation techniques for non-centrally cleared OTC derivatives in 2013 and the reporting of OTC and exchange traded derivatives in 2014. Mandatory clearing for certain standardized OTC derivatives transactions in the EU began in June 2016, and margin requirements for uncleared OTC derivative transactions in the EU started in February 2017, beginning with the initial margin requirement, which followed a phased implementation schedule, and followed by the variation margin requirement, which started March 2017.

The CFTC adopted final rules in 2016 that require additional interest rate swaps to be cleared, with a phased implementation schedule ending in October 2018. In December 2016, also pursuant to the DFA, the CFTC re-proposed regulations to impose position limits on certain commodities and economically equivalent swaps, futures and options. This proposal has not yet been finalized. The Securities and Exchange Commission (“SEC”) has also finalized rules regarding registration, business conduct standards and trade acknowledgement and verification requirements for security-based swap dealers and major security-based swap participants, although these rules will not come into effect until the SEC completes further security-based swap rulemakings. Finally, U.S. prudential regulators (the OCC, Federal Reserve, FDIC, Farm Credit Administration and FHFA) and the CFTC have adopted final rules establishing margin requirements for non-cleared swaps and security-based swaps. The final margin rules follow a phased implementation schedule, with certain initial margin and variation margin requirements in effect as of September 2016, additional variation margin requirements in effect as of March 1, 2017, and additional initial margin requirements phased in on an annual basis from September 2017 through September 2020, with the relevant compliance dates depending in each case on the transactional volume of the parties and their affiliates.

The following table shows a breakdown of notional amounts and gross market value of derivative transactions along with a breakdown of notional amounts of OTC derivative assets and liabilities on the basis of clearing channel.

#### Notional amounts of derivatives on basis of clearing channel and type of derivative

Dec 31, 2016

in € m.	Notional amount maturity distribution				Positive market value	Negative market value	Net market value
	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total			
<b>Interest rate related:</b>							
OTC	13,214,990	8,828,544	6,102,510	28,146,044	309,405	284,954	24,451
Bilateral (Amt)	2,777,349	3,625,915	2,645,075	9,048,340	272,059	248,396	23,664
CCP (Amt)	10,437,641	5,202,629	3,457,434	19,097,704	37,346	36,558	787
Exchange-traded	5,013,591	1,387,444	1,174	6,402,209	326	394	(68)
<b>Total Interest rate related</b>	<b>18,228,581</b>	<b>10,215,988</b>	<b>6,103,684</b>	<b>34,548,253</b>	<b>309,731</b>	<b>285,348</b>	<b>24,382</b>
<b>Currency related:</b>							
OTC	3,994,113	1,053,558	537,044	5,584,715	129,731	126,480	3,251
Bilateral (Amt)	3,938,295	1,053,434	537,044	5,528,773	129,288	126,049	3,239
CCP (Amt)	55,818	124	0	55,942	443	431	12
Exchange-traded	29,431	398	35	29,864	6	54	(48)
<b>Total Currency related</b>	<b>4,023,544</b>	<b>1,053,956</b>	<b>537,078</b>	<b>5,614,579</b>	<b>129,738</b>	<b>126,534</b>	<b>3,203</b>
<b>Equity/index related:</b>							
OTC	366,170	168,529	25,313	560,012	20,358	23,692	(3,334)
Bilateral (Amt)	366,170	168,529	25,313	560,012	20,358	23,692	(3,334)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	472,888	74,045	9,006	555,939	6,172	8,575	(2,402)
<b>Total Equity/index related</b>	<b>839,058</b>	<b>242,574</b>	<b>34,319</b>	<b>1,115,951</b>	<b>26,531</b>	<b>32,266</b>	<b>(5,736)</b>
<b>Credit derivatives related</b>							
OTC	297,563	1,076,954	142,572	1,517,089	21,297	22,399	(1,102)
Bilateral (Amt)	157,950	298,313	58,852	515,115	7,426	8,238	(811)
CCP (Amt)	139,613	778,640	83,720	1,001,974	13,870	14,161	(291)
Exchange-traded	0	0	0	0	0	0	0
<b>Total Credit derivatives related</b>	<b>297,563</b>	<b>1,076,954</b>	<b>142,572</b>	<b>1,517,089</b>	<b>21,297</b>	<b>22,399</b>	<b>(1,102)</b>
<b>Commodity related:</b>							
OTC	2,660	1,657	9,222	13,539	479	653	(175)
Bilateral (Amt)	2,660	1,657	9,222	13,539	479	653	(175)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	53,757	8,766	0	62,523	440	503	(63)
<b>Total Commodity related</b>	<b>56,417</b>	<b>10,423</b>	<b>9,222</b>	<b>76,062</b>	<b>918</b>	<b>1,156</b>	<b>(238)</b>
<b>Other:</b>							
OTC	13,994	6,856	98	20,948	443	719	(276)
Bilateral (Amt)	13,963	6,856	98	20,917	433	698	(265)
CCP (Amt)	31	0	0	31	10	21	(11)
Exchange-traded	4,929	0	0	4,929	10	29	(18)
<b>Total Other</b>	<b>18,923</b>	<b>6,856</b>	<b>98</b>	<b>25,877</b>	<b>453</b>	<b>747</b>	<b>(295)</b>
<b>Total OTC business</b>	<b>17,889,490</b>	<b>11,136,098</b>	<b>6,816,759</b>	<b>35,842,347</b>	<b>481,712</b>	<b>458,897</b>	<b>22,816</b>
Total bilateral business	7,256,387	5,154,704	3,275,604	15,686,696	430,043	407,725	22,318
Total CCP business	10,633,102	5,981,394	3,541,155	20,155,651	51,669	51,172	497
<b>Total exchange-traded business</b>	<b>5,574,597</b>	<b>1,470,653</b>	<b>10,214</b>	<b>7,055,464</b>	<b>6,954</b>	<b>9,555</b>	<b>(2,600)</b>
<b>Total</b>	<b>23,464,086</b>	<b>12,606,751</b>	<b>6,826,973</b>	<b>42,897,811</b>	<b>488,667</b>	<b>468,451</b>	<b>20,215</b>
Positive market values after netting and cash collateral received	0	0	0	0	44,784	0	0

Dec 31, 2015							
in € m.	Notional amount maturity distribution				Positive market value	Negative market value	Net market value
	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total			
<b>Interest rate related:</b>							
OTC	10,955,593	9,682,810	6,375,377	27,013,781	345,998	325,179	20,819
Bilateral (Amt)	3,906,875	4,952,043	3,205,837	12,064,755	316,736	298,220	18,516
CCP (Amt)	7,048,718	4,730,767	3,169,540	14,949,025	29,261	26,959	2,302
Exchange-traded	4,452,134	1,400,495	3,742	5,856,371	272	237	35
<b>Total Interest rate related</b>	<b>15,407,727</b>	<b>11,083,305</b>	<b>6,379,119</b>	<b>32,870,152</b>	<b>346,270</b>	<b>325,416</b>	<b>20,854</b>
<b>Currency related:</b>							
OTC	4,672,846	1,134,801	531,085	6,338,731	116,007	115,379	628
Bilateral (Amt)	4,644,414	1,134,686	531,085	6,310,184	115,900	115,270	630
CCP (Amt)	28,432	115	0	28,547	107	109	(2)
Exchange-traded	33,064	15	0	33,079	109	174	(65)
<b>Total Currency related</b>	<b>4,705,910</b>	<b>1,134,815</b>	<b>531,085</b>	<b>6,371,810</b>	<b>116,116</b>	<b>115,553</b>	<b>563</b>
<b>Equity/index related:</b>							
OTC	394,193	197,092	23,521	614,806	25,063	28,818	(3,756)
Bilateral (Amt)	394,193	197,092	23,521	614,806	25,063	28,818	(3,756)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	501,706	66,571	8,993	577,270	5,533	6,164	(631)
<b>Total Equity/index related</b>	<b>895,899</b>	<b>263,663</b>	<b>32,514</b>	<b>1,192,076</b>	<b>30,596</b>	<b>34,983</b>	<b>(4,387)</b>
<b>Credit derivatives related</b>							
OTC	270,524	949,312	129,622	1,349,458	23,548	20,992	2,556
Bilateral (Amt)	176,492	445,572	72,423	694,486	14,784	12,386	2,399
CCP (Amt)	94,032	503,741	57,199	654,972	8,763	8,606	157
Exchange-traded	0	0	0	0	0	0	0
<b>Total Credit derivatives related</b>	<b>270,524</b>	<b>949,312</b>	<b>129,622</b>	<b>1,349,458</b>	<b>23,548</b>	<b>20,992</b>	<b>2,556</b>
<b>Commodity related:</b>							
OTC	5,998	1,260	9,516	16,775	776	891	(115)
Bilateral (Amt)	5,998	1,260	9,516	16,775	776	891	(115)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	78,204	27,066	10	105,279	497	604	(107)
<b>Total Commodity related</b>	<b>84,202</b>	<b>28,326</b>	<b>9,526</b>	<b>122,054</b>	<b>1,273</b>	<b>1,496</b>	<b>(223)</b>
<b>Other:</b>							
OTC	20,621	5,378	43	26,043	906	1,953	(1,048)
Bilateral (Amt)	20,618	5,378	43	26,039	902	1,953	(1,051)
CCP (Amt)	3	0	0	3	3	0	3
Exchange-traded	8,430	11	0	8,441	22	49	(27)
<b>Total Other</b>	<b>29,051</b>	<b>5,389</b>	<b>43</b>	<b>34,484</b>	<b>928</b>	<b>2,002</b>	<b>(1,074)</b>
<b>Total OTC business</b>	<b>16,319,775</b>	<b>11,970,654</b>	<b>7,069,164</b>	<b>35,359,593</b>	<b>512,297</b>	<b>493,213</b>	<b>19,084</b>
Total bilateral business	9,148,589	6,736,032	3,842,425	19,727,045	474,162	457,538	16,623
Total CCP business	7,171,186	5,234,622	3,226,739	15,632,548	38,135	35,674	2,461
<b>Total exchange-traded business</b>	<b>5,073,538</b>	<b>1,494,157</b>	<b>12,746</b>	<b>6,580,441</b>	<b>6,433</b>	<b>7,229</b>	<b>(795)</b>
<b>Total</b>	<b>21,393,313</b>	<b>13,464,811</b>	<b>7,081,910</b>	<b>41,940,034</b>	<b>518,730</b>	<b>500,441</b>	<b>18,289</b>
Positive market values after netting and cash collateral received	0	0	0	0	53,202	0	0

## Equity Exposure

The table below presents the carrying values of our equity investments according to IFRS definition split by trading and nontrading for the respective reporting dates. We manage our respective positions within our market risk and other appropriate risk frameworks.

### Composition of our Equity Exposure

in € m.	Dec 31, 2016	Dec 31, 2015
Trading Equities	75,633	76,044
Nontrading Equities <sup>1</sup>	2,979	3,228
<b>Total Equity Exposure</b>	<b>78,613</b>	<b>79,273</b>

<sup>1</sup> Includes equity investment funds amounting to €288 million as of December 31, 2016 and €642 million as of December 31, 2015.

As of December 31, 2016, our Trading Equities exposure was mainly composed of €74.4 billion from Global Markets activities and €1.2 billion from Deutsche Asset Management business. Overall trading equities decreased by €411 million year on year driven by decreased exposure in Deutsche Asset Management which was partly offset by increases in Global Markets.

## Asset Quality

This section describes the asset quality of our loans. All loans where known information about possible credit problems of borrowers causes our management to have serious doubts as to the collectability of the borrower's contractual obligations are included in this section.

### Overview of performing, renegotiated, past due and impaired loans by customer groups

in € m.	Dec 31, 2016			Dec 31, 2015		
	Corporate loans	Consumer loans	Total	Corporate loans	Consumer loans	Total
Loans neither past due, nor renegotiated or impaired	219,106	182,760	401,865	237,758	182,306	420,064
Past due loans, neither renegotiated nor impaired	882	2,445	3,327	1,143	2,544	3,687
Loans renegotiated, but not impaired	357	459	816	438	437	875
Impaired loans	4,310	3,137	7,447	4,532	3,619	8,151
<b>Total</b>	<b>224,655</b>	<b>188,801</b>	<b>413,455</b>	<b>243,871</b>	<b>188,906</b>	<b>432,777</b>

## Past Due Loans

Loans are considered to be past due if contractually agreed payments of principal and/or interest remain unpaid by the borrower, except if those loans are acquired through consolidation. The latter are considered to be past due if payments of principal and/or interest, which were expected at a certain payment date at the time of the initial consolidation of the loans, are unpaid by the borrower.

### Non-impaired past due loans at amortized cost by past due status

in € m.	Dec 31, 2016	Dec 31, 2015
Loans less than 30 days past due	2,116	2,387
Loans 30 or more but less than 60 days past due	494	547
Loans 60 or more but less than 90 days past due	268	281
Loans 90 days or more past due	484	540
<b>Total</b>	<b>3,363</b>	<b>3,755</b>

**Non-impaired past due loans at amortized cost by industry**

in € m.	Dec 31, 2016	Dec 31, 2015 <sup>1</sup>
Financial intermediation	95	203
Fund management activities	28	16
Manufacturing	278	125
Wholesale and retail trade	172	131
Households	2,076	2,495
Commercial real estate activities	190	192
Public sector	12	3
Other	512	592
<b>Total</b>	<b>3,363</b>	<b>3,755</b>

<sup>1</sup> Comparatives have been restated to reflect changes in industry sectors.

**Non-impaired past due loans at amortized cost by region**

in € m.	Dec 31, 2016	Dec 31, 2015
Germany	1,299	1,430
Western Europe (excluding Germany)	1,531	1,417
Eastern Europe	155	139
North America	233	641
Central and South America	18	8
Asia/Pacific	113	106
Africa	14	15
Other	0	0
<b>Total</b>	<b>3,363</b>	<b>3,755</b>

Our non-impaired past due loans decreased by €392 million to €3.4 billion as of December 31, 2016 mainly driven by a small number of counterparties in PW&CC.

**Aggregated value of collateral – with the fair values of collateral capped at loan outstanding – held against our non-impaired past due loans**

in € m.	Dec 31, 2016	Dec 31, 2015
Financial and other collateral	1,775	2,254
Guarantees received	148	133
<b>Total</b>	<b>1,923</b>	<b>2,387</b>

Our aggregated value of collateral held against our non-impaired past due loans as of December 31, 2016 decreased in line with the reduction of non-impaired past due loans compared to prior year.

**Forborne Loans**

For economic or legal reasons we might enter into a forbearance agreement with a borrower who faces or will face financial difficulties in order to ease the contractual obligation for a limited period of time. A case by case approach is applied for our corporate clients considering each transaction and client specific facts and circumstances. For consumer loans we offer forbearances for a limited period of time, in which the total or partial outstanding or future installments are deferred to a later point of time. However, the amount not paid including accrued interest during this period must be re-compensated at a later point of time. Repayment options include distribution over residual tenor, a one-off payment or a tenor extension. Forbearances are restricted and depending on the economic situation of the client, our risk management strategies and the local legislation. In case a forbearance agreement is entered into, an impairment measurement is conducted as described below, an impairment charge is taken if necessary and the loan is subsequently recorded as impaired.

In our management and reporting of forborne loans, we are following the EBA definition for forbearances and non-performing loans (Implementing Technical Standards (ITS) on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013). Once the conditions mentioned in the ITS are met, we report the loan as being forborne; we remove the loan from our forbearance reporting, once the discontinuance criteria in the ITS are met (i.e., the contract is considered as performing, a minimum 2 year probation period has passed, regular payments of more than an insignificant aggregate amount of principal or interest have been made



during at least half of the probation period, and none of the exposures to the debtor is more than 30 days past-due at the end of the probation period).

### Forborne Loans

in € m.	Dec 31, 2016				Dec 31, 2015			
	Performing	Non-impaired	Non-performing	Total forborne loans	Performing	Non-impaired	Non-performing	Total forborne loans
	Nonimpaired		Impaired		Nonimpaired		Impaired	
German	907	374	983	2,264	1,067	441	1,096	2,605
Non-German	799	709	1,697	3,204	619	716	1,801	3,136
<b>Total</b>	<b>1,706</b>	<b>1,083</b>	<b>2,679</b>	<b>5,468</b>	<b>1,686</b>	<b>1,157</b>	<b>2,897</b>	<b>5,741</b>

The reduction of Total forborne loans in 2016 of €273 million was driven by performing as well as non-performing forborne loans to German clients, mainly driven by NCOU reflecting de-risking activities and PW&CC resulting from the ongoing benign environment in the German credit market.

## Impaired Loans

Credit Risk Management regularly assesses whether there is objective evidence that a loan or group of loans is impaired. A loan or group of loans is impaired and impairment losses are incurred if:

- there is objective evidence of impairment as a result of a loss event that occurred after the initial recognition of the asset and up to the balance sheet date (“a loss event”). When making our assessment we consider information on such events that is reasonably available up to the date the financial statements are authorized for issuance in line with the requirements of IAS 10;
- the loss event had an impact on the estimated future cash flows of the financial asset or the group of financial assets, and
- a reliable estimate of the loss amount can be made.

Credit Risk Management's loss assessments are subject to regular review in collaboration with Group Finance. The results of this review are reported to and approved by Group Finance and Risk Senior Management.

For further details with regard to impaired loans please refer to Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

## Impairment Loss and Allowance for Loan Losses

If there is evidence of impairment the impairment loss is generally calculated on the basis of discounted expected cash flows using the original effective interest rate of the loan. If the terms of a loan are renegotiated or otherwise modified because of financial difficulties of the borrower without qualifying for de-recognition of the loan, the impairment loss is measured using the original effective interest rate before modification of terms. We reduce the carrying amount of the impaired loan by the use of an allowance account and recognize the amount of the loss in the consolidated statement of income as a component of the provision for credit losses. We record increases to our allowance for loan losses as an increase of the provision for loan losses in our income statement. Charge-offs reduce our allowance while recoveries, if any, are credited to the allowance account. If we determine that we no longer require allowances which we have previously established, we decrease our allowance and record the amount as a reduction of the provision for loan losses in our income statement. When it is considered that there is no realistic prospect of recovery and all collateral has been realized or transferred to us, the loan and any associated allowance for loan losses is charged off (i.e., the loan and the related allowance for loan losses are removed from the balance sheet).

While we assess the impairment for our corporate credit exposures individually, we assess the impairment of our smaller-balance standardized homogeneous loans collectively.

Our collectively assessed allowance for non-impaired loans reflects allowances to cover for incurred losses that have neither been individually identified nor provided for as part of the impairment assessment of smaller-balance homogeneous loans.

For further details regarding our accounting policies regarding impairment loss and allowance for credit losses please refer to Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

#### Impaired loans, allowance for loan losses and coverage ratios by business division

in € m.	Dec 31, 2016			Dec 31, 2015			2016 increase (decrease) from 2015	
	Impaired loans	Loan loss allowance	Impaired loan coverage ratio in %	Impaired loans	Loan loss allowance	Impaired loan coverage ratio in %	Impaired loans	Impaired loan coverage ratio in ppt
Global Markets <sup>1</sup>	181	187	103	5	83	1,814	177	(1,711)
Corporate & Investment Banking	2,826	1,706	60	2,154	1,375	64	672	(3)
Private, Wealth & Commercial Clients	1,938	1,210	62	2,157	1,332	62	(219)	1
Deutsche Asset Management <sup>2</sup>	0	1	N/M	0	1	N/M	0	N/M
Postbank	1,708	1,007	59	1,846	1,126	61	(138)	(2)
Non-Core Operations Unit	794	432	54	1,989	1,109	56	(1,195)	(1)
thereof: assets reclassified to loans and receivables according to IAS 39	92	69	75	667	389	58	(575)	17
Consolidation & Adjustments and Other <sup>2</sup>	0	4	N/M	0	2	N/M	0	N/M
<b>Total</b>	<b>7,447</b>	<b>4,546</b>	<b>61</b>	<b>8,151</b>	<b>5,028</b>	<b>62</b>	<b>(703)</b>	<b>(1)</b>

N/M - Not meaningful.

<sup>1</sup> Impaired Loans in Global Markets are more than fully covered by loan loss allowance due to the latter including collectively assessed allowance for non-impaired loans.

<sup>2</sup> Allowance in Consolidation & Adjustments and Other and Deutsche Asset Management fully consists of collectively assessed allowance for non-impaired loans.

#### Impaired loans, allowance for loan losses and coverage ratios by industry

in € m.	Impaired Loans			Loan loss allowance			Dec 31, 2016	
	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	Impaired loan coverage ratio in %
Financial intermediation	122	11	133	27	3	47	77	58
Fund management activities	14	7	21	1	0	4	5	26
Manufacturing	524	229	754	476	149	82	707	94
Wholesale and retail trade	472	234	707	223	161	29	413	58
Households	193	2,467	2,661	220	1,466	67	1,754	66
Commercial real estate activities	385	37	422	168	25	39	233	55
Public sector	19	0	19	4	0	3	7	35
Other <sup>1</sup>	2,397	334	2,731	953	168	230	1,351	49
<b>Total</b>	<b>4,126</b>	<b>3,321</b>	<b>7,447</b>	<b>2,071</b>	<b>1,972</b>	<b>503</b>	<b>4,546</b>	<b>61</b>

<sup>1</sup> Thereof “Transportation, storage and communication”: Total Impaired Loans € 1.1 billion (40 %), Total Loan loss allowance € 650 million (48 %). The rest is split across various industries (of which no single one contributes 25 % or more to the total of the category ‘Other’).

Dec 31, 2015 <sup>1</sup>								
in € m.	Impaired Loans			Loan loss allowance				Impaired loan coverage ratio in %
	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	
Financial intermediation	159	10	169	38	5	55	98	58
Fund management activities	23	10	33	1	0	7	8	25
Manufacturing	518	247	765	470	149	70	688	90
Wholesale and retail trade	280	257	538	182	154	45	381	71
Households	332	2,931	3,263	324	1,805	74	2,202	67
Commercial real estate activities	860	52	912	503	36	36	576	63
Public sector	16	0	16	2	0	2	5	32
Other <sup>2</sup>	2,047	408	2,456	733	186	153	1,071	44
<b>Total</b>	<b>4,236</b>	<b>3,916</b>	<b>8,151</b>	<b>2,252</b>	<b>2,335</b>	<b>442</b>	<b>5,028</b>	<b>62</b>

<sup>1</sup> Comparatives have been restated to reflect changes in industry sectors.<sup>2</sup> Thereof 'Transportation, storage and communication': Total Impaired Loans €865 million (34 %), Total Loan loss allowance €375 million (35 %). The rest is split across various industries (of which no single one contributes 25 % or more to the totals of the category 'Other').

## Impaired loans, allowance for loan losses and coverage ratios by region

Dec 31, 2016								
in € m.	Impaired Loans			Loan loss allowance				Impaired loan coverage ratio in %
	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	
Germany	1,154	1,486	2,639	563	804	122	1,489	56
Western Europe (excluding Germany)	2,021	1,688	3,709	1,008	1,057	130	2,195	59
Eastern Europe	46	132	179	39	106	10	154	86
North America	495	1	496	148	0	128	277	56
Central and South America	4	0	5	3	0	14	16	363 <sup>1</sup>
Asia/Pacific	341	14	355	286	5	76	367	103 <sup>1</sup>
Africa	63	1	64	24	0	8	32	50
Other	2	0	2	0	0	17	17	908 <sup>1</sup>
<b>Total</b>	<b>4,126</b>	<b>3,321</b>	<b>7,447</b>	<b>2,071</b>	<b>1,972</b>	<b>503</b>	<b>4,546</b>	<b>61</b>

<sup>1</sup> Impaired Loans in Central & South America, Asia Pacific and Other are more than fully covered by loan loss allowance due to the latter including collectively assessed allowance for non-impaired loans.

Dec 31, 2015								
in € m.	Impaired Loans			Loan loss allowance				Impaired loan coverage ratio in %
	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	
Germany	1,362	1,642	3,004	647	930	105	1,682	56
Western Europe (excluding Germany)	2,280	2,057	4,337	1,294	1,237	132	2,662	61
Eastern Europe	76	179	255	38	165	10	213	83
North America	340	2	342	150	0	107	257	75
Central and South America	0	6	6	0	0	12	12	187 <sup>1</sup>
Asia/Pacific	155	23	178	100	2	60	162	91
Africa	21	5	26	23	0	5	28	107 <sup>1</sup>
Other	2	0	2	0	0	10	10	553 <sup>1</sup>
<b>Total</b>	<b>4,236</b>	<b>3,915</b>	<b>8,151</b>	<b>2,252</b>	<b>2,335</b>	<b>442</b>	<b>5,028</b>	<b>62</b>

<sup>1</sup> Impaired Loans in Central & South America, Africa and Other are more than fully covered by loan loss allowance due to the latter including collectively assessed allowance for non-impaired loans.

## Development of Impaired Loans

in € m.	Dec 31, 2016			Dec 31, 2015		
	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
Balance, beginning of year	4,236	3,915	8,151	4,990	4,359	9,348
Classified as impaired during the year	2,177	1,291	3,469	898	1,176	2,073
Transferred to not impaired during the year <sup>1</sup>	(1,080)	(723)	(1,803)	(1,010)	(859)	(1,869)
Charge-offs	(979)	(987)	(1,966)	(537)	(717)	(1,254)
Disposals of impaired loans	(266)	(161)	(427)	(239)	(53)	(292)
Exchange rate and other movements	38	(15)	23	135	10	145
Balance, end of year	4,126	3,321	7,447	4,236	3,915	8,151

<sup>1</sup> Includes repayments.

Our impaired loans decreased in 2016 by €704 million or 9 % to €7.4 billion resulting from reductions in our collectively assessed portfolio caused by NCOU, PW&CC and Postbank. There were further reductions in our individually assessed portfolio, where reductions in NCOU due to asset disposals more than offset new impairments in CIB and GM. The new impairments caused among other things by the continued market weakness of the shipping sector along and lower commodity prices in the metals and mining sector.

The impaired loan coverage ratio (defined as total on-balance sheet allowances for all loans individually impaired or collectively assessed divided by IFRS impaired loans (excluding collateral) decreased from 62 % as of year-end 2015 to 61 % as of December 31, 2016.

Our impaired loans included €92 million of loans reclassified to loans and receivables in accordance with IAS 39, down €575 million or 86 % from the level at prior year end. This decline was mainly driven by charge-offs.

## Provision for loan losses and recoveries by Industry

in € m.	2016						2015	
	Provision for loan losses before recoveries						Provision for loan losses before recoveries (total)	
	For individually assessed loans	For collectively assessed impaired loans	For collectively assessed non-impaired loans	Total	Recoveries			Recoveries
Financial intermediation	5	1	(9)	(3)	4	(5)		1
Fund management activities	0	1	(3)	(2)	0	2		0
Manufacturing	177	20	12	209	14	61		16
Wholesale and retail trade	43	28	(14)	58	4	78		4
Households	20	521	(10)	531	99	513		101
Commercial real estate activities	32	39	5	76	36	33		18
Public sector	(0)	0	1	0	0	(17)		0
Other <sup>1</sup>	552	58	55	665	31	378		21
Total	829	668	37	1,534	187	1,043		161

<sup>1</sup> The largest driver of Total Provision for loan losses before recoveries was the sector 'Transportation, storage and communication' with €422 million (63 %) in 2016 and €154 million (41 %) in 2015. The rest is split across various industries (of which no single one contributes 25 % or more of the total of the category 'Other').

Our existing commitments to lend additional funds to debtors with impaired loans amounted to €117 million as of December 31, 2016 and €54 million as of December 31, 2015.

## Collateral held against impaired loans, with fair values capped at transactional outstanding

in € m.	Dec 31, 2016	Dec 31, 2015
Financial and other collateral	2,016	2,722
Guarantees received	343	223
Total collateral held for impaired loans	2,359	2,945

Our total collateral held for impaired loans as of December 31, 2016 decreased by €586 million or 20 % compared to previous year, while coverage ratio including collateral (defined as total on-balance sheet allowances for all loans individually impaired or collectively assessed plus collateral held against impaired loans, with fair values capped at transactional outstanding, divided by IFRS impaired loans) declined to 93 % as of December 31, 2016 compared to 98 % as of December 31, 2015.

## Financial assets available for sale

The impairment concept is also applicable for available for sale debt instruments, which are otherwise carried at fair value with changes in fair value reported in other comprehensive income. If an available for sale debt instrument is considered impaired, the cumulative impairment loss reflects the difference between the amortized cost and the current fair value of the instrument. For a detailed discussion of our accounting procedures please refer to Note 1 "Significant Accounting policies and Critical Accounting Estimates".

### Non-impaired past due and impaired financial assets available for sale, accumulated impairments, coverage ratio and collateral held against impaired financial assets available for sale

in € m.	Dec 31, 2016	Dec 31, 2015
Financial assets non-impaired past due available for sale	1,661	1,610
thereof:		
Less than 30 days past due	178	47
30 or more but less than 60 days past due	24	0
60 or more but less than 90 days past due	23	0
90 days or more past due	1,436	1,563
Impaired financial assets available for sale	229	229
Accumulated impairment for financial assets available for sale	131	109
Impaired financial assets available for sale coverage ratio in %	57	47
Collateral held against impaired financial assets available for sale	20	19
thereof:		
Financial and other collateral	20	19
Guarantees received	0	0

## Collateral Obtained

We obtain collateral on the balance sheet by taking possession of collateral held as security or by calling upon other credit enhancements. Collateral obtained is made available for sale in an orderly fashion or through public auctions, with the proceeds used to repay or reduce outstanding indebtedness. Generally we do not occupy obtained properties for our business use. The commercial and residential real estate collateral obtained in 2016 refers predominantly to our exposures in Spain.

### Collateral obtained during the reporting periods

in € m.	2016	2015
Commercial real estate	9	5
Residential real estate	55	43
Other	0	0
Total collateral obtained during the reporting period	64	48

The collateral obtained, as shown in the table above, excludes collateral recorded as a result of consolidating securitization trusts under IFRS 10. In 2016 as well as in 2015 the group did not obtain any collateral related to these trusts.

## Allowance for Credit Losses

### Development of allowance for credit losses

in € m.	Allowance for Loan Losses			Allowance for Off-Balance Sheet Positions			2016
	Individually assessed	Collectively assessed	Subtotal	Individually assessed	Collectively assessed	Subtotal	Total
<b>Balance, beginning of year</b>	<b>2,252</b>	<b>2,776</b>	<b>5,028</b>	<b>144</b>	<b>168</b>	<b>312</b>	<b>5,340</b>
Provision for credit losses	743	604	1,347	24	12	36	1,383
thereof: (Gains)/Losses from disposal of impaired loans	3	(16)	(13)	0	0	0	(13)
Net charge-offs:	(894)	(870)	(1,764)	0	0	0	(1,764)
Charge-offs	(979)	(972)	(1,951)	0	0	0	(1,951)
Recoveries	85	101	187	0	0	0	187
Other changes	(30)	(35)	(65)	(5)	3	(2)	(67)
<b>Balance, end of year</b>	<b>2,071</b>	<b>2,475</b>	<b>4,546</b>	<b>162</b>	<b>183</b>	<b>346</b>	<b>4,892</b>
<b>Changes compared to prior year</b>							
Provision for credit losses							
Absolute	409	56	465	(34)	(4)	(39)	427
Relative	123 %	10 %	53 %	(59) %	(27) %	(52) %	45 %
Net charge-offs							
Absolute	(412)	(258)	(670)	0	0	0	(670)
Relative	85 %	42 %	61 %	0 %	0 %	0 %	61 %
Balance, end of year							
Absolute	(181)	(301)	(482)	18	15	34	(448)
Relative	(8) %	(11) %	(10) %	13 %	9 %	11 %	(8) %

Allowance for credit losses as at December 31, 2016 amounted to €4.9 billion compared to €5.3 billion as at December 31, 2015. The reduction was driven by charge-offs, partly compensated by additional provision for credit losses.

As of December 31, 2016, provision for credit losses increased by €427 million compared to year-end 2015, driven by an increase in provision for loan losses of €465 million partly offset by a reduction in provisions for off-balance sheet positions of €39 million. The increase in our individually assessed portfolio mainly resulted from CIB and Global Markets reflecting the continued market weakness of the shipping sector as well as lower commodity prices in the metals and mining and oil and gas sectors. The increase in provisions for our collectively assessed loan portfolio was mainly driven by NCOU partly relating to higher charges for IAS 39 reclassified assets and partly offset by PW&CC and Postbank, among other factors reflecting the good quality of the loan book and the benign economic environment. The reduction in provisions for off-balance sheet positions was driven by CIB and reflects releases caused by crystallization into cash of a few guarantee exposures leading to higher provision for loan losses.

The increase in net charge-offs of €670 million compared to 2015 was mainly driven by NCOU caused by IAS 39 reclassified assets along with disposals.

Our allowance for loan losses for IAS 39 reclassified assets, which were reported in NCOU, amounted to €69 million as of December 31, 2016, representing 2 % of our total allowance for loan losses, down 82 % from the level at the end of 2015 which amounted to €389 million (8 % of total allowance for loan losses). This reduction was driven by charge offs of €355 million along with reduction driven by foreign exchange as most IAS 39 reclassified assets are denominated in non-Euro currencies and partly offset by additional provisions of €66 million.

Compared to 2015, provision for loan losses for IAS 39 reclassified assets increased by €110 million mainly related to our European mortgage portfolios. Net charge offs increased by €242 million mainly driven by the European mortgage portfolio and one large single booking.

2015							
in € m.	Allowance for Loan Losses			Allowance for Off-Balance Sheet Positions			Total
	Individually assessed	Collectively assessed	Subtotal	Individually assessed	Collectively assessed	Subtotal	
<b>Balance, beginning of year</b>	<b>2,364</b>	<b>2,849</b>	<b>5,212</b>	<b>85</b>	<b>141</b>	<b>226</b>	<b>5,439</b>
Provision for credit losses	334	548	882	58	16	74	956
thereof: (Gains)/Losses from disposal of impaired loans	(64)	(51)	(116)	0	0	0	(116)
Net charge-offs:	(482)	(612)	(1,094)	0	0	0	(1,094)
Charge-offs	(538)	(717)	(1,255)	0	0	0	(1,255)
Recoveries	56	105	161	0	0	0	161
Other changes	36	(8)	28	1	10	11	39
<b>Balance, end of year</b>	<b>2,252</b>	<b>2,776</b>	<b>5,028</b>	<b>144</b>	<b>168</b>	<b>312</b>	<b>5,340</b>
<b>Changes compared to prior year</b>							
Provision for credit losses							
Absolute	(164)	(83)	(247)	71	(1)	70	(178)
Relative	(33) %	(13) %	(22) %	(538) %	(8) %	N/M <sup>1</sup>	(16) %
Net charge-offs							
Absolute	515	(100)	415	0	0	0	415
Relative	(52) %	19 %	(28) %	0 %	0 %	0 %	(28) %
Balance, end of year							
Absolute	(112)	(72)	(184)	59	27	86	(99)
Relative	(5) %	(3) %	(4) %	69 %	19 %	38 %	(2) %

1. N/M – Not meaningful

Allowance for credit losses as at December 2015 amounted to €5.3 billion compared to €5.4 billion as at the end of 2014. The reduction is mainly driven by charge offs in part relating to disposals.

Provision for credit losses decreased by €178 million compared to prior year, driven by a reduction in provision for loan losses of €247 million. The reduction in 2015 in provisions for loan losses in our individually assessed loan portfolio of €164 million is driven by IAS 39 reclassified assets and other real estate exposures recorded in NCOU, partly offset by higher provisioning in our Shipping and Leveraged Finance Portfolios in CIB. The reduction in our collectively assessed loan portfolio of €83 million mainly results from higher releases related to disposals along with an ongoing positive credit environment in Germany and a stabilization of Southern European markets. The increase in provisions for off-balance sheet exposures of €70 million compared to 2014 is driven by CIB mainly reflecting one large item and Postbank.

The reduction in charge offs of €415 million compared to 2014 is mainly driven by Postbank and results from high prior year levels caused by a one-off effect due to the alignment of processes.

Our allowance for loan losses for IAS 39 reclassified assets, which are reported in NCOU, amounted to €389 million at the end of 2015, representing 8 % of our total allowance for loan losses, down 25 % from the level at the end of the prior year which amounted to €518 million (10 % of total allowance for loan losses). This reduction was driven by net charge offs of €113 million along with net releases of €44 million and partly offset by increases related to foreign exchange as most IAS 39 reclassified assets are denominated in non-Euro currencies.

Compared to 2014, provision for loan losses for IAS 39 reclassified assets dropped by €129 million and net charge-offs increased by €98 million in 2015. Both changes were partly related to disposals.

## Derivatives – Credit Valuation Adjustment

We establish counterparty Credit Valuation Adjustment ("CVA") for OTC derivative transactions to cover expected credit losses. The adjustment amount is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the credit risk, based on available market information, including CDS spreads.



## Treatment of Default Situations under Derivatives

Unlike standard loan assets, we generally have more options to manage the credit risk in our derivatives transactions when movement in the current replacement costs or the behavior of our counterparty indicate that there is the risk that upcoming payment obligations under the transactions might not be honored. In these situations, we are frequently able under the relevant derivatives agreements to obtain additional collateral or to terminate and close-out the derivative transactions at short notice.

The master agreements for OTC derivative transactions executed with our clients usually provide for a broad set of standard or bespoke termination rights, which allow us to respond swiftly to a counterparty's default or to other circumstances which indicate a high probability of failure. We have less comfort under the rules and regulations applied by clearing CCPs, which rely primarily on the clearing members default fund contributions and guarantees and less on the termination and close-out of contracts, which will be considered only at a later point in time after all other measures failed. Considering the severe systemic disruptions to the financial system, that could be caused by a disorderly failure of a CCP, the Financial Stability Board ("FSB") recommended in October 2014 to subject CCPs to resolution regimes that apply the same objectives and provisions that apply to global systemically important banks (G-SIBs).

Our contractual termination rights are supported by internal policies and procedures with defined roles and responsibilities which ensure that potential counterparty defaults are identified and addressed in a timely fashion. These procedures include necessary settlement and trading restrictions. When our decision to terminate derivative transactions results in a residual net obligation owed by the counterparty, we restructure the obligation into a non-derivative claim and manage it through our regular work-out process. As a consequence, for accounting purposes we typically do not show any nonperforming derivatives.

Wrong-way risk occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. In compliance with Article 291(2) and (4) CRR we, excluding Postbank, had established a monthly process to monitor several layers of wrong-way risk (specific wrong-way risk, general explicit wrong-way risk at country/industry/region levels and general implicit wrong-way risk, whereby exposures arising from transactions subject to wrong-way risk are automatically selected and presented for comment to the responsible credit officer). A wrong-way risk report is then sent to Credit Risk senior management on a monthly basis. In addition, we, excluding Postbank, utilized our established process for calibrating our own alpha factor (as defined in Article 284 (9) CRR) to estimate the overall wrong-way risk in our derivatives and securities financing transaction portfolio. Postbank derivative counterparty risk is immaterial to the Group and collateral held is typically in the form of cash.

## Trading Market Risk Exposures

### Value-at-Risk Metrics of Trading Units of Deutsche Bank Group (excluding Postbank)

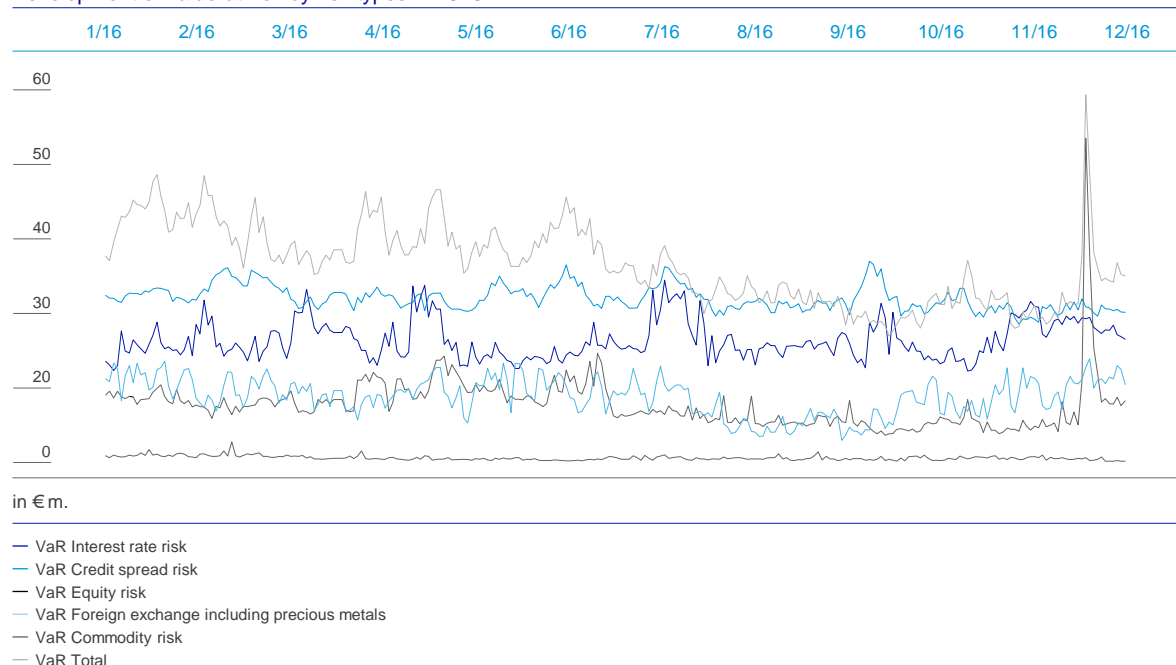
The tables and graph below present the value-at-risk metrics calculated with a 99 % confidence level and a one-day holding period for our trading units. They exclude contributions from Postbank trading book which are calculated on a stand-alone basis.

#### Value-at-Risk of our Trading Units by Risk Type

in € m.	Total		Diversification effect		Interest rate risk		Credit spread risk		Equity price risk		Foreign exchange risk <sup>1</sup>		Commodity price risk	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Average	32.0	43.3	(35.0)	(40.9)	19.7	20.3	26.6	30.9	9.3	16.6	10.7	15.0	0.7	1.3
Maximum	59.4	65.6	(57.6)	(59.2)	29.5	30.2	32.5	40.3	52.4	28.3	16.7	25.0	3.3	4.0
Minimum	20.4	28.7	(25.6)	(31.0)	14.8	16.2	22.3	24.0	4.4	9.2	3.6	6.0	0.2	0.5
Period-end	30.1	33.3	(36.9)	(38.8)	19.9	18.3	24.3	26.2	10.0	11.7	12.6	15.1	0.2	0.9

<sup>1</sup> Includes value-at-risk from gold and other precious metal positions.

## Development of value-at-risk by risk types in 2016



The average value-at-risk over 2016 was €32.0 million, which is a decrease of €11.2 million compared with the full year 2015. The reduction in the average was driven by decreases across the credit spread, foreign exchange and equity asset classes as a result of a decrease in directional exposure on average compared to the full year 2015. The spike in value-at-risk in December 2016 was driven by activity on the trading books for a short period of time during the facilitation of client transactions.

## Regulatory Trading Market Risk Measures (excluding Postbank)

The table below presents the stressed value-at-risk metrics calculated with a 99 % confidence level and a one-day holding period for our trading units. It excludes contributions from Postbank's trading book which are calculated on a stand-alone basis

## Average, Maximum and Minimum Stressed Value-at-Risk by Risk Type

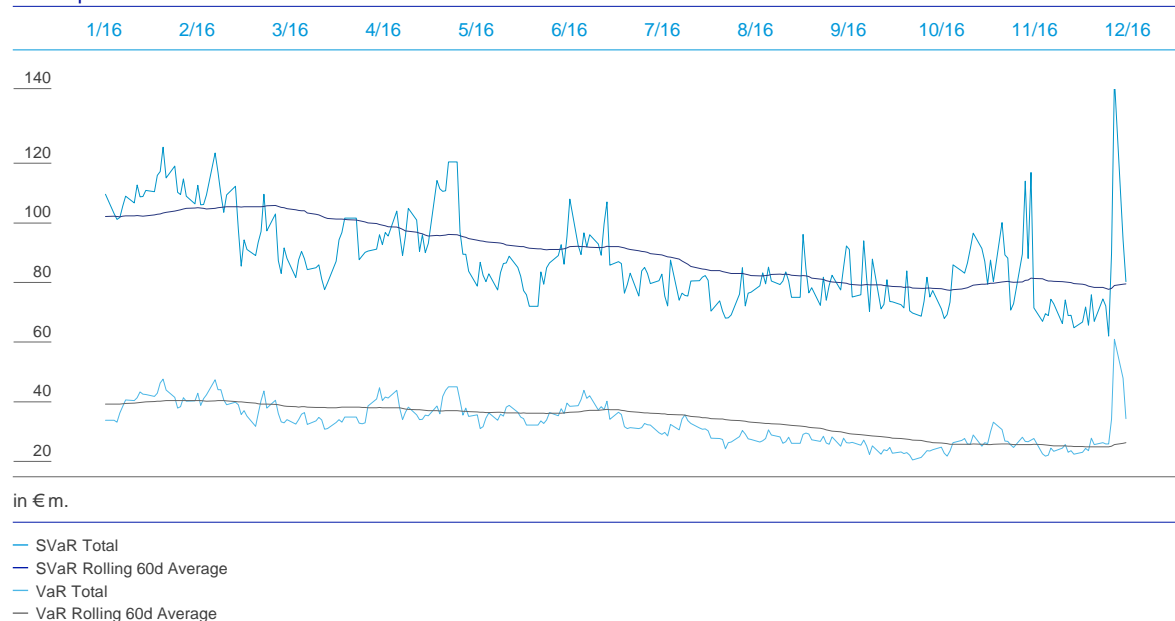
in € m.	Total		Diversification effect		Interest rate risk		Credit spread risk		Equity price risk		Foreign exchange risk <sup>1</sup>		Commodity price risk	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Average	85.2	105.1	(78.2)	(114.5)	51.9	60.7	74.9	106.7	20.6	22.8	14.8	26.7	1.3	2.5
Maximum	143.7	135.7	(150.0)	(186.7)	82.5	84.2	99.3	154.5	144.5	68.7	30.4	59.8	3.9	7.6
Minimum	60.4	82.4	(53.4)	(71.7)	37.4	45.1	59.0	82.6	2.4	0.1	3.4	5.7	0.4	0.7
Period-end	75.8	106.3	(91.3)	(98.0)	51.9	45.5	63.0	90.9	29.6	44.1	22.1	22.6	0.5	1.2

<sup>1</sup> Includes value-at-risk from gold and other precious metal positions.

The average stressed value-at-risk was €85.2 million over 2016, a decrease of €19.9 million compared with the full year 2015. The reduction in the average was driven by decreases coming from across the credit spread, foreign exchange and equity asset classes as a result of a decrease in directional exposure on average compared to the full year 2015. Additionally interest rate stressed value-at-risk has decreased on average over 2016 due to changes in the composition of the portfolio. Similar to value-at-risk there was a spike in December 2016 due to the facilitation of client transactions.

The following graph compares the development of the daily value-at-risk with the daily stressed value-at-risk and their 60 day averages, calculated with a 99 % confidence level and a one-day holding period for our trading units. Amounts are shown in millions of euro and exclude contributions from Postbank's trading book which are calculated on a stand-alone basis.

#### Development of value-at-risk and stressed value-at-risk in 2016



For regulatory reporting purposes, the incremental risk charge for the respective reporting dates represents the higher of the spot value at the reporting dates, and their preceding 12-week average calculation.

#### Average, Maximum and Minimum Incremental Risk Charge of Trading Units (with a 99.9 % confidence level and one-year capital horizon)<sup>1,2,3</sup>

in € m.	Total		Non-Core Operations Unit		Global Credit Trading		Core Rates		Fixed Income & Currencies APAC		Emerging Markets - Debt		Other	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Average	840.2	975.0	52.0	17.5	393.0	539.3	200.4	106.0	188.6	160.0	116.8	235.0	(110.5)	(82.0)
Maximum	944.4	1,020.8	57.3	85.0	405.8	693.0	229.6	179.0	243.0	351.0	128.0	300.0	(65.6)	(52.0)
Minimum	693.0	843.8	44.5	(4.8)	368.0	435.0	173.7	50.0	119.6	113.0	111.6	144.0	(141.8)	(128.0)
Period-end	693.0	890.0	51.8	(1.0)	368.0	489.0	173.7	86.0	119.6	123.0	121.8	259.0	(141.8)	(65.0)

<sup>1</sup> Amounts show the bands within which the values fluctuated during the 12-weeks preceding December 31, 2016 and December 31, 2015, respectively.

<sup>2</sup> Business line breakdowns have been updated for 2016 reporting to better reflect the current business structure.

<sup>3</sup> All liquidity horizons are set to 12 months.

The incremental risk charge as at the end of 2016 was €693 million a decrease of €197 million (22 %) compared with year end 2015. The 12-week average of the incremental risk charge as at the end of 2016 was €840 million and thus €135 million (14 %) lower compared with the average for the 12-week period ended December 31, 2015. The decreased average incremental risk charge is driven by a decrease in credit exposures in global credit trading when compared to the full year 2015.

For regulatory reporting purposes, the comprehensive risk measure for the respective reporting dates represents the higher of the internal spot value at the reporting dates, their preceding 12-week average calculation, and the floor, where the floor is equal to 8 % of the equivalent capital charge under the standardized approach securitization framework.

**Average, Maximum and Minimum Comprehensive Risk Measure of Trading Units (with a 99.9 % confidence level and one-year capital horizon)<sup>1,2,3</sup>**

in € m.	2016	2015
Average	31.3	188.4
Maximum	39.8	197.3
Minimum	21.9	180.3
Period-end	17.9	190.2

<sup>1</sup> Regulatory Comprehensive Risk Measure calculated for the 12-week period ending December 31.

<sup>2</sup> Period end is based on the internal model spot value.

<sup>3</sup> All liquidity horizons are set to 12 months.

The comprehensive risk measure as at the end of 2016 was €18 million and decreased by €172 million (91 %) compared with year end 2015. The 12-week average of our comprehensive risk measure as at the end of 2016 was €31 million and thus €157 million (83 %) lower compared with the average for the 12-week period ended December 31, 2015. The reduction was due to continued de-risking on the correlation trading portfolio.

**Market Risk Standardized Approach**

As of December 31, 2016, the securitization positions, for which the specific interest rate risk is calculated using the market risk standardized approach, generated capital requirements of €278.4 million corresponding to risk weighted-assets of €3.5 billion. As of December 31, 2015 these positions generated capital requirements of €811 million corresponding to risk weighted-assets of €10.1 billion. The reduction is due to continued de-risking of securitization exposures.

For nth-to-default credit default swaps the capital requirement increased to €6.4 million corresponding to risk weighted-assets of €80 million compared with €6 million and €78 million as of December 31, 2015.

Additionally, the capital requirement for investment funds under the market risk standardized approach was €39 million corresponding to risk weighted-assets of €487 million as of December 31, 2016, compared with €70 million and €873 million as of December 31, 2015.

The capital requirement for longevity risk under the market risk standardized approach was €46 million for NCOU and PIRM corresponding to risk weighted-assets of €570 million as of December 31, 2016, compared with €36 million and €451 million as of December 31, 2015.

**Value-at-Risk at Postbank**

The value-at-risk of Postbank's trading book calculated with a 99 % confidence level and a one-day holding period amounted to zero as of December 31, 2016. Postbank's current trading strategy does not allow any new trading activities with regard to the trading book. Therefore, Postbank's trading book did not contain any positions as of December 31, 2016. Nevertheless, Postbank will remain classified as a trading book institution.

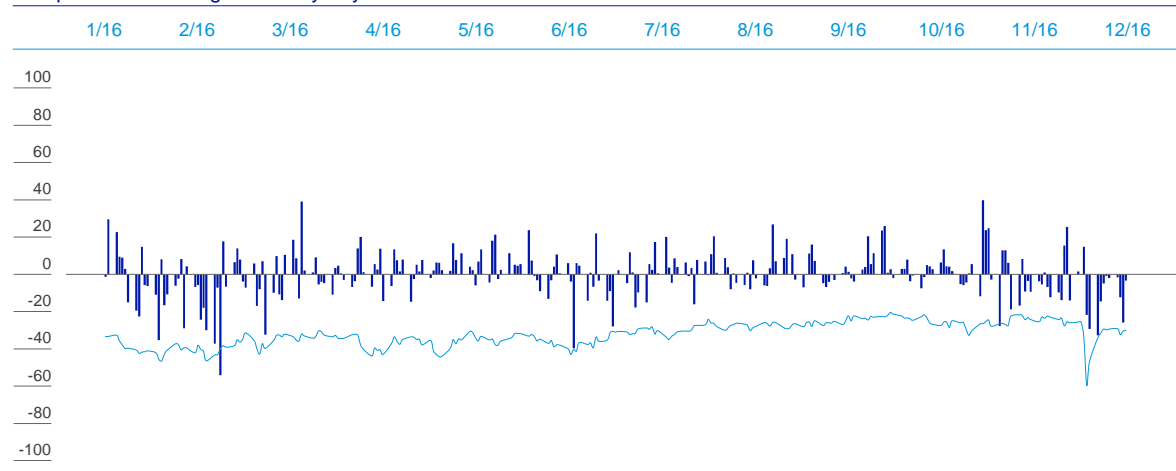
**Results of Regulatory Backtesting of Trading Market Risk**

In 2016 we observed one global outlier, where our loss on a buy-and-hold basis exceeded the value-at-risk, compared with three outliers in 2015. The outlier in 2016 occurred in February and was driven by market-event related losses across various businesses. This was as a consequence of heightened risk aversion in the markets following several concerns to the global economic outlook. Based on the backtesting results, our analysis of the underlying reasons for outliers and enhancements included in our value-at-risk methodology we continue to believe that our value-at-risk model will remain an appropriate measure for our trading market risk under normal market conditions.

The following graph shows the trading units daily buy-and-hold income in comparison to the value-at-risk as of the close of the previous business day for the trading days of the reporting period. The value-at-risk is presented in negative amounts to visually compare the estimated potential loss of our trading positions with the buy and hold income.

Figures are shown in millions of euro. The chart shows that our trading units achieved a positive buy and hold income for 54 % of the trading days in 2016 (versus 51 % in 2015), as well as displaying the global outlier experienced in 2016.

Comparison of trading units daily buy-and-hold income and value-at-risk in 2016



in € m.

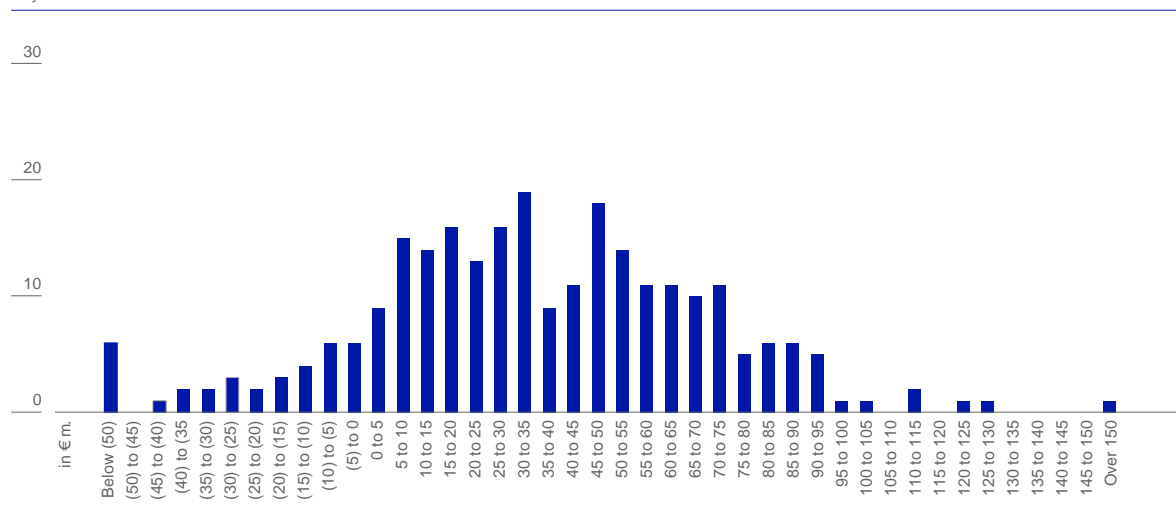
— Buy-and-hold income of Trading Units  
— Value-at-Risk

## Daily Income of our Trading Units

The following histogram shows the distribution of daily income of our trading units (excluding Postbank). Daily income is defined as total income which consists of new trades, fees & commissions, buy & hold income, reserves, carry and other income. It displays the number of trading days on which we reached each level of trading income shown on the horizontal axis in millions of euro.

Distribution of daily income of our trading units in 2016

Days



Our trading units achieved a positive revenue for 87 % of the trading days in 2016 compared with 91 % in the full year 2015.

## Nontrading Market Risk Exposures

### Carrying Value and Economic Capital Usage for Nontrading Market Risk Portfolios

#### Carrying Value and Economic Capital Usage for Nontrading Portfolios.

in € m.	Carrying value		Economic capital usage	
	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015
Strategic investments	1,064	829	562	332
Alternative assets	2,335	6,363	690	2,764
Principal investments	972	1,735	374	504
Other nonstrategic investment assets	1,363	4,627	316	2,260
Other nontrading market risks <sup>1</sup>	N/M	N/M	9,112	9,782
Interest rate risk	N/M	N/M	1,921	2,057
Credit spread risk	N/M	N/M	1,419	1,654
Equity compensation risk	N/M	N/M	582	405
Pension risk	N/M	N/M	1,007	828
Structural foreign exchange risk	N/M	N/M	2,485	3,183
Guaranteed funds risk	N/M	N/M	1,699	1,655
<b>Total nontrading market risk portfolios</b>	<b>3,399</b>	<b>7,192</b>	<b>10,364</b>	<b>12,878</b>

N/M – Not meaningful

<sup>1</sup> N/M – Indicates that the risk is mostly related to off-balance sheet and liabilities items.

The economic capital figures do take into account diversification benefits between the different risk types.

- **Strategic investments.** The nontrading market risk economic capital usage increased mainly by mark-to-market valuation of investments within this portfolio.
- **Alternative assets.** The nontrading market risk economic capital decreased significantly during 2016 mainly due to the sale of Hua Xia Bank Company Limited and Maher Terminals USA. Further decreases were driven by de-risking initiatives in the Non-Core Operations Unit.
- **Other nontrading market risks:**
  - **Interest rate risk.** In addition to the allocation of economic capital to outright interest rate risk in the nontrading market risk portfolio, a main component in this category is the maturity transformation of contractually short term deposits. The effective duration of contractually short term deposits is based upon observable client behavior, elasticity of deposit rates to market interest rates (“DRE”) and the volatility of deposit balances. Economic capital is derived by stressing modeling assumptions in particular the DRE – for the effective duration of overnight deposits. Behavioral and economic characteristics are taken into account when calculating the effective duration and optional exposures from our mortgage businesses. In total the economic capital usage for December 31, 2016 was € 1,921 million, compared to € 2,057 million for December 31, 2015. The decrease in economic capital contribution was driven by methodology enhancements with regard to modeling of non-maturity deposit partially offset by an increase in basis risks.
  - **Credit spread risk.** Economic capital charge for portfolios in the banking book subject to material credit spread risk. Economic capital usage was € 1,419 million as of December 31, 2016, versus € 1,654 million as of December 31, 2015. The decrease in economic capital usage was driven by reduced spread risk of securities held by Treasury as liquidity reserve partially offset by enhanced capture of credit spread risks in banking book positions in Global Markets.
  - **Equity compensation risk.** The risk arises from a structural short position in our own share price arising from restricted equity units. The economic capital usage was € 582 million as of December 31, 2016, compared with € 405 million as of December 31, 2015, predominately driven by an increase in restricted equity units.
  - **Pension risk.** This risk arises from our defined benefit obligations, including interest rate risk and inflation risk, credit spread risk, equity risk and longevity risk. The economic capital usage was € 1,007 million and € 828 million as of December 31, 2016 and December 31, 2015 respectively. The increase is mainly caused by increased credit spread risk from the pension liability due to convexity effects following a decline in market rates.

- **Structural foreign exchange risk.** Our foreign exchange exposure arises from unhedged capital and retained earnings in non-euro currencies in certain subsidiaries. Our economic capital usage was €2,485 million as of December 31, 2016 on a diversified basis versus €3,183 million as of December 31, 2015. The decrease is largely caused by reduced shareholders equity position in foreign currency including the sale of Hua Xia Bank Company Limited.
- **Guaranteed funds risk.** Economic capital usage as of December 31, 2016 was materially unchanged at €1,699 million compared to €1,655 million as of December 31, 2015.

## Operational Risk Exposure

### Operational Risk – Risk Profile

#### Operational Risk Losses by Event Type (Profit and Loss view)

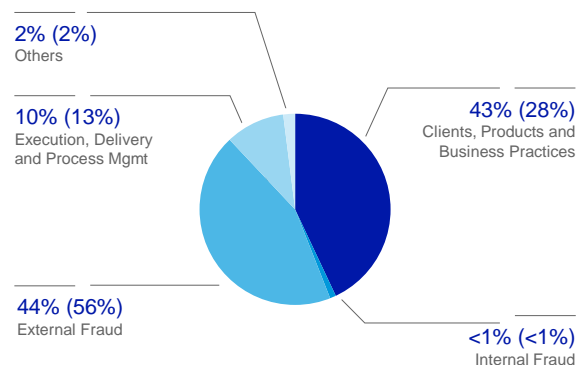
in € m.	2016	2015 <sup>1</sup>
Clients, Products and Business Practices	2,566	3,346
Internal Fraud	396	2,176
External Fraud	18	(197)
Execution, Delivery and Process Management	160	381
Others	23	20
<b>Group</b>	<b>3,163</b>	<b>5,726</b>

<sup>1</sup> Changed 2015 loss figures due to subsequent capture of losses and reclassification.

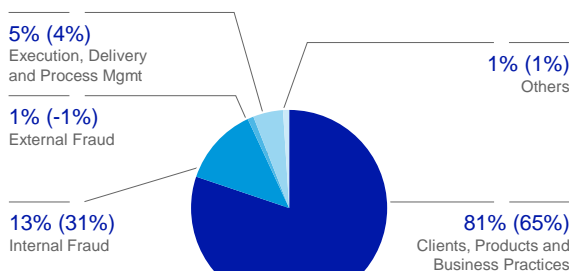
As of December 2016, profit and loss based operational losses decreased by €2.6 billion or 45 % compared to year-end 2015. The decrease was driven by the event types “Clients, Products and Business Practices” and “Internal Fraud”, due to settlements reached and increased litigation reserves for unsettled cases in 2015.

#### Operational Losses by Event Type occurred in the period 2016 (2011-2015)<sup>(1)</sup>

##### Frequency of Operational Losses (first posting date)



##### Distribution of Operational Losses (posting date)



<sup>1</sup> Percentages in brackets correspond to loss frequency respectively to loss amount for losses occurred in 2011-2015 period. Frequency and amounts can change subsequently.

The above left chart “Frequency of Operational Losses” summarizes operational risk events which occurred in 2016 compared to the five-year period 2011-2015 in brackets based on the period in which a loss was first recognized for that event. For example, for a loss event that was first recognized in 2002 with an additional profit/loss event recognized in 2016, the frequency chart would not include the loss event, but the loss distribution chart would include the profit/loss recognized in the respective period.

Frequencies are driven by the event types “External Fraud” with a frequency of 44 % and the event type “Clients, Product and Business Practices” with 43 % of all observed loss events. “Execution, Delivery and Process Management”



contributes 10 %. Others are stable at 2 %. The event type “Internal Fraud” has a low frequency, resulting in less than 1 % of the loss events in the period 2016. This is unchanged compared to 2011-2015.

The above right chart “Distribution of Operational Losses” summarizes operational risk loss postings recognized in the profit/loss in 2016 compared to the five-year period 2011-2015. The event type “Clients, Product and Business Practices” dominates the operational loss distribution with a share of 81 % and is determined by outflows related to litigation, investigations and enforcement actions. “Internal Fraud” has the second highest share (13 %) which is related to regulatory events we have experienced in recent years. Finally, the event types “Execution, Delivery and Process Management” (5 %), “Others” (1 %) and “External Fraud” (1 %) can be considered minor, compared to other event types.

## Liquidity Risk Exposure

### Funding Markets and Capital Markets Issuance

Credit markets in 2016 were affected by continued political uncertainties, the ongoing low interest rate environment as well as the implementation in a number of jurisdictions, including Germany, of measures regarding the insolvency hierarchy of senior liabilities. Our 5 year CDS traded within a range of 98 to 267 basis points, peaking in February. Since then, the spread has declined significantly and as of year-end was trading at 175 bp, in the middle of the range for the year. The spreads on our bonds exhibited similar volatility. For example, our 1.25 % EUR benchmark maturing in September 2021 traded in a range of 80 to 189 basis points, closing at the lower end of the range at year end.

Our 2016 funding plan of up to €30 billion, comprising debt issuance with an original maturity in excess of one year, was fully completed and we concluded 2016 having raised €31.8 billion in term funding. This funding was broadly spread across the following funding sources: unsecured benchmark issuance (€13 billion), Tier 2 benchmark issuance (€0.8 billion), covered benchmark issuance (€3.3 billion), unsecured plain vanilla private placements (€8.0 billion) and other unsecured structured and covered private placements (€6.7 billion). The €31.8 billion total was evenly split between Euro (€15.2 billion) and US dollar (€15.1 billion) with smaller amounts in JPY and CHF. In addition to direct issuance, we use long-term cross currency swaps to manage our funding needs outside of EUR. Our investor base for 2016 issuances comprised retail customers (19 %), banks (12 %), asset managers and pension funds (39 %), insurance companies (11 %) and other institutional investors (19 %). The geographical distribution was split between Germany (30 %), rest of Europe (25 %), US (28 %), Asia/Pacific (15 %) and Other (2 %). Of our total capital markets issuance outstanding as of December 31, 2016, approximately 84 % was issued on an unsecured basis.

The average spread of our issuance over 3-months-Euribor (all non-Euro funding spreads are rebased versus 3-months Euribor) was 129 basis points for the full year with an average tenor of 6.7 years. Our issuance activities were slightly higher in the first half of the year with volumes decreasing in the second half of the year 2016. We issued the following volumes over each quarter: €9.1 billion, €11.1 billion, €2.8 billion and €8.8 billion, respectively.

In 2017, our funding plan is €25 billion which we plan to cover by accessing the above sources, without being overly dependent on any one source. We also plan to raise a portion of this funding in U.S. dollar and may enter into cross currency swaps to manage any residual requirements. We have total capital markets maturities, excluding legally exercisable calls of approximately €21.5 billion in 2017.

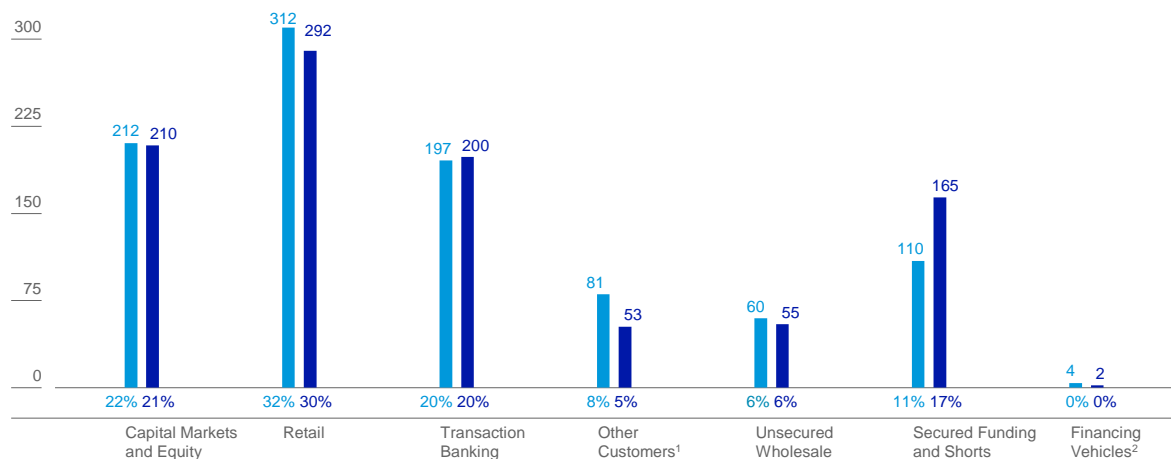
### Funding Diversification

In 2016, total external funding remained constant at €977 billion versus €976 billion at December 31, 2015. Retail deposits declined by €19.6 billion (6 %) predominantly reflecting a loss of wealth management client balances in the second half of the year. Transaction banking balances increased by €3.3 billion (2 %) while unsecured wholesale funding reduced by €5.4 billion (9 %). Other customers reduced by €28.1 billion (35 %) primarily driven by a reduction in net prime brokerage payables of €20 billion. Secured funding and shorts increased by €54.9 billion (50 %) driven by increased repo financing in addition to a net increase in TLTRO funding of €14 billion. This was reflected in the increase in the cash component of €80 billion in the Liquidity Reserves.

The overall proportion of our most stable funding sources (comprising capital markets and equity, retail, and transaction banking) slightly decreased from 74 % to 72 %.

### Composition of External Funding Sources

In € bn.



■ December 31, 2015: total €976 billion

■ December 31, 2016: total €977 billion

<sup>1</sup> Other includes fiduciary, self-funding structures (e.g. X-markets), margin/Prime Brokerage cash balances (shown on a net basis).

<sup>2</sup> Includes ABCP-Conduits.

Reference: Reconciliation to total balance sheet: Derivatives & settlement balances €504 billion (€528 billion), add-back for netting effect for Margin & Prime Brokerage cash balances (shown on a net basis) €68 billion (€71 billion), other non-funding liabilities €42 billion (€54 billion) for December 31, 2016 and December 31, 2015 respectively; figures may not add up due to rounding.

### Maturity of unsecured wholesale funding, ABCP and capital markets issuance<sup>1</sup>

Dec 31, 2016

in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	15,626	5,294	6,961	1,588	29,469	40	659	30,168
Deposits from other wholesale customers	4,164	5,712	3,992	4,111	17,979	703	422	19,104
CDs and CP	1,117	1,379	1,973	1,060	5,529	4	1	5,534
ABCP	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla <sup>2</sup>	626	4,111	4,735	11,825	21,296	8,085	49,993	79,374
Senior unsecured structured notes <sup>2</sup>	430	696	858	1,715	3,698	3,578	20,217	27,494
Covered bonds/ABS	0	482	678	1,284	2,445	2,718	18,601	23,764
Subordinated liabilities	0	8	1,576	972	2,556	4,620	11,712	18,887
Other	0	0	0	0	0	0	0	0
<b>Total</b>	<b>21,963</b>	<b>17,682</b>	<b>20,773</b>	<b>22,555</b>	<b>82,973</b>	<b>19,749</b>	<b>101,605</b>	<b>204,326</b>
thereof:								
Secured	0	482	678	1,284	2,445	2,718	18,601	23,764
Unsecured	21,963	17,199	20,094	21,271	80,528	17,031	83,004	180,563

<sup>1</sup> Includes additional Tier 1 notes reported as additional equity components in the financial statements. Liabilities with call features are shown at earliest legally exercisable call date. No assumption is made as to whether such calls would be exercised.

<sup>2</sup> Split between vanilla and structured notes has been aligned with TLAC definitions, 2015 numbers have been restated accordingly.

The total volume of unsecured wholesale liabilities, ABCP and capital markets issuance maturing within one year amount to €83 billion as of December 31, 2016, and should be viewed in the context of our total Liquidity Reserves of €219 billion.

Dec 31, 2015								
in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	11,101	8,073	3,196	1,399	23,769	143	69	23,981
Deposits from other wholesale customers	2,872	8,911	5,090	4,078	20,950	319	191	21,460
CDs and CP	1,216	3,718	3,984	5,636	14,555	298	1	14,853
ABCP	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla <sup>1</sup>	2,598	6,320	2,249	3,079	14,246	17,175	38,659	70,081
Senior unsecured structured notes <sup>1</sup>	708	2,376	2,214	3,371	8,669	5,365	23,446	37,480
Covered bonds/ABS	0	51	1,371	75	1,496	2,460	18,056	22,012
Subordinated liabilities	734	680	263	310	1,987	1,376	16,199	19,562
Other	0	0	0	0	0	0	0	0
<b>Total</b>	<b>19,229</b>	<b>30,129</b>	<b>18,367</b>	<b>17,948</b>	<b>85,673</b>	<b>27,136</b>	<b>96,621</b>	<b>209,430</b>
thereof:								
Secured	0	51	1,371	75	1,496	2,460	18,056	22,012
Unsecured	19,229	30,078	16,996	17,873	84,176	24,677	78,565	187,418

<sup>1</sup> Split between vanilla and structured notes has been aligned with TLAC definitions, 2015 numbers have been restated accordingly.

The following table shows the currency breakdown of our short-term unsecured wholesale funding, of our ABCP funding and of our capital markets issuance.

#### Unsecured wholesale funding, ABCP and capital markets issuance (currency breakdown)

in € m.	Dec 31, 2016					Dec 31, 2015				
	in EUR	in USD	in GBP	in other CCYs	Total	in EUR	in USD	in GBP	in other CCYs	Total
Deposits from banks	3,554	22,122	3,649	843	30,168	4,875	17,066	1,053	987	23,981
Deposits from other wholesale customers	15,396	2,964	541	203	19,104	15,912	4,257	476	815	21,460
CDs and CP	4,456	259	259	560	5,534	10,771	1,202	1,843	1,038	14,853
ABCP	0	0	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla <sup>1</sup>	39,510	33,504	8	6,352	79,374	42,403	22,145	110	5,422	70,081
Senior unsecured structured notes <sup>1</sup>	11,037	12,697	133	3,626	27,494	15,515	17,750	176	4,039	37,480
Covered bonds/ABS	23,745	16	0	2	23,764	21,952	60	0	0	22,012
Subordinated liabilities	8,540	9,196	799	353	18,887	8,507	9,858	800	397	19,562
Other	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>106,239</b>	<b>80,758</b>	<b>5,390</b>	<b>11,940</b>	<b>204,326</b>	<b>119,935</b>	<b>72,338</b>	<b>4,459</b>	<b>12,698</b>	<b>209,430</b>
thereof:										
Secured	23,745	16	0	2	23,764	21,952	60	0	0	22,012
Unsecured	82,494	80,742	5,390	11,938	180,563	97,984	72,278	4,459	12,697	187,418

<sup>1</sup> Split between vanilla and structured notes has been aligned with TLAC definitions, 2015 numbers have been restated accordingly.

## Liquidity Reserves

### Composition of our liquidity reserves by parent company (including branches) and subsidiaries

in € bn.	Dec 31, 2016		Dec 31, 2015	
	Carrying Value	Liquidity Value	Carrying Value	Liquidity Value
Available cash and cash equivalents (held primarily at central banks)	178	178	98	98
Parent (incl. foreign branches)	136	136	75	75
Subsidiaries	42	42	23	23
Highly liquid securities (includes government, government guaranteed and agency securities)	27	25	100	94
Parent (incl. foreign branches)	25	24	78	73
Subsidiaries	2	1	22	21
Other unencumbered central bank eligible securities	14	9	17	13
Parent (incl. foreign branches)	9	6	14	11
Subsidiaries	5	3	3	2
<b>Total liquidity reserves</b>	<b>219</b>	<b>212</b>	<b>215</b>	<b>205</b>
Parent (incl. foreign branches)	171	166	167	159
Subsidiaries	48	46	48	46

As of December 31, 2016, our liquidity reserves amounted to €219 billion compared with €215 billion as of December 31, 2015. Although the net growth in Liquidity Reserves was only €3 billion, the cash and cash equivalents increased by €80 billion, while the unencumbered securities decreased by €76 billion. This was largely driven by actions taken during the year to increase secured funding outstandings, as well as more general reductions in business inventory in particular during the last quarter of 2016. This was considered a prudent short-term measure in light of a challenging environment for the Group during this time. Our average liquidity reserves during the year were €212.4 billion compared with €202.2 billion during 2015. In the table above the carrying value represents the market value of our liquidity reserves while the liquidity value reflects our assumption of the value that could be obtained, primarily through secured funding, taking into account the experience observed in secured funding markets at times of stress.

The liquidity value (weighted) of our Liquidity Reserves of €212 billion exceeds the liquidity value (weighted) of our High Quality Liquid Assets (HQLA) of €203 billion. The major drivers of this difference are that Liquidity Reserves include central bank eligible but otherwise less liquid securities (for example traded loans, other investment grade corporate bonds and ABS) which are not recognized in HQLA and that HQLA includes major index equities, but excludes cash balances deposited with central banks to satisfy a minimum cash requirements as well as cash balances deposited with non EU Central Banks rated below AA- which are included in the LCR but not as part of the HQLA.

## Liquidity Coverage Ratio

Our LCR of 128 % as of December 31, 2016 has been calculated in accordance with the Commission Delegated Regulation (EU) 2015/61 and the EBA's Implementing Technical Standard on Supervisory Reporting with regard to the LCR.

### LCR components

in € bn.	Dec 31, 2016	Dec 31, 2015
	Liquidity Value (weighted)	Liquidity Value (weighted)
<b>High quality liquid assets</b>	<b>201</b>	<b>192</b>
Gross inflows	93	111
Gross outflows	250	272
<b>Net outflows</b>	<b>158</b>	<b>161</b>
LCR ratio in %	128 %	119 %

## Funding Risk Management

### Structural Funding

All funding matrices (the aggregate currency, the U.S. dollar and the GBP funding matrix) were in line with the respective risk appetite as of year ends 2016 and 2015.

### Stress Testing and Scenario Analysis

During 2016, in particular in the late autumn following market speculation on our negotiation with the U.S. Department of Justice in relation to our issuance and underwriting of residential mortgage-backed securities (RMBS), negative client responses adversely impacted our liquidity and funding position, and our internal measures of available liquidity over the duration of a stressed situation indicated a need to take corrective action. We responded with actions designed to restore these measures to customary levels and remained in contact with our regulators.

#### Global All Currency Monthly Stress Testing Results

in € bn.	Dec 31, 2016			Dec 31, 2015 <sup>1</sup>		
	Funding Gap <sup>2</sup>	Gap Closure <sup>3</sup>	Net Liquidity Position <sup>4</sup>	Funding Gap <sup>2</sup>	Gap Closure <sup>3</sup>	Net Liquidity Position <sup>4</sup>
Systemic market risk	64	204	141	71	218	147
Emerging markets	10	190	180	14	190	176
1 notch downgrade (DB specific)	43	195	152	51	200	148
Severe downgrade (DB specific)	178	224	46	188	240	53
Combined <sup>4</sup>	206	242	36	218	264	46

<sup>1</sup> Funding gap caused by impaired rollover of liabilities and other projected outflows

<sup>2</sup> Based on liquidity generation through Liquidity Reserves and other countermeasures.

<sup>3</sup> All scenarios showing 8 week point.

<sup>4</sup> Combined impact of systemic market risk and severe downgrade.

#### Global USD Monthly Stress Testing Results

in € bn.	Dec 31, 2016			Dec 31, 2015		
	Funding Gap <sup>1</sup>	Gap Closure <sup>2</sup>	Net Liquidity Position <sup>3</sup>	Funding Gap <sup>1</sup>	Gap Closure <sup>2</sup>	Net Liquidity Position <sup>3</sup>
Combined <sup>4</sup>	94	164	69	102	163	61

<sup>1</sup> Funding gap caused by impaired rollover of liabilities and other projected outflows

<sup>2</sup> Based on liquidity generation through Liquidity Reserves and other countermeasures.

<sup>3</sup> All scenarios showing 8 week point.

<sup>4</sup> Combined impact of systemic market risk and severe downgrade.

#### Global GBP Monthly Stress Testing Results

in € bn.	Dec 31, 2016			Dec 31, 2015		
	Funding Gap <sup>1</sup>	Gap Closure <sup>2</sup>	Net Liquidity Position <sup>3</sup>	Funding Gap	Gap Closure	Net Liquidity Position
Combined <sup>4</sup>	10	20	10	10	32	22

<sup>1</sup> Funding gap caused by impaired rollover of liabilities and other projected outflows.

<sup>2</sup> Based on liquidity generation through Liquidity Reserves and other countermeasures.

<sup>3</sup> All scenarios showing 8 week point.

<sup>4</sup> Combined impact of systemic market risk and severe downgrade.

The following table presents the amount of additional collateral required in the event of a one- or two-notch downgrade by rating agencies for all currencies.

#### Additional Contractual Obligations

in € m.	Dec 31, 2016		Dec 31, 2015	
	One-notch downgrade	Two-notch downgrade	One-notch downgrade	Two-notch downgrade
Contractual derivatives funding or margin requirements	1,470	1,982	4,332	6,472
Other contractual funding or margin requirements	317	1,459	317	1,459

## Asset Encumbrance

This section refers to asset encumbrance in the group of institutions consolidated for banking regulatory purposes pursuant to the German Banking Act. Thereunder not included are insurance companies or companies outside the finance sector. Assets pledged by our insurance subsidiaries are included in Note 23 "Assets Pledged and Received as Collateral" of the consolidated financial statements, and restricted assets held to satisfy obligations to insurance companies' policy holders are included within Note 40 "Information on Subsidiaries" of the consolidated financial statements.

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. Additionally, in line with the EBA technical standards on regulatory asset encumbrance reporting, we consider assets placed with settlement systems, including default funds and initial margins as encumbered, as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks. We also include derivative margin receivable assets as encumbered under these EBA guidelines.

Readily available assets are those on- and off-balance sheet assets that are not otherwise encumbered, and which are in freely transferrable form. Unencumbered financial assets at fair value, other than securities borrowed or purchased under resale agreements and positive market value from derivatives, and available for sale investments are all assumed to be readily available.

The readily available value represents the current balance sheet carrying value rather than any form of stressed liquidity value (see the "Liquidity Reserves" for an analysis of unencumbered liquid assets available under a liquidity stress scenario). Other unencumbered on- and off-balance sheet assets are those assets that have not been pledged as collateral against secured funding or other collateralized obligations, or are otherwise not considered to be readily available. Included in this category are securities borrowed or purchased under resale agreements and positive market value from derivatives. Similarly, for loans and other advances to customers, these would only be viewed as readily available to the extent they are already in a pre-packaged transferrable format, and have not already been used to generate funding. This represents the most conservative view given that an element of such loans currently shown in other could be packaged into a format that would be suitable for use to generate funding.

### Encumbered and unencumbered assets

in €bn. (unless stated otherwise)	Dec 31, 2016			
	Carrying value			
	Unencumbered assets			
	Assets	Encumbered assets	Readily available	Other
Debt securities	151	57	94	0
Equity instruments	75	42	33	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	191	12	179	0
Securities borrowed or purchased under resale agreements <sup>1</sup>	36	0	0	36
Financial assets at fair value through profit and loss <sup>2</sup>				
Trading assets	14	0	14	0
Positive market value from derivative financial instruments	488	0	0	488
Securities borrowed or purchased under resale agreements <sup>1</sup>	69	0	0	69
Other financial assets at fair value through profit or loss	7	0	7	0
Financial assets available for sale <sup>2</sup>	3	0	3	0
Loans	419	72	17	329
Other assets	139	55	0	84
<b>Total</b>	<b>1,591</b>	<b>239</b>	<b>347</b>	<b>1,005</b>

<sup>1</sup> Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below.

<sup>2</sup> Excludes Debt securities and Equity instruments (separately disclosed above).

in € bn. (unless stated otherwise)	Dec 31, 2016			
	Fair value of collateral received			
	Unencumbered assets			
	Assets	Encumbered assets	Readily available	Other
Collateral received:	260	218	43	0
Debt securities	196	155	41	0
Equity instruments	64	63	2	0
Other collateral received	0	0	0	0

in € bn. (unless stated otherwise)	Dec 31, 2015			
	Carrying value			
	Unencumbered assets			
	Assets	Encumbered assets	Readily available	Other
Debt securities	215	74	141	0
Equity instruments	76	49	28	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	107	11	96	0
Securities borrowed or purchased under resale agreements <sup>1</sup>	56	0	0	56
Financial assets at fair value through profit and loss <sup>2</sup>				
Trading assets	17	0	17	0
Positive market value from derivative financial instruments	518	0	0	518
Securities borrowed or purchased under resale agreements <sup>1</sup>	73	0	0	73
Other financial assets at fair value through profit or loss	12	0	12	0
Financial assets available for sale <sup>2</sup>	3	0	3	0
Loans	424	45	11	368
Other assets	132	59	0	74
<b>Total</b>	<b>1,632</b>	<b>238</b>	<b>307</b>	<b>1,087</b>

<sup>1</sup> Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below.

<sup>2</sup> Excludes Debt securities and Equity instruments (separately disclosed above).

in € bn. (unless stated otherwise)	Dec 31, 2015			
	Fair value of collateral received			
	Unencumbered assets			
	Assets	Encumbered assets	Readily available	Other
Collateral received:	285	238	46	1
Debt securities	197	152	45	0
Equity instruments	87	86	1	0
Other collateral received	1	0	0	1

The above tables set out a breakdown of on- and off-balance sheet items, broken down between encumbered, readily available and other. Any securities borrowed or purchased under resale agreements are shown based on the fair value of collateral received.

The above tables of encumbered assets include assets that are not encumbered at an individual entity level, but which may be subject to restrictions in terms of their transferability within the group. Such restrictions may be due to local connected lending requirements or similar regulatory restrictions. In this situation it is not feasible to identify individual balance sheet items that cannot be transferred.



## Maturity Analysis of Assets and Financial Liabilities

Treasury manages the maturity analysis of assets and liabilities. Modeling of assets and liabilities is necessary in cases where the contractual maturity does not adequately reflect the liquidity risk position. The most significant example in this context would be immediately repayable deposits from retail and transaction banking customers which have consistently displayed high stability throughout even the most severe financial crises.

The modeling profiles are part of the overall liquidity risk management framework (see section “Liquidity Stress Testing and Scenario Analysis” for short-term liquidity positions  $\leq 1$  year and section “Structural Funding” for long-term liquidity positions  $> 1$  year) which is defined and approved by the Management Board.

The following tables present a maturity analysis of our total assets based on carrying value and upon earliest legally exercisable maturity as of December 31, 2016 and 2015, respectively.

## Analysis of the earliest contractual maturity of assets

Dec 31, 2016

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances	177,648	539	131	121	334	2,591	0	0	0	181,364
Interbank balances (w/o central banks)	5,841	3,578	596	83	65	834	115	26	469	11,606
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	631	4,204	5,852	3,170	1,368	532	449	15	67	16,287
With banks	604	2,534	5,026	2,077	1,217	461	0	0	0	11,918
With customers	27	1,670	826	1,093	152	71	449	15	67	4,370
Securities borrowed	19,548	532	0	0	0	0	0	0	0	20,081
With banks	2,459	52	0	0	0	0	0	0	0	2,511
With customers	17,089	480	0	0	0	0	0	0	0	17,570
Financial assets at fair value through profit or loss – trading	677,696	33,314	9,577	1,752	776	1,983	2,995	2,803	12,884	743,781
Trading assets	171,044	0	0	0	0	0	0	0	0	171,044
Fixed-income securities and loans	94,486	0	0	0	0	0	0	0	0	94,486
Equities and other variable-income securities	75,633	0	0	0	0	0	0	0	0	75,633
Other trading assets	924	0	0	0	0	0	0	0	0	924
Positive market values from derivative financial instruments	485,150	0	0	0	0	0	0	0	0	485,150
Financial assets designated at fair value through profit or loss	21,502	33,314	9,577	1,752	776	1,983	2,995	2,803	12,884	87,587
Securities purchased under resale agreements	7,154	28,691	6,810	914	110	1,256	995	608	866	47,404
Securities borrowed	14,227	4,561	2,348	0	0	0	0	0	0	21,136
Fixed-income securities and loans	120	62	419	838	666	232	1,992	2,195	11,399	17,923
Equities and other variable-income securities	0	0	0	0	0	146	0	0	590	736
Other financial assets designated at fair value through profit or loss	1	0	0	0	0	350	7	0	29	387
Positive market values from derivative financial instruments qualifying for hedge accounting	0	61	201	39	52	30	257	1,030	1,846	3,516
Financial assets available for sale	471	1,154	2,344	1,031	1,915	2,298	9,210	18,778	19,028	56,228
Fixed-income securities and loans	251	1,008	2,341	1,031	1,915	1,334	9,210	18,733	18,452	54,275
Equities and other variable-income securities	219	146	3	0	0	964	0	45	575	1,953
Loans	18,364	23,666	26,185	29,223	9,128	9,107	28,787	66,383	198,067	408,909
To banks	937	1,978	3,043	2,425	650	641	1,529	1,298	775	13,276
To customers	17,427	21,688	23,142	26,798	8,477	8,467	27,258	65,085	197,292	395,633
Retail	6,446	3,872	5,436	2,397	1,630	2,055	5,634	17,450	157,616	202,536
Corporates and other customers	10,980	17,816	17,706	24,401	6,847	6,412	21,624	47,635	39,676	193,097
Securities held to maturity	0	0	0	0	0	0	0	1,515	1,691	3,206
Other financial assets	104,400	475	1,052	221	240	135	58	671	2,878	110,131
<b>Total financial assets</b>	<b>1,004,599</b>	<b>67,523</b>	<b>45,937</b>	<b>35,640</b>	<b>13,878</b>	<b>17,510</b>	<b>41,870</b>	<b>91,221</b>	<b>236,931</b>	<b>1,555,109</b>
Other assets	23,492	0	0	0	0	0	0	0	11,944	35,437
<b>Total assets</b>	<b>1,028,091</b>	<b>67,523</b>	<b>45,937</b>	<b>35,640</b>	<b>13,878</b>	<b>17,510</b>	<b>41,870</b>	<b>91,221</b>	<b>248,875</b>	<b>1,590,546</b>

## Analysis of the earliest contractual maturity of assets

Dec 31, 2015										
in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances	94,290	337	0	0	0	2,313	0	0	0	96,940
Interbank balances (w/o central banks)	7,703	2,115	434	341	1	2,025	83	100	40	12,842
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	450	8,293	5,530	4,539	1,861	568	888	328	0	22,456
With banks	426	7,050	5,091	3,648	1,601	311	647	0	0	18,773
With customers	24	1,243	440	890	260	258	241	328	0	3,683
Securities borrowed	30,335	3,221	0	0	0	0	0	1	0	33,557
With banks	3,462	159	0	0	0	0	0	0	0	3,622
With customers	26,873	3,062	0	0	0	0	0	1	0	29,935
Financial assets at fair value through profit or loss – trading	735,748	35,190	6,176	3,652	1,318	1,298	5,173	6,599	25,727	820,883
Trading assets	196,035	0	0	0	0	0	0	0	0	196,035
Fixed-income securities and loans	118,671	0	0	0	0	0	0	0	0	118,671
Equities and other variable-income securities	76,044	0	0	0	0	0	0	0	0	76,044
Other trading assets	1,320	0	0	0	0	0	0	0	0	1,320
Positive market values from derivative financial instruments	515,594	0	0	0	0	0	0	0	0	515,594
Financial assets designated at fair value through profit or loss	24,119	35,190	6,176	3,652	1,318	1,298	5,173	6,599	25,727	109,253
Securities purchased under resale agreements	6,139	31,257	5,449	2,344	503	341	1,690	2,384	965	51,073
Securities borrowed	17,898	3,544	47	0	0	0	0	0	0	21,489
Fixed-income securities and loans	79	376	656	1,303	791	448	3,483	4,214	14,532	25,883
Equities and other variable-income securities	0	4	0	0	0	155	0	0	10,230	10,389
Other financial assets designated at fair value through profit or loss	2	9	24	5	24	354	0	1	0	419
Positive market values from derivative financial instruments qualifying for hedge accounting	0	9	71	75	139	58	142	716	1,925	3,136
Financial assets available for sale	18	966	1,941	1,543	893	1,998	8,832	22,880	34,513	73,583
Fixed-income securities and loans	6	481	1,937	1,543	893	952	8,815	22,869	33,873	71,368
Equities and other variable-income securities	12	485	3	0	0	1,046	17	12	640	2,215
Loans	20,375	31,464	27,851	30,337	9,142	11,313	24,272	71,890	201,104	427,749
To banks	543	2,137	3,829	1,858	1,703	870	726	1,592	926	14,183
To customers	19,832	29,327	24,022	28,480	7,439	10,442	23,546	70,299	200,177	413,565
Retail	5,363	6,048	6,102	3,065	2,536	2,874	6,743	18,787	149,127	200,646
Corporates and other customers	14,470	23,279	17,920	25,415	4,903	7,568	16,803	51,512	51,050	212,919
Other financial assets	94,078	932	1,479	564	254	1,003	115	62	66	98,555
<b>Total financial assets</b>	<b>982,997</b>	<b>82,528</b>	<b>43,483</b>	<b>41,051</b>	<b>13,608</b>	<b>20,577</b>	<b>39,505</b>	<b>102,576</b>	<b>263,374</b>	<b>1,589,700</b>
<b>Other assets</b>	<b>26,341</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,089</b>	<b>39,430</b>
<b>Total assets</b>	<b>1,009,338</b>	<b>82,528</b>	<b>43,483</b>	<b>41,051</b>	<b>13,608</b>	<b>20,577</b>	<b>39,505</b>	<b>102,576</b>	<b>276,463</b>	<b>1,629,130</b>

The following tables present a maturity analysis of our total liabilities based on carrying value and upon earliest legally exercisable maturity as of December 31, 2016 and 2015, respectively.

## Analysis of the earliest contractual maturity of liabilities

	Dec 31, 2016									
in € m.	On demand (incl. Over- night and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	329,776	36,590	110,606	17,562	15,756	12,595	8,532	8,041	10,746	550,204
Due to banks	64,438	9,602	13,129	2,279	6,175	4,220	1,885	5,372	8,993	116,094
Due to customers	265,337	26,988	97,477	15,283	9,581	8,375	6,647	2,669	1,752	434,110
Retail	109,943	10,761	75,517	3,191	1,744	902	785	911	279	204,033
Corporates and other customers	155,395	16,227	21,960	12,093	7,837	7,472	5,862	1,758	1,473	230,077
Trading liabilities	520,887	0	0	0	0	0	0	0	0	520,887
Trading securities	56,592	0	0	0	0	0	0	0	0	56,592
Other trading liabilities	437	0	0	0	0	0	0	0	0	437
Negative market values from derivative financial instruments	463,858	0	0	0	0	0	0	0	0	463,858
Financial liabilities designed at fair value through profit or loss (without loan commitments and financial guarantees)	1,992	38,633	8,123	2,212	744	3,745	1,031	1,004	2,969	60,452
Securities sold under repurchase agreements	1,587	36,128	7,584	1,791	2	2,739	566	0	0	50,397
Long-term debt	201	73	329	384	640	859	398	949	2,640	6,473
Other financial liabilities designated at fair value through profit or loss	203	2,432	210	37	102	147	68	55	329	3,582
Investment contract liabilities	0	0	0	0	0	592	0	0	0	592
Negative market values from derivative financial instruments qualifying for hedge accounting	0	249	324	194	312	231	943	1,484	856	4,593
Central bank funds purchased	353	0	0	0	0	0	0	0	0	353
Securities sold under repurchase agreements	19,957	1,510	844	1,191	0	1,178	434	271	0	25,387
Due to banks	14,934	1,510	844	1,191	0	1,178	292	271	0	20,222
Due to customers	5,023	0	0	0	0	0	142	0	0	5,165
Securities loaned	3,587	10	1	0	0	0	0	0	0	3,598
Due to banks	1,488	4	0	0	0	0	0	0	0	1,492
Due to customers	2,099	6	1	0	0	0	0	0	0	2,106
Other short term borrowings	13,216	921	1,073	265	1,292	529	0	0	0	17,295
Long-term debt	0	1,037	5,275	8,143	10,113	4,190	43,315	56,444	43,799	172,316
Debt securities - senior	0	989	5,085	7,476	9,772	3,534	13,284	51,704	30,162	122,006
Debt securities - subordinated	0	0	0	0	0	231	140	1,124	5,293	6,788
Other long-term debt - senior	0	43	190	582	284	384	29,507	3,496	8,063	42,549
Other long-term debt - subordinated	0	5	0	85	56	42	384	120	281	974
Trust Preferred Securities	0	0	0	730	1,054	413	4,176	0	0	6,373
Other financial liabilities	128,398	976	1,665	221	201	161	295	112	3,246	135,274
<b>Total financial liabilities</b>	<b>1,018,165</b>	<b>79,926</b>	<b>127,911</b>	<b>30,518</b>	<b>29,473</b>	<b>23,635</b>	<b>58,726</b>	<b>67,356</b>	<b>61,616</b>	<b>1,497,325</b>
<b>Other liabilities</b>	<b>28,362</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,362</b>
<b>Total equity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64,819</b>	<b>64,819</b>
<b>Total liabilities and equity</b>	<b>1,046,527</b>	<b>79,926</b>	<b>127,911</b>	<b>30,518</b>	<b>29,473</b>	<b>23,635</b>	<b>58,726</b>	<b>67,356</b>	<b>126,435</b>	<b>1,590,506</b>
Off-balance sheet commitments given	6,061	9,569	8,896	13,765	8,708	14,794	30,609	98,024	27,978	218,404
Banks	305	688	1,501	1,671	602	587	1,185	958	192	7,688
Retail	253	124	95	226	283	387	757	538	8,875	11,540
Corporates and other customers	5,503	8,757	7,300	11,868	7,823	13,820	28,667	96,528	18,911	199,176

## Analysis of the earliest contractual maturity of liabilities

Dec 31, 2015										
in € m.	On demand (incl. Over- night and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	345,569	37,777	117,943	21,500	10,169	8,600	7,356	6,935	11,126	566,974
Due to banks	72,304	5,131	15,770	5,884	1,616	2,106	2,188	5,214	8,852	119,065
Due to customers	273,265	32,646	102,173	15,616	8,552	6,494	5,168	1,721	2,273	447,909
Retail	113,016	13,588	80,124	3,270	2,131	1,805	2,524	642	220	217,321
Corporates and other customers	160,249	19,058	22,049	12,346	6,422	4,689	2,644	1,079	2,053	230,588
Trading liabilities	546,381	0	0	0	0	0	0	0	0	546,381
Trading securities	51,327	0	0	0	0	0	0	0	0	51,327
Other trading liabilities	977	0	0	0	0	0	0	0	0	977
Negative market values from derivative financial instruments	494,076	0	0	0	0	0	0	0	0	494,076
Financial liabilities designed at fair value through profit or loss (without loan commitments and financial guarantees)	18,423	4,725	1,569	1,760	1,240	10,069	1,809	1,652	3,526	44,773
Securities sold under repurchase agreements	17,600	2,712	690	1,172	140	9,322	0	0	0	31,637
Long-term debt	269	47	342	426	879	513	1,669	1,384	3,183	8,710
Other financial liabilities designated at fair value through profit or loss	554	1,966	537	162	221	233	141	268	343	4,425
Investment contract liabilities	0	35	70	70	70	734	108	1,593	5,843	8,522
Negative market values from derivative financial instruments qualifying for hedge accounting	0	43	513	414	203	301	278	1,630	2,983	6,365
Central bank funds purchased	574	0	0	0	0	0	0	0	0	574
Securities sold under repurchase agreements	7,492	1,567	53	117	0	0	0	0	0	9,229
Due to banks	2,757	1,554	53	117	0	0	0	0	0	4,481
Due to customers	4,734	13	0	0	0	0	0	0	0	4,747
Securities loaned	2,846	10	1	0	0	0	0	0	414	3,270
Due to banks	290	6	0	0	0	0	0	0	0	295
Due to customers	2,556	5	1	0	0	0	0	0	414	2,975
Other short term borrowings	17,776	1,311	2,052	2,666	3,006	1,199	0	0	0	28,010
Long-term debt	0	3,327	8,638	6,923	4,251	2,990	39,801	45,435	48,652	160,016
Debt securities - senior	0	3,184	8,444	5,815	3,782	2,631	24,701	40,061	36,599	125,217
Debt securities - subordinated	0	0	0	619	150	100	0	1,314	4,231	6,414
Other long-term debt - senior	0	143	194	247	173	162	14,978	3,575	7,502	26,973
Other long-term debt - subordinated	0	0	0	243	146	97	121	486	319	1,412
Trust Preferred Securities	0	733	0	262	0	0	735	4,373	918	7,020
Other financial liabilities	146,678	931	2,859	198	83	170	340	14	36	151,309
<b>Total financial liabilities</b>	<b>1,085,739</b>	<b>50,458</b>	<b>133,696</b>	<b>33,911</b>	<b>19,023</b>	<b>24,063</b>	<b>50,426</b>	<b>61,633</b>	<b>73,496</b>	<b>1,532,443</b>
<b>Other liabilities</b>	<b>28,984</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,984</b>
<b>Total equity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67,624</b>	<b>67,624</b>
<b>Total liabilities and equity</b>	<b>1,114,722</b>	<b>50,458</b>	<b>133,696</b>	<b>33,911</b>	<b>19,023</b>	<b>24,063</b>	<b>50,426</b>	<b>61,633</b>	<b>141,120</b>	<b>1,629,051</b>
Off-balance sheet commitments given	6,433	9,833	8,772	17,963	10,036	14,221	29,240	107,376	27,999	231,874
Banks	425	406	1,405	2,354	1,301	1,059	1,512	1,213	177	9,852
Retail	231	166	103	687	678	945	2,272	1,605	7,272	13,958
Corporates and other customers	5,778	9,261	7,265	14,923	8,057	12,218	25,456	104,559	20,549	208,063

# Compensation Report

	Introduction – 200
	Letter of the Chairman of the Supervisory Board – 201
202	Management Board Compensation Report
	Management Board Compensation Governance – 202
	Principles of the Management Board Compensation and the Compensation System – 202
	Compensation Structure until 2016 – 204
	Compensation Structure as of January 2017 – 207
	Long-Term Incentive and Sustainability – 214
	Forfeiture Conditions/Clawback – 2015
	Limitations in the Event of Exceptional Developments – 2015
	Shareholding Guidelines – 216
	Other Benefits upon Premature Termination – 217
	Expense for Long-Term Incentive Components – 218
	Management Board compensation for the 2016 financial year – 218
	Share awards – 219
	Management Board Share Ownership – 220
	Compensation in accordance with the German Corporate Governance Codex (GCGC) – 220
	Compensation in accordance with the German Accounting Standard No. 17 (GAS 17) – 229
232	Employee Compensation Report
	Overview on Compensation Decisions for 2016 – 232
	Regulatory Environment – 233
	Compensation Governance – 234
	Compensation Strategy – 235
	Total Compensation Structure – 236
	Determination of Variable Compensation – Methodology – 238
	Compensation Decisions for 2016 – 239
	Recognition and Amortization of Variable Compensation – 240
	Variable Compensation Structure and Vehicles – 240
	Ex-post Risk Adjustment of Variable Compensation – 240
	2017 Retention Award Program – 244
	Compensation disclosure pursuant to Sec. 16 InstVV and Art. 450 CRR – 245
247	Compensation System for Supervisory Board Members
	Supervisory Board Compensation for the 2016 Financial Year – 248

## Introduction

The 2016 Compensation Report provides detailed compensation information with regard to the overall Deutsche Bank Group.

The compensation report comprises the following three sections:

### Management Board Compensation Report

The first section of the Report sets out the structure and design of the compensation system for the members of the Management Board of Deutsche Bank AG. It presents the compensation system for the 2016 financial year, for which variable compensation structure was supplemented by an additional component compared to the compensation system for the 2015 financial year. Following the presentation of the existing compensation structures, the compensation system applicable as of the 2017 financial year, on the approval of which the General Meeting will vote in May 2017, is introduced. In addition, the report contains information on the individual compensation granted by the Supervisory Board to the members of the Management Board of Deutsche Bank AG.

### Employee Compensation Report

The second section of the compensation report discloses information with regard to the compensation system and structure that applies to the employees in Deutsche Bank Group (except for Deutsche Postbank AG, which publishes a separate Compensation Report). The report provides details on the New Compensation Framework that was introduced in 2016 and it outlines the decisions on Variable Compensation for 2016. Furthermore, this part contains quantitative disclosures specific to employees identified as Material Risk Takers (MRTs) in accordance with the German Regulation on the Supervisory Requirements for Compensation Systems of Banks (Institutsvergütungsverordnung, "InstVV").

### Supervisory Board Report and Disclosure

The third section provides information on the structure and level of compensation for Supervisory Board members of Deutsche Bank AG.

The report complies with the requirements of Section 314 (1) No.6 of the German Commercial Code (Handelsgesetzbuch, "HGB"), the German Accounting Standard No. 17 ("DRS 17") "Reporting on Executive Body Remuneration", CRR, InstVV, and the recommendations of the German Corporate Governance Code.



## Letter of the Chairman of the Supervisory Board

*Dear Shareholders,*

*On the following pages you find the details of the compensation and the underlying compensation system for members of the Group Management Board for the 2016 financial year.*

*The Supervisory Board changed the compensation system with effect from January 1, 2016, in particular by supplementing the variable compensation components by an additional Division Incentive Award for Management Board members with front office responsibility. We presented the changed compensation system to you for approval at the General Meeting in May 2016. Unfortunately, no majority approval was granted.*

*The Bank's Supervisory Board has taken the outcome of this resolution very seriously and, immediately after the General Meeting, it started analyzing the existing system on the basis of the criticisms voiced and discussing adequate possibilities to change the system. The Compensation Control Committee worked vigorously on the re-design of the compensation system over the past months and regularly informed the Supervisory Board of any progress made. In February of this year, the Supervisory Board, on a proposal from the Compensation Control Committee, resolved new compensation structures for the members of the Management Board as of the 2017 financial year.*

*I am convinced that with the new 2017 compensation system, we are able to present to you a compensation system featuring transparent and clear structures, appropriately addressing any points you consider critical. The compensation for the Management Board members is closely linked to pre-defined objectives; the performance of the Management Board as a plenary body based on Group-wide key financial figures, but also on an individual basis, is clearly determined and rewarded on the basis of the achievement level of collective and individual objectives. Thus, the structures align compensation closely with Group performance and the performance of the Deutsche Bank share.*

*The new performance system will be presented to you in detail starting on page 207. It goes without saying that we will put the system to the vote again at the General Meeting in May 2017.*

*Yours sincerely  
Dr. Paul Achleitner*

# Management Board Compensation Report

## Management Board Compensation Governance

### Compensation Control Committee

Prepares the resolutions about the compensation system and the compensation level and presents these to the Supervisory Board.

### Supervisory Board

Takes decisions about the compensation system and the compensation level. The concluded compensation system is presented to the Annual General Meeting.

### Annual General Meeting

Takes decision about the approval of the compensation system.

The Supervisory Board, as a plenary body, is responsible for the structuring of the compensation system for the members of the Management Board as well as for determining their individual compensation. The Supervisory Board is supported by the Compensation Control Committee. The Compensation Control Committee controls and supports the appropriate structuring of the compensation system and prepares the resolutions of the Supervisory Board regarding the individual compensation of the Management Board members. In addition, the Compensation Control Committee and/or the Supervisory Board will consult independent external consultants where this is considered necessary.

The Compensation Control Committee currently comprises four members. In accordance with regulatory requirements, at least one must have sufficient expertise and professional experience in the area of risk management and risk controlling and at least one other must be an employee representative.

The Supervisory Board regularly reviews the compensation system for the members of the Management Board. In the case of a change or restructuring of the compensation framework, the Supervisory Board also uses the possibility provided in the German Act on the Appropriateness of Management Board Remuneration (Gesetz zur Angemessenheit der Vorstandsvergütung – VorstAG) for the General Meeting to approve the system of compensation for Management Board members.

The Supervisory Board presented the compensation system for the 2016 financial year to the General Meeting for approval in May 2016. However, the General Meeting did not grant majority approval. Due to this voting result, the Supervisory Board subsequently amended the compensation system for Management Board members with effect from January 1, 2017. In May 2017, the General Meeting will be given the opportunity to vote on a resolution on the approval of the changed compensation system.

## Principles of the Management Board Compensation and the Compensation System

Numerous factors are to be considered when structuring the compensation system and determining individual compensation. These factors can be summarized as specific remuneration principles. The following overview shows the core remuneration principles which have an impact on both the compensation system and the individual remuneration and must therefore be taken into consideration by the Supervisory Board when passing a resolution on questions of remuneration.

When passing a resolution on the structure and determination of compensation, the Supervisory Board considers in particular:

<b>Governance</b>	The structuring of the compensation system and determination of individual remuneration takes place within the framework of the statutory and regulatory requirements. The Supervisory Board's objective is to offer, within the regulatory requirements, a compensation package that continues to be in line with customary market practices and is therefore competitive.
<b>Group Strategy</b>	Through the structure of the compensation system the members of the Management Board are to be motivated to achieve the objectives set out in the Bank's strategies, to work continuously towards the positive development of the Group and to avoid unreasonably high risks.
<b>Collective and Individual Performance of the Management Board Members</b>	The variable, performance-related compensation is determined on the basis of the level of achievement of previously agreed objectives. For this purpose, collective and Deutsche Bank Group-related objectives applying equally to all Management Board members are set. In addition, the Supervisory Board sets individual objectives for each member of the Management Board separately, which particularly take into account the development of the business, infrastructure or regional areas of responsibility.
<b>Regulatory or other compensation caps</b>	Pursuant to the regulatory approaches under CRD 4, the ratio of fixed to variable compensation is generally limited to 1:1 (cap regulation), i.e. the amount of variable compensation must not exceed that of fixed compensation. However, lawmakers have also stipulated that shareholders can resolve to relax the requirement by setting the ratio of fixed to variable compensation to 1:2. In May 2014, the General Meeting approved the aforementioned setting to 1:2 with a large majority of 90.84 %. The compensation system resolved by the Supervisory Board also provides fixed caps for the individual variable compensation components. In addition, the Supervisory Board is entitled to set an additional cap for the total compensation of the individual members of the Management Board. In the 2017 financial year, the additional cap is €9.85 million.
<b>Sustainability Aspects</b>	The total variable compensation for Management Board members is currently only to be granted on a deferred basis. Since 2017, a portion of at least 75 % of the deferred variable compensation is to be granted in the form of equity-based compensation components, which only vest no less than five years after the grant in one tranche (cliff vesting) and are subject to an additional retention period of one year. The remaining portion is to be granted as non-equity based compensation component and to vest in identical tranches over a period of four years. During the deferral and retention period, deferred compensation is subject to specific forfeiture provisions.
<b>Interests of the Shareholders</b>	When designing the specific structure of the compensation system, determining individual compensation amounts, and structuring its delivery and allocation, the focus is on establishing a close link between the interests of both the Management Board members and shareholders. While defining the variable compensation, this is achieved through the utilization of clearly defined key financial figures which are directly linked to the performance of Deutsche Bank and, since 2017, granting equity-based compensation components amounting to at least 75 % of the total variable compensation. When determining the variable compensation, the equity-based compensation components are directly linked to the performance of the Deutsche Bank share price, and only become eligible for payment after a period of several years.

The compensation system and the compensation structures it encompasses are reflected in the individual Management Board members' contracts.

## Compensation Structure until 2016

The Supervisory Board changed the structure of the compensation system for Management Board members for the 2016 financial year compared to the compensation system in 2015. The changed compensation system thereby follows the reorganization of the Bank's leadership structure. Effective January 1, 2016, all four core business divisions (front offices) are represented directly by members on the Management Board. For Management Board members with front office responsibility, the previous variable compensation components were supplemented by the newly introduced Division Performance Award which sought to reflect market requirements and ensure competitive pay levels. In addition to the implementation of the aforementioned component, the target and maximum figures of the variable compensation components were adjusted.

### Compensation structure and compensation elements

	2016	2015
<b>Fixed compensation</b>	Base salary + Contribution to the company pension plan	Base salary + Contribution to the company pension plan
<b>Variable compensation</b>	Annual Performance Award (APA) + Long Term Performance Award (LTPA) + Division Performance Award (DPA)	Annual Performance Award (APA) + Long Term Performance Award (LTPA)

The compensation system for the 2016 financial year consists of non-performance-related and performance-related components.

### Non-Performance-Related Components (Fixed Compensation)

The fixed compensation is not linked to performance and consists primarily of a base salary as well as contributions to the company pension plan.

in €	2016	2015
<b>Base salary</b>		
Co-Chairmen	3,800,000	3,800,000
Ordinary Board member	2,400,000	2,400,000

in €	2016	2015
<b>Contributions to the company pension plan</b>		
Co-Chairmen	650,000	650,000
Ordinary Board member (CIB) <sup>1</sup>	2,000,000	0
Ordinary Board member (GM/AM) <sup>1</sup>	1,000,000	0
Ordinary Board member (PW&CC)	650,000	400,000
Ordinary Board member (Infrastructure/Region)	400,000	400,000

<sup>1</sup> In 2015, the Co-Chairmen were responsible for these front-office divisions.

Additional non-performance-related components include “other benefits”. The “other benefits” comprise the monetary value of non-cash benefits such as company cars and driver services, insurance premiums, expenses for company-related social functions and security measures including payments, if applicable, of taxes on these benefits as well as taxable reimbursements of expenses.

## Performance-Related Components (Variable Compensation)

The variable compensation is performance-related and consists of the three components **Annual Performance Award**, **Long-Term Performance Award** and **Division Performance Award**.

### Annual Performance Award (APA)

The APA rewards the achievement of the Bank's short and medium-term business policy and corporate objectives that were set as part of the objective setting agreement for the respective financial year's performance evaluation. Not only is financial success taken into account in the process, but also the conduct towards staff members and clients as part of carrying out business activities. As part of the annual objective setting agreement, corresponding key financial figures and/or factors are set for all objectives that will be used to determine the objective achievement level.

For the 2016 financial year, the following Group-wide key financial figures, which apply equally to all Management Board members, were agreed:

- **Category Capital:** Common Equity Tier 1 Ratio (CET 1) and Leverage Ratio,
- **Category Costs:** Cost-Income-Ratio (CIR),
- **Category Competencies:** Value added,
- **Categories Culture/Clients:** Employee Commitment, Behavior and Reputation.

In assessing the individual performance component, a quantitative objective from the categories **Capital/Costs/Competencies** and a qualitative objective from the categories **Culture/Clients** was agreed with each Management Board member.

Altogether, the sum of Group-wide and individually agreed objectives amounts to a maximum of 80 % of the overall APA, depending on the achievement level of the aforementioned objectives. The Supervisory Board can decide merely on the remaining portion to reward outstanding contributions, including project specific contributions as an exercise of its discretionary authority. If the objectives are not achieved, an APA will not be granted.

### Long-Term Performance Award (LTPA)

The level of the LTPA is determined on the basis of the relative performance of the Deutsche Bank share in comparison to selected peer institutions (Relative Total Shareholder Return, RTSR) on the basis of a three-year assessment and, through the additional inclusion of non-financial parameters (so-called Culture & Clients factor), it is also oriented towards how the targets are achieved.

If the three-year average of the relative total shareholder return of Deutsche Bank is greater than 100 %, then the value of the RTSR portion increases proportionately to an upper limit of 150 % of the target figure. If the three-year average of the relative total shareholder return is lower than 100 %, the value declines disproportionately. If the three-year average of the RTSR does not exceed 60 %, the value of the Award portion is set to zero.

The peer group for the RTSR comprises the following institutions: BNP Paribas, Société Générale, Barclays, Credit Suisse, UBS, Bank of America, Citigroup, Goldman Sachs, JP Morgan Chase and Morgan Stanley.

The collective objective for all members of the Management Board for the 2016 financial year was to install a robust control environment for Deutsche Bank Group. For an assessment of the objective as “excellent”, 150 % of the Culture & Client Factor target figure is assigned, 100 % for “good”, and 50 % for “average”. For “below average”, the value of the Award portion is set to zero.

## Division Performance Award (DPA)

The DPA rewards the achievement of the Bank's short and medium-term business policy and strategic objectives established in the context of the objective setting process for the performance evaluation for the respective year. The key objectives underlying the determination of the DPA are designed to contribute to the applicable business policy and strategic objectives of the relevant division, in line with its business and risk strategy and the individual objectives set separately for each member of the Management Board on the basis of the member's area of responsibility.

As part of the annual objective setting agreement, corresponding key financial figures and/or factors are set for all objectives that will be used to determine the objective achievement level. If the objectives were not achieved during the period being evaluated, the Supervisory Board may determine that a DPA will not be granted.

## Maximum Compensation

Following the implementation of the regulatory requirements and based on the aforementioned individual compensation components for the 2016 financial year, the following values for the Management Board members are as follows:

### Total Compensation/Target and Maximum Values

in €					2016	2015
	Base salary	APA	LTPA	DPA	Total compensation	Total compensation
Co-Chairmen						
Target	3,800,000	1,500,000	3,800,000	0	9,100,000	9,100,000
Maximum	3,800,000	3,000,000	5,700,000	0	12,500,000	12,500,000
Ordinary Board member (CIB) <sup>1</sup>						
Target	2,400,000	1,650,000	2,800,000	1,650,000	8,500,000	0
Maximum	2,400,000	3,300,000	4,200,000	3,300,000	13,200,000	0
Ordinary Board member (GM/AM) <sup>1</sup>						
Target	2,400,000	1,200,000	2,200,000	1,200,000	7,000,000	0
Maximum	2,400,000	2,400,000	3,300,000	2,400,000	10,500,000	0
Ordinary Board member (PW&CC)						
Target	2,400,000	800,000	1,800,000	800,000	5,800,000	5,800,000
Maximum	2,400,000	1,600,000	2,700,000	1,600,000	8,300,000	8,000,000
Ordinary Board member (Infrastructure/Region)						
Target	2,400,000	1,000,000	2,400,000	0	5,800,000	5,800,000
Maximum	2,400,000	2,000,000	3,600,000	0	8,000,000	8,000,000

<sup>1</sup> In 2015, the Co-Chairmen were responsible for these front-office divisions.

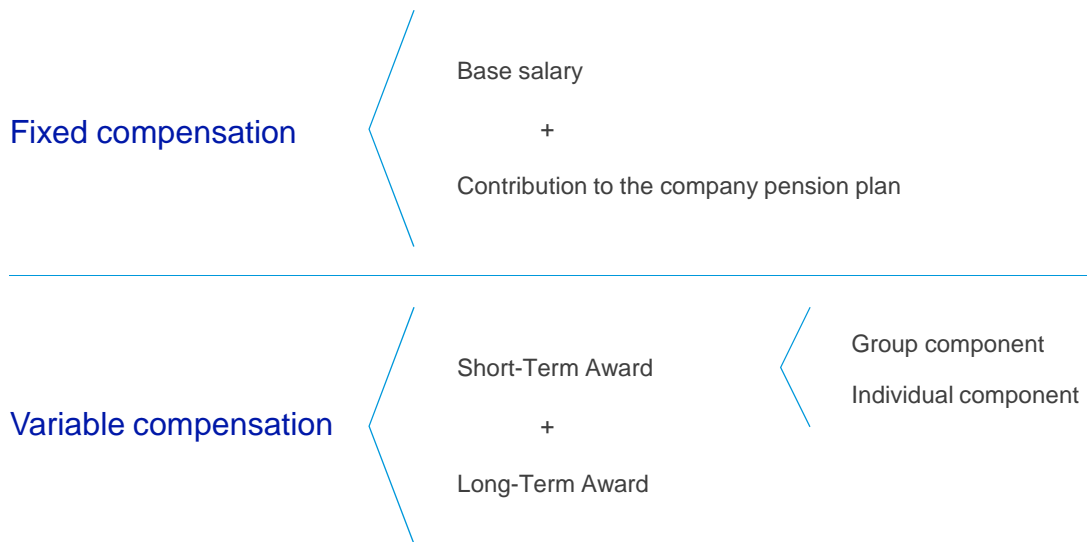
The total compensation of a Management Board member is subject to a separate cap of €9.85 million which has been set by the Supervisory Board for the overall total compensation for the 2016 financial year. Consequently, compensation is capped at a maximum of €9.85 million, even where the level of the target achievement would result in higher compensation.

## Compensation Structure as of January 2017

- Simplification of Compensation Structures
- Obvious link between compensation and previously agreed objectives
- Strong emphasis on the interests of the shareholders

The structures of the compensation system applicable as of the 2017 financial year are set out below, highlighting the changes to the previously applicable system and giving the reasons for the individual changes. In May 2017, the General Meeting will be given the opportunity to pass a resolution on the approval of the changed compensation system.

### Structure und compensation elements of the new compensation system



The compensation system applicable as of January 2017 continues to consist of non performance-related (fixed) and performance-related (variable) components.



## Non-Performance-Related Components (Fixed Compensation)

The fixed compensation is not linked to performance and consists of the base salary, contributions to the company pension plan and “other benefits”.

Various factors were considered when determining the appropriate level of the base salary. First, the base salary rewards general assumption of the office of Management Board member and the related overall responsibility of the individual Management Board members. In addition, the compensation paid in the comparable market is taken into account when determining the amount of the base salary. However, a market comparison must take into consideration that the regulatory requirements pursuant to the InstVV set a cap for variable compensation at 200 % of the fixed compensation. Accordingly, the fixed compensation must be determined in a way that ensures competitive compensation in line with market practice while taking into account the aforementioned requirements. The regulatory cap was implemented in 2014; as a consequence, the overall base salaries were increased, and in May 2014, the General Meeting approved the respective increases by a large majority.

The InstVV provides for the possibility to define contributions to the company pension plan as fixed compensation and thus to include these in the basis for calculating the ratio between fixed and variable compensation components. The Supervisory Board reviews the previous entitlement structure of the contributions to the company pension plan and- if applicable - adjusts it.

Additional non-performance-related components include “other benefits”. The “other benefits” comprise the monetary value of non-cash benefits such as company cars and driver services, insurance premiums, expenses for company-related social functions and security measures including payments, if applicable, of taxes on these benefits as well as taxable reimbursements of expenses.

## Performance-Related Components (Variable Compensation)

For the 2016 financial year, the variable compensation components were supplemented by a newly introduced component, the Division Performance Award. The implementation of the new component sought to reflect and reward the specific characteristics of the front offices represented on the Management Board in the related objectives. In May 2016, the changes to the system did not receive majority approval by the General Meeting. With respect to the newly implemented compensation component, it was criticized that the structure had become even more complex and less transparent, the introduction of compensation components for only part of the Management Board was not comprehensible and linking the component with the underlying objectives was not convincing.

In light of the criticism expressed, the Supervisory Board substantially simplified the structures of the variable compensation for 2017 and linked compensation to transparent performance criteria. However, the structure still allows for the agreement of individual and divisional objectives alongside collective objectives and makes it possible to achieve competitive pay levels in line with market practice on the basis of the respective member's area of responsibility and, at the same time, also meets in this respect the regulatory requirements.

The entire variable compensation is performance-related. As of the 2017 financial year, variable compensation will consist of a short term component and a long term component:

- the [Short Term Award](#) and
- the [Long Term Award](#).

## Short-Term Award (STA)

The STA is linked to the achievement of short term and long term objectives. Objectives include collective objectives to be achieved by the Management Board as a whole and individual objectives whose achievement level is determined separately for each member of the Management Board.

In order to clearly distinguish collective objectives from individual objectives, the STA is divided into two components:

- the [Group Component](#) and
- the [Individual Component](#).

### Group Component

The objectives to be achieved form the basis for the calculation of the Group component as part of the STA. The key objective of the Group component is to link the variable compensation for the Management Board to the overall performance of the Bank.

In 2016, the Management Board decided to align part of the variable compensation for non-tariff employees of the Bank more closely with Group performance. This seeks to reward the contribution of all employees to the financial results of the Bank and the achievements in the implementation of our strategy. Management Board compensation is also closely linked to the performance of the Bank using selected key financial figures. The Supervisory Board decided to align the compensation system for the Management Board members more closely with the compensation system for employees. This is achieved by using the performance metrics underlying the Group component in the compensation system for employees as the reference value for the Group component of the STA as of 2017.

In accordance with our targets originally announced in October 2015, four performance metrics constituting important indicators for the capital, risk, cost and return profile of the Bank form the reference value for the Group Component of the STA:

<a href="#">Common Equity Tier 1 (CET1) capital ratio (fully loaded)</a>	The Common Equity Tier-1 Ratio of the Bank in relation to their risk-weighted assets.
<a href="#">Leverage Ratio</a>	The Bank's Tier 1 capital as a percentage of its total leverage exposure pursuant in line with CRR/CRD 4.
<a href="#">Adjusted costs</a>	Total noninterest expenses, excluding restructuring and severance, litigation, impairment of goodwill and other intangibles and policyholder benefits and claims.
<a href="#">Post-tax return on tangible equity (RoTE)</a>	Net income (or loss) attributable to Deutsche Bank shareholders as a percentage of average tangible shareholders' equity. The latter is the shareholders' equity on the bank's balance sheet, excluding goodwill and other intangible assets.

At the end of a financial year, the Supervisory Board establishes how each of these performance metrics developed compared to the published target figures and determines an achievement level for each performance metric.

The Supervisory Board regularly reviews the selection of the performance metrics. The above four objectives are equally weighted at up to 25 % in the determination of the Group Component of the STA, depending on the achievement level. If, overall, the performance metric-based objectives are not achieved during the period being evaluated, the Supervisory Board may determine that a Group component will not be granted.

#### Individual Component

The individual component of the STA rewards the achievement of short and medium-term individual and front office-related objectives. These objectives are established by the Supervisory Board as part of the objective setting agreement for the respective financial year's performance evaluation. The key objectives are designed to contribute to the applicable business policy and strategic objectives of the Bank, in line with each Management Board member's area of responsibility. In the process, not merely financial success is taken into account, but also the conduct towards staff members and clients as part of carrying out business activities. Objectives for the individual components may for example include revenue developments in the course of the year, project-related targets, diversity objectives or other developments in employee or client satisfaction.

As part of the annual objective setting agreement, corresponding key financial figures and/or factors are set for all objectives that will be used to determine the objective achievement level. A maximum of three objectives per financial year is set for each Management Board member. The sum of individually agreed and business objectives amounts to a maximum of 90 % of the individual component of the STA, depending on the achievement level of the aforementioned objectives. The Supervisory Board decides merely on the remaining portion of 10 % of the individual component to reward outstanding contributions, including project-specific contributions over the course of the financial year as an exercise of its discretionary authority. If, overall, the objectives are not achieved during the period being evaluated, the Supervisory Board may determine that an individual component will not be granted.

#### Minimum, Target and Maximum Values

The sum of Group-wide and individually agreed objectives amounts to a maximum of 40 % of the total variable compensation, depending on the achievement level of the aforementioned objectives. This is designed to ensure that the individual objectives do not primarily determine the value of the variable compensation. If, overall, the objectives are not achieved during the period being evaluated, the Supervisory Board may determine that an STA will not be granted.

## Long-Term Award (LTA)

The Supervisory Board decided to clearly focus on the achievement of long-term objectives when determining the variable compensation. Therefore, the target figure of the LTA constitutes a portion of no less than 60 % of the total variable target compensation. As with the short-term component, the Supervisory Board determines the collective and/or individual long-term objectives for the Management Board members. The achievement level is determined on the basis of the definition of clear performance metrics and/or factors which are to be agreed for these objectives at the beginning of a financial year.

---

**60 %** of the variable compensation, as a minimum,  
relate to the long-term component

---

The Supervisory Board determines a total of three objectives for each Management Board member. Compared to the previous compensation system, an additional third objective was added to the long-term component. Each objective is equally weighted at 1/3 in the assessment of the LTA.

The relative performance of the Deutsche Bank share in comparison to selected peer institutions remains an objective within the framework of the LTA. This objective is intended to promote the sustainable performance of the Deutsche Bank share. However, the portion of this objective of the LTA was decreased from 2/3 to 1/3 to achieve a better balance. The long-term nature of this objective is supported by the determination of the Relative Total Shareholder Return (RTSR) on the basis of a three-year assessment. The RTSR of Deutsche Bank is derived from the Total Shareholder Return of Deutsche Bank in relation to the average total shareholder returns of a select peer group (calculated in Euro). This LTA portion is calculated from the average of the annual RTSR for the last three financial years (compensation year and the two preceding years). If the three-year average of the relative total shareholder return of Deutsche Bank is greater than 100 %, then the value of the RTSR portion increases proportionately to an upper limit of 150 % of the target figure, i.e., the value increases by 1 % for each percentage point above 100 %. If the three-year average of the relative total shareholder return is lower than 100 %, the value declines disproportionately. If the relative total shareholder return is calculated to be in the range of less than 100 % to 80 %, the value of the Award portion is reduced for each lower percentage point by 2 percentage points. In the range between 80 % and 60 %, the value of the Award portion is reduced for each lower percentage point by 3 percentage points. If the three-year average of the RTSR does not exceed 60 %, the value of the Award portion is set to zero.

The peer group used for the calculation of the relative total shareholder return is selected based on the criteria of generally comparable business activities, comparable size and international presence. The Supervisory Board critically reviewed the peer group as part of the design of the new compensation system and decided to adjust this group in comparison to the previously applicable group. In light of the business activities of the Bank, it was decided to remove the investment bank-centric financial institutions Goldman Sachs and Morgan Stanley from the peer group, due to the differing business strategy compared to a universal bank. However, the reduced peer group will be supplemented by HSBC, which is also used for comparison with respect to internal benchmarking purposes.

The peer group for the RTSR therefore comprises the following banks:

#### Peer Group of Deutsche Bank

---

BNP Paribas	Société Générale	Barclays	Credit Suisse	UBS
Bank of America	Citigroup	JP Morgan Chase	HSBC	

---

The second objective is linked to the growth and strengthening of the Bank. Within the notion of **organic capital growth** on a net basis, the Supervisory Board sets an objective designed to promote this growth.

As before, the third objective is taken from the category “**Culture & Clients**”. In this context, the Supervisory sets an objective which is linked to corporate culture, client satisfaction and dealing with clients. This objective is linked to the sustainable development of the intrabank environment or designed to foster the development of the relationships to clients. As for the 2017 financial year, one objective set by the Supervisory Board for all Management Board members is again the evaluation of the control environment within the Deutsche Bank Group.

The Long Term Award can be a maximum of 150 % of the respective target figures.

#### Objectives

Objectives are established by the Supervisory Board as part of an objective setting agreement at the beginning of the respective financial year for purposes of performance evaluation. For all objectives, financial figures and/or factors are set from which the achievement level of the objectives is transparently derived. The leeway for the discretionary decision is strictly limited to 3 to 6 % with respect to the total variable compensation.

The allocation of the objectives to the individual compensation components is set out below.

	Relevant indicators	Relative weight
Short-Term Award (STA)	Group component <sup>(1)</sup>	
	CET1 ratio	25 %
	Leverage ratio	25 %
	Adjusted non-interest expenses	25 %
	Post-tax return on tangible equity (RoTE)	25 %
	Individual component (exemplary) <sup>(2)</sup>	
	Revenue Growth / IBIT y-o-y versus plan	30 %
	Project-related objectives (realisation, mangement)	30 %
	Employee Commitment Index (% y-o-y) / Diversity objectives	30 %
	Adjustment based on informed judgement	10 %
Long-Term Award (LTA) <sup>(3)</sup>	Relative total shareholder return	33,34 %
	Organic capital growth (net)	33,33 %
	‘Culture & client factor’ / Control environment grade group	33,33 %

(1) Joint strategic key objectives which also form base for the assessment of the group component as part of the compensation system for the employees of DB Group

(2) Short-term individual and divisional objectives of quantitative and qualitative nature

(3) Long-term group-wide objections.

## Maximum Compensation

The total compensation of a Management Board member is subject to caps. Due to regulatory requirements, the variable compensation is capped at 200 % of the fixed compensation. In addition, the Supervisory Board again set a cap of €9.85 million for the overall total compensation for the 2017 financial year. Consequently, compensation is capped at a maximum of €9.85 million, even where the level of the target achievement would result in higher compensation.

A detailed presentation of the figures will be provided in a separate document on the website of the Bank which is not part of the Management Report.

## Long-Term Incentive and Sustainability

According to the requirements of the InstVV at least 60 % of the total Variable Compensation must be granted on a deferred basis. Not less than half of this deferred portion may comprise equity-based compensation components, while the remaining portion must be granted as deferred cash compensation. Both compensation components must be deferred over a multi-year period which, for the equity-based compensation components, must be followed by a retention period. During the period until payment or delivery, the compensation portions awarded on a deferred basis may be forfeited. A maximum of 40 % of the total Variable Compensation may be granted on a non-deferred basis. However, at least half of this must consist of equity-based compensation components and only the remaining portion may be paid out directly in cash. Of the total Variable Compensation, no more than a maximum of 20 % may be paid out in cash immediately, while at least 80 % are paid or delivered at a later date.

Since 2014, the total variable compensation for Management Board members is only granted on a deferred basis. The compensation system applicable up to and including 2016 provided that the short-term components (APA and DPA) were in principle granted in the form of non-equity-based compensation components ("Restricted Incentive Awards"). However, the long-term component (LTPA) was exclusively granted in the form of equity-based compensation components ("Restricted Equity Award").

---

**75 %** of the variable compensation, as a minimum, is granted equity-based

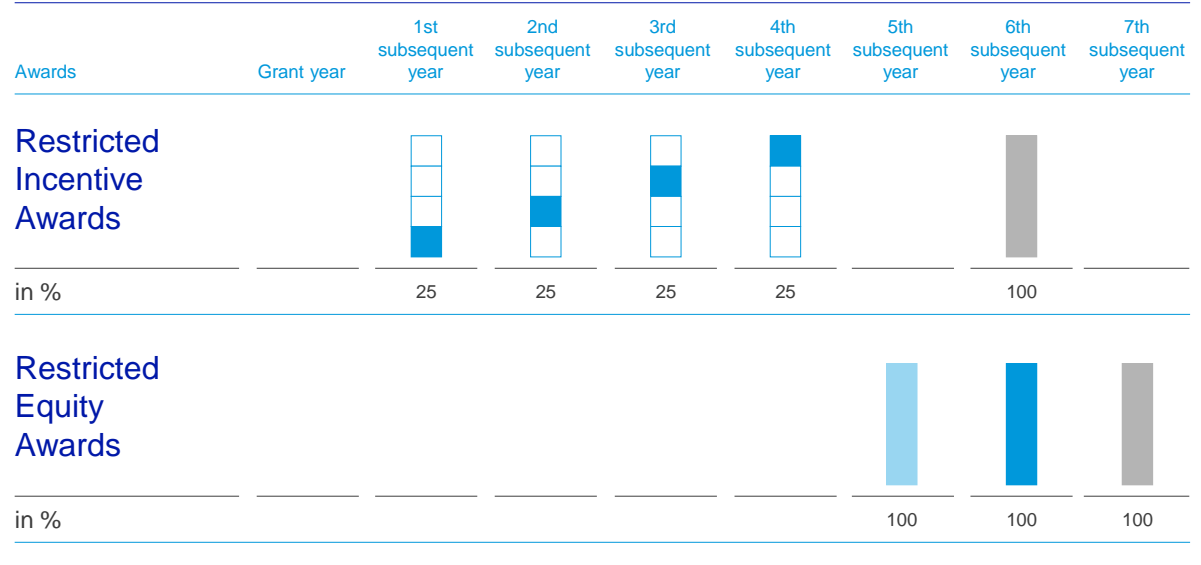
---

In order to bind the Management Board members even closer to the performance of the Bank and the Deutsche Bank share price, the Supervisory Board decided that as of the 2017 financial year, the long-term component (LTA), and in fact no less than 75 % of the total variable compensation, will continue to be granted only in the form of restricted equity awards. Only the short-term component (STA), however, a maximum of 25 % of the total variable compensation, is granted in the form of Restricted Incentive Awards.

The Restricted Incentive Awards vest over a period of four years. Based on the new regulatory requirements, the Restricted Equity Awards vest after five years in one tranche ("cliff vesting") and have an additional retention period of one year. Accordingly, Management Board members are first permitted to dispose of the equities after six years. During the deferral and retention period, the value of the Restricted Equity Awards is linked to the Bank's share price and is therefore tied to the sustained performance of the Bank. Specific forfeiture provisions apply for Restricted Incentive Awards and Restricted Equity Awards during the deferral and retention period.

The following chart shows the time period for the payment or the delivery of the variable compensation components in the five consecutive years following the grant year as well as the period of a possible clawback.



**Timeframe for payment or delivery and non-forfeiture for the Management Board (from 2017)**

- Vesting and/or non forfeiture, aligned with payment or delivery.
- Vesting followed by a retention period until delivery; subject to individual forfeiture conditions during the retention period.
- End of possibility to demand the return ('Clawback') of already paid/delivered compensation components.

## Forfeiture Conditions/Clawback

Because some of the compensation components are deferred or spread out over several years (Restricted Incentive Awards and Restricted Equity Awards) certain forfeiture conditions are applicable until vesting or the end of the retention periods, in order to create a long-term incentive. Awards may be fully or partially forfeited, for example, due to individual misconduct (including a breach of regulations) or termination for cause, and also due to a negative Group result or individual negative contributions to results. In addition, the Restricted Equity Award will be forfeited completely if the statutory or regulatory minimum requirements for the core capital ratio are not met during this period.

The draft of the amendment of the InstVV provides *inter alia* that so-called "clawback provisions" are to be agreed with the members of the management body (*Geschäftsleiter*) of significant institutions. Contrary to the forfeiture conditions, this clause allows the Supervisory Board to reclaim already paid out or delivered compensation components due to specific individual negative contributions to results made by the Management Board member. The Supervisory Board will agree such a clause with the Management Board members.

## Limitations in the Event of Exceptional Developments

In the event of exceptional developments, the total compensation for each Management Board member is limited to a maximum amount. In addition, the Supervisory Board and the members of the Management Board agreed on a possible limitation of the variable compensation which is included in the service agreements of the Management Board members and according to which the variable compensation may be limited to amounts below the provided maximum amounts or may not be granted altogether. Furthermore, statutory regulations provide that the Supervisory Board may reduce the compensation of the Management Board members to an appropriate level, if the situation of the company deteriorates in such a way following the determination of the compensation that the continuous granting of the compensation would be unreasonable for the company. A payment of Variable Compensation elements will also not take

place if the payment of Variable Compensation components is prohibited or restricted by the Bank's regulator in accordance with existing statutory requirements.

## Shareholding Guidelines

- Long-term commitment of Management Board members to the Bank
- Identification with Deutsche Bank and its shareholders
- Link to performance of the Bank through deferred compensation

All members of the Management Board are required to hold a specified value of Deutsche Bank shares. This requirement fosters the identification of the Management Board members with Deutsche Bank and its shareholders and aims to ensure a sustainable link to the performance of the Bank.

The number of shares to be held amounts to two times the annual base salary for the Chairman and one time the annual base salary for ordinary Management Board members.

in €	Shareholding Guidelines
Chairman	7,600,000
Ordinary Board member	2,400,000

There is in principle a waiting period of 36 months for the Chairman and 24 months for ordinary Management Board members until which these requirements must be fulfilled. In each case, the waiting period is extended by 12 months for each financial year falling within the waiting period for which the Management Board member is not awarded any variable compensation. Deferred equity-based compensation may be taken into account at 75 % of its value towards fulfillment of the obligation.

Observance of the requirement is reviewed semi-annually as of June 30 and December 31. If the required number of shares is not met, the Management Board members must correct any deficiencies by the next review. In 2016, all Management Board members fulfilled the retention obligations for shares.

As compensation components are deferred or spread out over several years, another link to the performance of the Deutsche Bank share is established that should generally continue to exist even for the period after leaving the Management Board.

## Pension benefits

The Supervisory Board allocates an entitlement to pension plan benefits to the Management Board members. These entitlements involve a defined contribution pension plan. Under this pension plan, a personal pension account has been set up for each participating member of the Management Board after appointment to the Management Board. A contribution is made annually into this pension account.

Management Board members receive a contribution in the form of a contractually agreed fixed annual amount in Euro. The contribution accrues interest credited in advance, determined by means of an age-related factor, at an average rate of 4 % per year up to the age of 60. From the age of 61 onwards, the contribution made is credited with an annual interest payment of 4 % up to the date of retirement.

The annual contributions, taken together, form the pension amount available to pay the future pension benefit. Under defined conditions, the pension may also become due for payment before a regular pension event (age limit, disability or death) has occurred. The pension right is vested from the start.

The following table shows the annual contributions, the interest credits, the account balances and the annual service costs for the years 2016 and 2015 as well as the corresponding defined benefit obligations for each member of the Management Board in office in 2016 as of December 31, 2016 and December 31, 2015. The different balances are attributable to the different lengths of service on the Management Board, the respective age-related factors, and the different contribution rates, as well as the individual pensionable compensation amounts and the previously mentioned additional individual entitlements.

Members of the Management Board in €	Annual contribution, in the year		Interest credit, in the year		Account balance, end of year		Service cost (IFRS), in the year		Present value of the defined benefit obligation (IFRS), end of year	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
John Cryan <sup>1</sup>	754,000	393,250	0	0	1,147,250	393,250	821,114	439,065	1,221,303	450,200
Jürgen Fitschen <sup>2</sup>	270,834	650,000	52,696	95,272	0 <sup>9</sup>	2,549,796	232,666	624,192	0	2,576,287
Kim Hammonds <sup>3</sup>	250,001	0	0	0	250,001	0	270,466	0	275,563	0
Stuart Lewis	556,000	576,000	0	0	2,342,938	1,786,938	546,402	516,969	2,555,844	1,551,547
Sylvie Matherat <sup>4</sup>	500,000	86,668	0	0	586,668	86,668	517,352	128,506	613,025	130,231
Nicolas Moreau <sup>5</sup>	347,500	0	0	0	347,500	0	442,672	0	450,380	0
Quintin Price <sup>6</sup>	416,667	0	0	0	0 <sup>10</sup>	0	525,143	0	0	0
Garth Ritchie <sup>7</sup>	1,550,000	0	0	0	1,550,000	0	1,443,171	0	1,475,820	0
Karl von Rohr <sup>4</sup>	556,000	96,001	0	0	652,001	96,001	546,402	131,141	647,482	132,799
Dr. Marcus Schenck <sup>8</sup>	556,000	528,001	0	0	1,084,001	528,001	546,402	478,387	1,041,150	490,386
Christian Sewing	1,085,500	692,000	0	0	1,777,500	692,000	984,198	559,197	1,592,460	572,899
Werner Steinmüller <sup>3</sup>	166,667	0	0	0	166,667	0	164,232	0	169,445	0
Jeffrey Urwin <sup>7</sup>	2,000,000	0	0	0	2,000,000	0	2,036,367	0	2,090,722	0

<sup>1</sup> Member since July 1, 2015.

<sup>2</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>3</sup> Member since August 1, 2016.

<sup>4</sup> Member since November 1, 2015.

<sup>5</sup> Member since October 1, 2016.

<sup>6</sup> Member since January 1, 2016 until June 15, 2016.

<sup>7</sup> Member since January 1, 2016.

<sup>8</sup> Member since May 22, 2015.

<sup>9</sup> At the time of retirement from Management Board membership the accumulated account balance of €2,873,326 has been capitalized and paid out as a lump sum.

<sup>10</sup> The pension entitlement was not vested at the time of the termination of the Management Board membership and was paid in form of a cash compensation in the amount of €416,667.

## Other Benefits upon Premature Termination

The Management Board members are in principle entitled to receive a severance payment upon early termination of their appointment at the Bank's initiative, provided the Bank is not entitled to revoke the appointment or give notice under the contractual agreement for cause. The circumstances of the early termination of the appointment and the length of service on the Management Board are to be taken into account when determining the amount of the severance payment. The severance payment, as a rule, is two annual compensation amounts and is limited to the claims to compensation for the remaining term of the contract. The calculation of the severance payment is based on the annual compensation for the previous financial year and on the expected annual compensation for the current financial year, if applicable. The severance payment is determined in accordance with the statutory and regulatory requirements, in particular with the provisions of the InstVV.

If a Management Board member leaves office in connection with a change of control, he is also, under certain conditions, entitled in principle to a severance payment. The exact amount of the severance payment is determined by the Supervisory Board within its sole discretion. According to the German Corporate Governance Codex, the severance payment will not exceed three annual compensation amounts and is limited to the claims to compensation for the remaining term of the contract. The calculation of the compensation is again based on the annual compensation for the previous financial year.

## Expense for Long-Term Incentive Components

The following table presents the compensation expense recognized in the respective years for long-term incentive components of compensation granted for service on the Management Board.

Members of the Management Board	Amount expensed for			
	Share-based compensation components		Cash-based compensation components	
in €	2016	2015	2016	2015
Jürgen Fitschen <sup>1</sup>	621,077 <sup>2</sup>	1,013,489	1,203,434	1,170,591
Stuart Lewis	(136,084) <sup>3</sup>	633,658	466,922	633,466

<sup>1</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>2</sup> With the termination of the Management Board membership all expenses of outstanding awards have been accelerated into the P&L.

<sup>3</sup> Share-based compensation of Management Board members is generally valued based on the share price at each respective reporting date and leads to a negative result in this instance.

## Management Board compensation for the 2016 financial year

### Base Salary

In the 2016 financial year, the annual base salary of the Management Board Co-Chairmen was €3,800,000 each and for an ordinary Management Board member €2,400,000.

### Variable Compensation

Due to the financial performance of Deutsche Bank in 2016 and the severe measures taken by the Management Board against this background with respect to the compensation for employees for the 2016 financial year, the Management Board unanimously took the decision to irrevocably waive any entitlement to the determination and grant of variable compensation members of the Management Board for the 2016 financial year. The Management Board declared its waiver to the Supervisory Board. Therefore, the Supervisory Board refrained from determining any variable compensation for the Management Board members for the 2016 financial year.

### Total Compensation

The members of the Management Board collectively received in/for the 2016 financial year compensation (without fringe benefits and pension service costs) totaling €25,883,333 (2015: €22,660,000). This amount was for base salaries only. €0 (2015: €0) were received for performance-related components with long-term incentives.

The Supervisory Board determined the aforementioned compensation on an individual basis for 2016 and 2015 as follows:

in €	2016				2015
	Base salary	APA <sup>1</sup>	LTPA <sup>2</sup>	DPA <sup>3</sup>	Total compensation
John Cryan <sup>4</sup>	3,800,000	0	0	0	3,800,000
Jürgen Fitschen <sup>5</sup>	1,583,333	0	0	0	1,583,333
Kim Hammonds <sup>6</sup>	1,000,000	0	0	0	1,000,000
Stuart Lewis	2,400,000	0	0	0	2,400,000
Sylvie Mathéat <sup>7</sup>	2,400,000	0	0	0	2,400,000
Nicolas Moreau <sup>8</sup>	600,000	0	0	0	600,000
Quintin Price <sup>9</sup>	1,100,000	0	0	0	1,100,000
Garth Ritchie <sup>10</sup>	2,400,000	0	0	0	2,400,000
Karl von Rohr <sup>7</sup>	2,400,000	0	0	0	2,400,000
Dr. Marcus Schenck <sup>11</sup>	2,400,000	0	0	0	2,400,000
Christian Sewing	2,400,000	0	0	0	2,400,000
Werner Steinmüller <sup>6</sup>	1,000,000	0	0	0	1,000,000
Jeffrey Urwin <sup>10</sup>	2,400,000	0	0	0	2,400,000
Anshuman Jain <sup>12</sup>	–	–	–	–	–
Stefan Krause <sup>13</sup>	–	–	–	–	–
Dr. Stephan Leithner <sup>14</sup>	–	–	–	–	–
Rainer Neske <sup>12</sup>	–	–	–	–	–
Henry Ritchotte <sup>15</sup>	–	–	–	–	–
<b>Total</b>	<b>25,883,333</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25,883,333</b>
					<b>22,660,000</b>

<sup>1</sup> APA: Annual Performance Award.

<sup>2</sup> LTPA: Long-Term Performance Award.

<sup>3</sup> DPA: Division Performance Award.

<sup>4</sup> Member since July 1, 2015.

<sup>5</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>6</sup> Member since August 1, 2016.

<sup>7</sup> Member since November 1, 2015.

<sup>8</sup> Member since October 1, 2016.

<sup>9</sup> Member since January 1, 2016 until June 15, 2016.

<sup>10</sup> Member since January 1, 2016.

<sup>11</sup> Member since May 22, 2015.

<sup>12</sup> Member until June 30, 2015.

<sup>13</sup> Member until October 31, 2015 / contract termination on December 31, 2015.

<sup>14</sup> Member until October 31, 2015.

<sup>15</sup> Member until December 31, 2015.

## Share awards

The Management Board members declared to the Supervisory Board that they waive the determination and grant of any variable compensation for the 2016 financial year. The Supervisory Board had decided in 2016 not to grant the Management Board members any variable compensation for the 2015 financial year.

As a result, no share awards were granted for both the 2015 and 2016 financial years.

Management Board members do not receive any compensation for mandates on boards of Deutsche Bank subsidiaries.

## Management Board Share Ownership

As of February 17, 2017 and February 19, 2016, respectively, the current members of the Management Board held Deutsche Bank shares as presented below:

Members of the Management Board		Number of shares
John Cryan	2017	9,160
	2016	0
Kim Hammonds <sup>1</sup>	2017	22,800
Stuart Lewis	2017	51,347
	2016	51,347
Sylvie Matherat	2017	0
	2016	0
Nicolas Moreau <sup>2</sup>	2017	0
Garth Ritchie	2017	28,778
	2016	28,778
Karl von Rohr	2017	3,737
	2016	2,747
Dr. Marcus Schenck	2017	26,445
	2016	26,445
Christian Sewing	2017	36,249
	2016	36,249
Werner Steinmüller <sup>1</sup>	2017	79,792
Jeffrey Urwin	2017	120,690
	2016	120,690
<b>Total</b>	<b>2017</b>	<b>378,998</b>
	<b>2016</b>	<b>266,256</b>

<sup>1</sup> Member since August 1, 2016.

<sup>2</sup> Member since October 1, 2016.

The current members of the Management Board held an aggregate of 378,998 Deutsche Bank shares on February 17, 2017, amounting to approximately 0.03 % of Deutsche Bank shares issued on that date.

The following table shows the number of share awards held by the Management Board members as of February 17, 2017 and February 19, 2016 as well as the number of share awards newly granted, delivered or forfeited in this period.

Members of the Management Board	Balance as of Feb 19, 2016	Granted	Delivered	Forfeited	Balance as of Feb 17, 2017
John Cryan	17,441	–	17,441	0	0
Kim Hammonds <sup>1</sup>	–	–	–	–	88,072
Stuart Lewis	166,538	0	0	0	166,538
Sylvie Matherat	3,217	7,541	0	0	10,758
Nicolas Moreau <sup>2</sup>	–	–	–	–	0
Garth Ritchie	244,227	305,424	0	0	549,651
Karl von Rohr	22,846	22,623	2,013	0	43,456
Dr. Marcus Schenck	132,517	84,462	0	0	216,979
Christian Sewing	85,508	0	0	0	85,508
Werner Steinmüller <sup>1</sup>	–	–	–	–	191,879
Jeffrey Urwin	379,808	263,125	0	0	642,933

<sup>1</sup> Member since August 1, 2016.

<sup>2</sup> Member since October 1, 2016.

## Compensation in accordance with the German Corporate Governance Codex (GCGC)

The compensation for the members of the Management Board in accordance with the requirements of section 4.2.5 paragraph 3 of the GCGC is provided below. This comprises the benefits granted for the year under

review including the fringe benefits, and including the maximum and minimum achievable compensation for variable compensation components. In addition, the disbursements of fixed compensation and variable compensation (broken down by Restricted Incentive Awards and Restricted Equity Awards) in/for the year under review, broken down into the relevant reference years are reported.

The following table provides the compensation granted for the 2016 and 2015 financial years:

#### Compensation granted in 2016 (2015) according to GCGC

in €	2016				John Cryan <sup>1</sup> 2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	3,800,000	3,800,000	3,800,000	3,800,000	1,900,000	1,900,000
Fringe benefits	41,795	41,795	41,795	41,795	29,697	29,697
<b>Total</b>	<b>3,841,795</b>	<b>3,841,795</b>	<b>3,841,795</b>	<b>3,841,795</b>	<b>1,929,697</b>	<b>1,929,697</b>
Variable compensation	0	5,300,000	0	8,700,000	0	2,650,000
thereof:						
Restricted Incentive Awards	0	1,500,000	0	3,000,000	0	750,000
Restricted Equity Awards	0	3,800,000	0	5,700,000	0	1,900,000
<b>Total</b>	<b>0</b>	<b>5,300,000</b>	<b>0</b>	<b>8,700,000</b>	<b>0</b>	<b>2,650,000</b>
Pension service costs	821,114	821,114	821,114	821,114	439,065	439,065
<b>Total compensation (GCGC)</b>	<b>4,662,909</b>	<b>9,962,909</b>	<b>4,662,909</b>	<b>13,362,909</b>	<b>2,368,762</b>	<b>5,018,762</b>
<b>Total compensation<sup>2</sup></b>	<b>3,800,000</b>	<b>9,100,000</b>	<b>3,800,000</b>	<b>12,500,000</b>	<b>1,900,000</b>	<b>4,550,000</b>

<sup>1</sup> Member since July 1, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	2016				Jürgen Fitschen <sup>1</sup> 2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	1,583,333	1,583,333	1,583,333	1,583,333	3,800,000	3,800,000
Fringe benefits	38,937	38,937	38,937	38,937	102,016	102,016
<b>Total</b>	<b>1,622,270</b>	<b>1,622,270</b>	<b>1,622,270</b>	<b>1,622,270</b>	<b>3,902,016</b>	<b>3,902,016</b>
Variable compensation	0	2,208,333	0	3,625,000	0	5,300,000
thereof:						
Restricted Incentive Awards	0	625,000	0	1,250,000	0	1,500,000
Restricted Equity Awards	0	1,583,333	0	2,375,000	0	3,800,000
<b>Total</b>	<b>0</b>	<b>2,208,333</b>	<b>0</b>	<b>3,625,000</b>	<b>0</b>	<b>5,300,000</b>
Pension service costs	232,666	232,666	232,666	232,666	624,192	624,192
<b>Total compensation (GCGC)</b>	<b>1,854,936</b>	<b>4,063,269</b>	<b>1,854,936</b>	<b>5,479,936</b>	<b>4,526,208</b>	<b>9,826,208</b>
<b>Total compensation<sup>2</sup></b>	<b>1,583,333</b>	<b>3,791,667</b>	<b>1,583,333</b>	<b>5,208,333</b>	<b>3,800,000</b>	<b>9,100,000</b>

<sup>1</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	2016				Kim Hammonds <sup>1</sup> 2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	1,000,000	1,000,000	1,000,000	1,000,000	0	0
Fringe benefits	6,035	6,035	6,035	6,035	0	0
<b>Total</b>	<b>1,006,035</b>	<b>1,006,035</b>	<b>1,006,035</b>	<b>1,006,035</b>	<b>0</b>	<b>0</b>
Variable compensation	0	1,416,667	0	2,333,333	0	0
thereof:						
Restricted Incentive Awards	0	416,667	0	833,333	0	0
Restricted Equity Awards	0	1,000,000	0	1,500,000	0	0
<b>Total</b>	<b>0</b>	<b>1,416,667</b>	<b>0</b>	<b>2,333,333</b>	<b>0</b>	<b>0</b>
Pension service costs	270,466	270,466	270,466	270,466	0	0
<b>Total compensation (GCGC)</b>	<b>1,276,501</b>	<b>2,693,168</b>	<b>1,276,501</b>	<b>3,609,834</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>1,000,000</b>	<b>2,416,667</b>	<b>1,000,000</b>	<b>3,333,333</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since August 1, 2016.

<sup>2</sup> Without fringe benefits and pension service costs.



in €	Stuart Lewis					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Fringe benefits	77,938	77,938	77,938	77,938	97,624	97,624
<b>Total</b>	<b>2,477,938</b>	<b>2,477,938</b>	<b>2,477,938</b>	<b>2,477,938</b>	<b>2,497,624</b>	<b>2,497,624</b>
Variable compensation	0	3,400,000	0	5,600,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,000,000	0	2,000,000	0	1,000,000
Restricted Equity Awards	0	2,400,000	0	3,600,000	0	2,400,000
<b>Total</b>	<b>0</b>	<b>3,400,000</b>	<b>0</b>	<b>5,600,000</b>	<b>0</b>	<b>3,400,000</b>
Pension service costs	546,402	546,402	546,402	546,402	516,969	516,969
<b>Total compensation (GCGC)</b>	<b>3,024,340</b>	<b>6,424,340</b>	<b>3,024,340</b>	<b>8,624,340</b>	<b>3,014,593</b>	<b>6,414,593</b>
<b>Total compensation<sup>1</sup></b>	<b>2,400,000</b>	<b>5,800,000</b>	<b>2,400,000</b>	<b>8,000,000</b>	<b>2,400,000</b>	<b>5,800,000</b>

<sup>1</sup> Without fringe benefits and pension service costs.

in €	Sylvie Matherat <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	400,000	400,000
Fringe benefits	12,905	12,905	12,905	12,905	5,226	5,226
<b>Total</b>	<b>2,412,905</b>	<b>2,412,905</b>	<b>2,412,905</b>	<b>2,412,905</b>	<b>405,226</b>	<b>405,226</b>
Variable compensation	0	3,400,000	0	5,600,000	0	566,667
thereof:						
Restricted Incentive Awards	0	1,000,000	0	2,000,000	0	166,667
Restricted Equity Awards	0	2,400,000	0	3,600,000	0	400,000
<b>Total</b>	<b>0</b>	<b>3,400,000</b>	<b>0</b>	<b>5,600,000</b>	<b>0</b>	<b>566,667</b>
Pension service costs	517,352	517,352	517,352	517,352	128,506	128,506
<b>Total compensation (GCGC)</b>	<b>2,930,257</b>	<b>6,330,257</b>	<b>2,930,257</b>	<b>8,530,257</b>	<b>533,732</b>	<b>1,100,399</b>
<b>Total compensation<sup>2</sup></b>	<b>2,400,000</b>	<b>5,800,000</b>	<b>2,400,000</b>	<b>8,000,000</b>	<b>400,000</b>	<b>966,667</b>

<sup>1</sup> Member since November 1, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	Nicolas Moreau <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	600,000	600,000	600,000	600,000	0	0
Fringe benefits	5,239	5,239	5,239	5,239	0	0
<b>Total</b>	<b>605,239</b>	<b>605,239</b>	<b>605,239</b>	<b>605,239</b>	<b>0</b>	<b>0</b>
Variable compensation	0	1,150,000	0	2,025,000	0	0
thereof:						
Restricted Incentive Awards	0	600,000	0	1,200,000	0	0
Restricted Equity Awards	0	550,000	0	825,000	0	0
<b>Total</b>	<b>0</b>	<b>1,150,000</b>	<b>0</b>	<b>2,025,000</b>	<b>0</b>	<b>0</b>
Pension service costs	442,672	442,672	442,672	442,672	0	0
<b>Total compensation (GCGC)</b>	<b>1,047,911</b>	<b>2,197,911</b>	<b>1,047,911</b>	<b>3,072,911</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>600,000</b>	<b>1,750,000</b>	<b>600,000</b>	<b>2,625,000</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since October 1, 2016.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	Quintin Price <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	1,100,000	1,100,000	1,100,000	1,100,000	0	0
Fringe benefits	13,783	13,783	13,783	13,783	0	0
<b>Total</b>	<b>1,113,783</b>	<b>1,113,783</b>	<b>1,113,783</b>	<b>1,113,783</b>	<b>0</b>	<b>0</b>
Variable compensation	0	2,108,333	0	3,712,500	0	0
thereof:						
Restricted Incentive Awards	0	1,100,000	0	2,200,000	0	0
Restricted Equity Awards	0	1,008,333	0	1,512,500	0	0
<b>Total</b>	<b>0</b>	<b>2,108,333</b>	<b>0</b>	<b>3,712,500</b>	<b>0</b>	<b>0</b>
Pension service costs	525,143	525,143	525,143	525,143	0	0
<b>Total compensation (GCGC)</b>	<b>1,638,926</b>	<b>3,747,259</b>	<b>1,638,926</b>	<b>5,351,426</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>1,100,000</b>	<b>3,208,333</b>	<b>1,100,000</b>	<b>4,812,500</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since January 1, 2016 until June 15, 2016.<sup>2</sup> Without fringe benefits and pension service costs.

in €	Garth Ritchie <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	0	0
Fringe benefits	110,241	110,241	110,241	110,241	0	0
<b>Total</b>	<b>2,510,241</b>	<b>2,510,241</b>	<b>2,510,241</b>	<b>2,510,241</b>	<b>0</b>	<b>0</b>
Variable compensation	0	4,600,000	0	8,100,000	0	0
thereof:						
Restricted Incentive Awards	0	2,400,000	0	4,800,000	0	0
Restricted Equity Awards	0	2,200,000	0	3,300,000	0	0
<b>Total</b>	<b>0</b>	<b>4,600,000</b>	<b>0</b>	<b>8,100,000</b>	<b>0</b>	<b>0</b>
Pension service costs	1,443,171	1,443,171	1,443,171	1,443,171	0	0
<b>Total compensation (GCGC)</b>	<b>3,953,412</b>	<b>8,553,412</b>	<b>3,953,412</b>	<b>12,053,412</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>2,400,000</b>	<b>7,000,000</b>	<b>2,400,000</b>	<b>10,500,000</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since January 1, 2016.<sup>2</sup> Without fringe benefits and pension service costs.

in €	Karl von Rohr <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	400,000	400,000
Fringe benefits	47,730	47,730	47,730	47,730	2,348	2,348
<b>Total</b>	<b>2,447,730</b>	<b>2,447,730</b>	<b>2,447,730</b>	<b>2,447,730</b>	<b>402,348</b>	<b>402,348</b>
Variable compensation	0	3,400,000	0	5,600,000	0	566,667
thereof:						
Restricted Incentive Awards	0	1,000,000	0	2,000,000	0	166,667
Restricted Equity Awards	0	2,400,000	0	3,600,000	0	400,000
<b>Total</b>	<b>0</b>	<b>3,400,000</b>	<b>0</b>	<b>5,600,000</b>	<b>0</b>	<b>566,667</b>
Pension service costs	546,402	546,402	546,402	546,402	131,141	131,141
<b>Total compensation (GCGC)</b>	<b>2,994,132</b>	<b>6,394,132</b>	<b>2,994,132</b>	<b>8,594,132</b>	<b>533,489</b>	<b>1,100,156</b>
<b>Total compensation<sup>2</sup></b>	<b>2,400,000</b>	<b>5,800,000</b>	<b>2,400,000</b>	<b>8,000,000</b>	<b>400,000</b>	<b>966,667</b>

<sup>1</sup> Member since November 1, 2015.<sup>2</sup> Without fringe benefits and pension service costs.

in €	2016				2015	
	Determined		Target		Determined	
	Min	Max	Min	Max	Min	Max
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	1,460,000	1,460,000
Fringe benefits	23,720	23,720	23,720	23,720	38,370	38,370
<b>Total</b>	<b>2,423,720</b>	<b>2,423,720</b>	<b>2,423,720</b>	<b>2,423,720</b>	<b>1,498,370</b>	<b>1,498,370</b>
Variable compensation	0	3,400,000	0	5,600,000	0	2,068,333
thereof:						
Restricted Incentive Awards	0	1,000,000	0	2,000,000	0	608,333
Restricted Equity Awards	0	2,400,000	0	3,600,000	0	1,460,000
<b>Total</b>	<b>0</b>	<b>3,400,000</b>	<b>0</b>	<b>5,600,000</b>	<b>0</b>	<b>2,068,333</b>
Pension service costs	546,402	546,402	546,402	546,402	478,387	478,387
<b>Total compensation (GCGC)</b>	<b>2,970,122</b>	<b>6,370,122</b>	<b>2,970,122</b>	<b>8,570,122</b>	<b>1,976,757</b>	<b>4,045,090</b>
<b>Total compensation<sup>2</sup></b>	<b>2,400,000</b>	<b>5,800,000</b>	<b>2,400,000</b>	<b>8,000,000</b>	<b>1,460,000</b>	<b>3,528,333</b>

<sup>1</sup> Member since May 22, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	2016				2015	
	Determined		Target		Determined	
	Min	Max	Min	Max	Min	Max
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Fringe benefits	204,758	204,758	204,758	204,758	19,471	19,471
<b>Total</b>	<b>2,604,758</b>	<b>2,604,758</b>	<b>2,604,758</b>	<b>2,604,758</b>	<b>2,419,471</b>	<b>2,419,471</b>
Variable compensation	0	3,400,000	0	5,900,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,600,000	0	3,200,000	0	1,000,000
Restricted Equity Awards	0	1,800,000	0	2,700,000	0	2,400,000
<b>Total</b>	<b>0</b>	<b>3,400,000</b>	<b>0</b>	<b>5,900,000</b>	<b>0</b>	<b>3,400,000</b>
Pension service costs	984,198	984,198	984,198	984,198	559,197	559,197
<b>Total compensation (GCGC)</b>	<b>3,588,956</b>	<b>6,988,956</b>	<b>3,588,956</b>	<b>9,488,956</b>	<b>2,978,668</b>	<b>6,378,668</b>
<b>Total compensation<sup>1</sup></b>	<b>2,400,000</b>	<b>5,800,000</b>	<b>2,400,000</b>	<b>8,300,000</b>	<b>2,400,000</b>	<b>5,800,000</b>

<sup>1</sup> Without fringe benefits and pension service costs

in €	2016				2015	
	Determined		Target		Determined	
	Min	Max	Min	Max	Min	Max
Fixed compensation (base salary)	1,000,000	1,000,000	1,000,000	1,000,000	0	0
Fringe benefits	165,001	165,001	165,001	165,001	0	0
<b>Total</b>	<b>1,165,001</b>	<b>1,165,001</b>	<b>1,165,001</b>	<b>1,165,001</b>	<b>0</b>	<b>0</b>
Variable compensation	0	1,416,667	0	2,333,333	0	0
thereof:						
Restricted Incentive Awards	0	416,667	0	833,333	0	0
Restricted Equity Awards	0	1,000,000	0	1,500,000	0	0
<b>Total</b>	<b>0</b>	<b>1,416,667</b>	<b>0</b>	<b>2,333,333</b>	<b>0</b>	<b>0</b>
Pension service costs	164,232	164,232	164,232	164,232	0	0
<b>Total compensation (GCGC)</b>	<b>1,329,233</b>	<b>2,745,900</b>	<b>1,329,233</b>	<b>3,662,566</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>1,000,000</b>	<b>2,416,667</b>	<b>1,000,000</b>	<b>3,333,333</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since August 1, 2016.

<sup>2</sup> Without fringe benefits and pension service costs.

in €	Jeffrey Urwin <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	0	0
Fringe benefits	59,763	59,763	59,763	59,763	0	0
<b>Total</b>	<b>2,459,763</b>	<b>2,459,763</b>	<b>2,459,763</b>	<b>2,459,763</b>	<b>0</b>	<b>0</b>
Variable compensation	0	6,100,000	0	10,800,000	0	0
thereof:						
Restricted Incentive Awards	0	3,300,000	0	6,600,000	0	0
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	0
<b>Total</b>	<b>0</b>	<b>6,100,000</b>	<b>0</b>	<b>10,800,000</b>	<b>0</b>	<b>0</b>
Pension service costs	2,036,367	2,036,367	2,036,367	2,036,367	0	0
<b>Total compensation (GCGC)</b>	<b>4,496,130</b>	<b>10,596,130</b>	<b>4,496,130</b>	<b>15,296,130</b>	<b>0</b>	<b>0</b>
<b>Total compensation<sup>2</sup></b>	<b>2,400,000</b>	<b>8,500,000</b>	<b>2,400,000</b>	<b>13,200,000</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Member since January 1, 2016.<sup>2</sup> Without fringe benefits and pension service costs.

in €	Anshuman Jain <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	0	0	0	0	1,900,000	1,900,000
Fringe benefits	0	0	0	0	337,718	337,718
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,237,718</b>	<b>2,237,718</b>
Variable compensation	0	0	0	0	0	2,650,000
thereof:						
Restricted Incentive Awards	0	0	0	0	0	750,000
Restricted Equity Awards	0	0	0	0	0	1,900,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,650,000</b>
Pension service costs	0	0	0	0	1,553,203	1,553,203
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,790,921</b>	<b>6,440,921</b>
<b>Total compensation<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,900,000</b>	<b>4,550,000</b>

<sup>1</sup> Member until June 30, 2015.<sup>2</sup> Without fringe benefits and pension service costs.

in €	Stefan Krause <sup>1</sup>					
	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	0	0	0	0	2,400,000	2,400,000
Fringe benefits	0	0	0	0	105,099	105,099
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,505,099</b>	<b>2,505,099</b>
Variable compensation	0	0	0	0	0	3,400,000
thereof:						
Restricted Incentive Awards	0	0	0	0	0	1,000,000
Restricted Equity Awards	0	0	0	0	0	2,400,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,400,000</b>
Pension service costs	0	0	0	0	498,908	498,908
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,004,007</b>	<b>6,404,007</b>
<b>Total compensation<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,400,000</b>	<b>5,800,000</b>

<sup>1</sup> Member until October 31, 2015 / contract termination on December 31, 2015.<sup>2</sup> Without fringe benefits and pension service costs.

Dr. Stephan Leithner <sup>1</sup>						
in €	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	0	0	0	0	2,000,000	2,000,000
Fringe benefits	0	0	0	0	72,570	72,570
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,072,570</b>	<b>2,072,570</b>
Variable compensation	0	0	0	0	0	2,833,333
thereof:	0	0	0	0	0	0
Restricted Incentive Awards	0	0	0	0	0	833,333
Restricted Equity Awards	0	0	0	0	0	2,000,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,833,333</b>
Pension service costs	0	0	0	0	442,033	442,033
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,514,603</b>	<b>5,347,936</b>
<b>Total compensation<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>4,833,333</b>

<sup>1</sup> Member until October 31, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

Rainer Neske <sup>1</sup>						
in €	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	0	0	0	0	1,200,000	1,200,000
Fringe benefits	0	0	0	0	61,347	61,347
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,261,347</b>	<b>1,261,347</b>
Variable compensation	0	0	0	0	0	1,700,000
thereof:						
Restricted Incentive Awards	0	0	0	0	0	500,000
Restricted Equity Awards	0	0	0	0	0	1,200,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,700,000</b>
Pension service costs	0	0	0	0	550,484	550,484
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,811,831</b>	<b>3,511,831</b>
<b>Total compensation<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,200,000</b>	<b>2,900,000</b>

<sup>1</sup> Member until June 30, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

Henry Ritchotte <sup>1</sup>						
in €	2016				2015	
	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	0	0	0	0	2,400,000	2,400,000
Fringe benefits	0	0	0	0	382,390	382,390
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,782,390</b>	<b>2,782,390</b>
Variable compensation	0	0	0	0	0	3,400,000
thereof:						
Restricted Incentive Awards	0	0	0	0	0	1,000,000
Restricted Equity Awards	0	0	0	0	0	2,400,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,400,000</b>
Pension service costs	0	0	0	0	502,274	502,274
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,284,664</b>	<b>6,684,664</b>
<b>Total compensation<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,400,000</b>	<b>5,800,000</b>

<sup>1</sup> Member until December 31, 2015.

<sup>2</sup> Without fringe benefits and pension service costs.

The following table provides the disbursements in/for the 2016 and 2015 financial years:

#### Disbursements paid out in 2016 (2015) according to GCGC

	John Cryan <sup>1</sup> Co-Chairman		Jürgen Fitschen <sup>2</sup> Co-Chairman		Kim Hammonds <sup>3</sup>		Stuart Lewis	
in €	2016	2015	2016	2015	2016	2015	2016	2015
Fixed compensation	3,800,000	1,900,000	1,583,333	3,800,000	1,000,000	0	2,400,000	2,400,000
Fringe benefits	41,795	29,697	38,937	102,016	6,035	0	77,938	97,624
<b>Total</b>	<b>3,841,795</b>	<b>1,929,697</b>	<b>1,622,270</b>	<b>3,902,016</b>	<b>1,006,035</b>	<b>0</b>	<b>2,477,938</b>	<b>2,497,624</b>
Variable compensation	0	0	0	285,529	0	0	0	0
thereof Restricted Equity Awards:								
REA for 2010 (until 2016)	0	0	0	285,529	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>285,529</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pension service costs	821,114	439,065	232,666	624,192	270,466	0	546,402	516,969
<b>Total compensation (GCGC)</b>	<b>4,662,909</b>	<b>2,368,762</b>	<b>1,854,936</b>	<b>4,811,737</b>	<b>1,276,501</b>	<b>0</b>	<b>3,024,340</b>	<b>3,014,593</b>

<sup>1</sup> Member since July 1, 2015. Release of EUR 227,163.68 resp. 17,440.59 Deutsche Bank share-awards which were granted as compensation for the forfeiture of deferred compensation components from a former employer in 2015.

<sup>2</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>3</sup> Member since August 1, 2016.

	Sylvie Mathérat <sup>1</sup>		Nicolas Moreau <sup>2</sup>		Quintin Price <sup>3</sup>		Garth Ritchie <sup>4</sup>	
in €	2016	2015	2016	2015	2016	2015	2016	2015
Fixed compensation	2,400,000	400,000	600,000	0	1,100,000	0	2,400,000	0
Fringe benefits	12,905	5,226	5,239	0	13,783	0	110,241	0
<b>Total</b>	<b>2,412,905</b>	<b>405,226</b>	<b>605,239</b>	<b>0</b>	<b>1,113,783</b>	<b>0</b>	<b>2,510,241</b>	<b>0</b>
Variable compensation	0	0	0	0	0	0	0	0
thereof Restricted Equity Awards:								
REA for 2010 (until 2016)	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pension service costs	517,352	128,506	442,672	0	525,143	0	1,443,171	0
<b>Total compensation (GCGC)</b>	<b>2,930,257</b>	<b>533,732</b>	<b>1,047,911</b>	<b>0</b>	<b>1,638,926</b>	<b>0</b>	<b>3,953,412</b>	<b>0</b>

<sup>1</sup> Member since November 1, 2015.

<sup>2</sup> Member since October 1, 2016.

<sup>3</sup> Member since January 1, 2016 until June 15, 2016.

<sup>4</sup> Member since January 1, 2016.

	Karl von Rohr <sup>1</sup>		Dr. Marcus Schenck <sup>2</sup>		Christian Sewing		Werner Steinmüller <sup>3</sup>	
in €	2016	2015	2016	2015	2016	2015	2016	2015
Fixed compensation	2,400,000	400,000	2,400,000	1,460,000	2,400,000	2,400,000	1,000,000	0
Fringe benefits	47,730	2,348	23,720	38,370	204,758	19,471	165,001	0
<b>Total</b>	<b>2,447,730</b>	<b>402,348</b>	<b>2,423,720</b>	<b>1,498,370</b>	<b>2,604,758</b>	<b>2,419,471</b>	<b>1,165,001</b>	<b>0</b>
Variable compensation	0	0	0	0	0	0	0	0
thereof Restricted Equity Awards:								
REA for 2010 (until 2016)	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pension service costs	546,402	131,141	546,402	478,387	984,198	559,197	164,232	0
<b>Total compensation (GCGC)</b>	<b>2,994,132</b>	<b>533,489</b>	<b>2,970,122</b>	<b>1,976,757</b>	<b>3,588,956</b>	<b>2,978,668</b>	<b>1,329,233</b>	<b>0</b>

<sup>1</sup> Member since November 1, 2015.

<sup>2</sup> Member since May 22, 2015.

<sup>3</sup> Member since August 1, 2016.

in €	Jeffrey Urwin <sup>1</sup>		Anshuman Jain <sup>2</sup>		Stefan Krause <sup>3</sup>		Dr. Stephan Leithner <sup>4</sup>	
	2016	2015	2016	2015	2016	2015	2016	2015
Fixed compensation	2,400,000	0	0	1,900,000	0	2,400,000	0	2,000,000
Fringe benefits	59,763	0	0	337,718	0	105,099	0	72,570
<b>Total</b>	<b>2,459,763</b>	<b>0</b>	<b>0</b>	<b>2,237,718</b>	<b>0</b>	<b>2,505,099</b>	<b>0</b>	<b>2,072,570</b>
Variable compensation	0	0	0	0	0	303,115	0	0
thereof Restricted Equity Awards:								
REA for 2010 (until 2016)	0	0	0	0	0	303,115	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>303,115</b>	<b>0</b>	<b>0</b>
Pension service costs	2,036,367	0	0	1,553,203	0	498,908	0	442,033
<b>Total compensation (GCGC)</b>	<b>4,496,130</b>	<b>0</b>	<b>0</b>	<b>3,790,921</b>	<b>0</b>	<b>3,307,122</b>	<b>0</b>	<b>2,514,603</b>

<sup>1</sup> Member since January 1, 2016.

<sup>2</sup> Member until June 30, 2015.

<sup>3</sup> Member until October 31, 2015 / contract termination on December 31, 2015.

<sup>4</sup> Member until October 31, 2015.

in €	Rainer Neske <sup>1</sup>		Henry Ritchotte <sup>2</sup>	
	2016	2015	2016	2015
Fixed compensation	0	1,200,000	0	2,400,000
Fringe benefits	0	61,347	0	382,390
<b>Total</b>	<b>0</b>	<b>1,261,347</b>	<b>0</b>	<b>2,782,390</b>
Variable compensation	0	0	0	0
thereof Restricted Equity Awards:				
REA for 2010 (until 2016)	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pension service costs	0	550,484	0	502,274
<b>Total compensation (GCGC)</b>	<b>0</b>	<b>1,811,831</b>	<b>0</b>	<b>3,284,664</b>

<sup>1</sup> Member until June 30, 2015.

<sup>2</sup> Member until December 31, 2015.

In 2016, the Supervisory Board decided to suspend the tranches of deferred compensation elements which were subject to non-forfeiture and/or disbursal in 2016 for the Management Board members Fitschen and Lewis, who were still active in the reporting period, as well as for nine former Management Board members who already left the Management Board prior to the reporting period. Accordingly, the above table does not contain the respective compensation elements which were not disbursed (or delivered – in case of share based elements) in 2016.

With respect to deferred awards scheduled to be delivered in the first quarter of 2017, the Supervisory Board has confirmed that the performance conditions relating to Group-wide IBIT for the financial year 2016 have been met.



## Compensation in accordance with the German Accounting Standard No. 17 (GAS 17)

In accordance with the requirements of the GAS 17, the members of the Management Board collectively received in the 2016 financial year compensation totaling €26,691,178 (2015: €23,913,876) for their service on the Management Board. Of that, €25,883,333 (2015: €22,660,000) was for base salaries, €807,845 (2015: €1,253,876) for fringe benefits and €0 (2015: €0) for performance-related components with long-term incentives.

In accordance with German Accounting Standard No. 17, the Restricted Incentive Awards, as a deferred, non-equity-based compensation component subject to certain (forfeiture) conditions, must be recognized in the total compensation for the year of their payment (i.e. in the financial year in which the unconditional payment takes place) and not in the year they are originally granted. Based on this the Management Board members individually received the following compensation components for their service on the Management Board for or in the years 2016 and 2015, including the non-performance-related fringe benefits.

### Compensation according to GAS 17

	John Cryan <sup>1</sup> Co-Chairman		Jürgen Fitschen <sup>2</sup> Co-Chairman		Kim Hammonds <sup>3</sup>		Stuart Lewis	
in €	2016	2015	2016	2015	2016	2015	2016	2015
<b>Compensation</b>								
Performance-related components								
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	0	0	0	0
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0	0	0
Non-performance-related components								
Base salary	3,800,000	1,900,000	1,583,333	3,800,000	1,000,000	0	2,400,000	2,400,000
Fringe benefits	41,795	29,697	38,937	102,016	6,035	0	77,938	97,624
<b>Total</b>	<b>3,841,795</b>	<b>1,929,697</b>	<b>1,622,270</b>	<b>3,902,016</b>	<b>1,006,035</b>	<b>0</b>	<b>2,477,938</b>	<b>2,497,624</b>

<sup>1</sup> Member since July 1, 2015.

<sup>2</sup> Member until May 19, 2016 / contract termination on May 31, 2016.

<sup>3</sup> Member since August 1, 2016.

in €	Sylvie Matherat <sup>1</sup>		Nicolas Moreau <sup>2</sup>		Quintin Price <sup>3</sup>		Garth Ritchie <sup>4</sup>	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Compensation</b>								
Performance-related components								
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	0	0	0	0
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0	0	0
Non-performance-related components								
Base salary	2,400,000	400,000	600,000	0	1,100,000	0	2,400,000	0
Fringe benefits	12,905	5,226	5,239	0	13,783	0	110,241	0
<b>Total</b>	<b>2,412,905</b>	<b>405,226</b>	<b>605,239</b>	<b>0</b>	<b>1,113,783</b>	<b>0</b>	<b>2,510,241</b>	<b>0</b>

<sup>1</sup> Member since November 1, 2015.

<sup>2</sup> Member since October 1, 2016.

<sup>3</sup> Member since January 1, 2016 until June 15, 2016.

<sup>4</sup> Member since January 1, 2016.

in €	Karl von Rohr <sup>1</sup>		Dr. Marcus Schenck <sup>2</sup>		Christian Sewing		Werner Steinmüller <sup>3</sup>	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Compensation</b>								
Performance-related components								
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	0	0	0	0
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0	0	0
Non-performance-related components								
Base salary	2,400,000	400,000	2,400,000	1,460,000	2,400,000	2,400,000	1,000,000	0
Fringe benefits	47,730	2,348	23,720	38,370	204,758	19,471	165,001	0
<b>Total</b>	<b>2,447,730</b>	<b>402,348</b>	<b>2,423,720</b>	<b>1,498,370</b>	<b>2,604,758</b>	<b>2,419,471</b>	<b>1,165,001</b>	<b>0</b>

<sup>1</sup> Member since November 1, 2016.

<sup>2</sup> Member since May 22, 2015.

<sup>3</sup> Member since August 1, 2016.

in €	Jeffrey Urwin <sup>1</sup>		Anshuman Jain <sup>2</sup>		Stefan Krause <sup>3</sup>		Dr. Stephan Leithner <sup>4</sup>	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Compensation</b>								
Performance-related components								
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	0	0	0	0
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0	0	0
Non-performance-related components								
Base salary	2,400,000	0	0	1,900,000	0	2,400,000	0	2,000,000
Fringe benefits	59,763	0	0	337,718	0	105,099	0	72,570
<b>Total</b>	<b>2,459,763</b>	<b>0</b>	<b>0</b>	<b>2,237,718</b>	<b>0</b>	<b>2,505,099</b>	<b>0</b>	<b>2,072,570</b>

<sup>1</sup> Member since January 1, 2016.<sup>2</sup> Member until June 30, 2015.<sup>3</sup> Member until October 31, 2015 / contract termination on December 31, 2015.<sup>4</sup> Member until October 31, 2015.

in €	Rainer Neske <sup>1</sup>		Henry Ritchotte <sup>2</sup>		Total	
	2016	2015	2016	2015	2016	2015
<b>Compensation</b>						
Performance-related components						
With long-term incentives						
Cash-based						
Restricted Incentive Award(s) paid	0	0	0	0	0	0
Share-based						
Equity Upfront Award(s)	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0
Non-performance-related components						
Base salary	0	1,200,000	0	2,400,000	25,883,333	22,660,000
Fringe benefits	0	61,347	0	382,390	807,845	1,253,876
<b>Total</b>	<b>0</b>	<b>1,261,347</b>	<b>0</b>	<b>2,782,390</b>	<b>26,691,178</b>	<b>23,913,876</b>

<sup>1</sup> Member until June 30, 2015.<sup>2</sup> Member until December 31, 2015.

In 2016, the Supervisory Board decided to suspend the tranches of deferred compensation elements which were subject to non-forfeiture and/or disbursal in 2016 for the Management Board members Fitschen and Lewis, who were still active in the reporting period, as well as for nine former Management Board members who already left the Management Board prior to the reporting period. Accordingly, the table above does not contain the Restricted Incentive Awards which were not disbursed in 2016.

With respect to deferred awards scheduled to be delivered in the first quarter of 2017, the Supervisory Board has confirmed that the performance conditions relating to Group-wide IBIT for the financial year 2016 have been met.

# Employee Compensation Report

## Overview on Compensation Decisions for 2016

Compensating the Bank's employees transparently and sustainably is an important element of building a better Deutsche Bank. Against this background, one of the main objectives of our strategy is to align the reward system better with employee conduct and Group returns. For 2016, the Management Board took two major decisions which demonstrate the Bank's commitment towards reaching this goal.

Firstly, the Bank introduced a new compensation framework, which was designed to encourage and reward sustainable performance at all levels of the Bank. It introduced a consistent logic for structuring Total Compensation by providing guidance on the target ratio of fixed to variable compensation components, depending on the level of seniority and the division or function of the employee. Variable Compensation (VC) now generally consists of two elements – the "Group Component" and the "Individual Component". The "Group Component" is designed to link the employee's VC directly and transparently to the Bank's results and achievements in reaching strategic targets while the "Individual Component" is linked to divisional and individual performance on a discretionary basis.

Secondly, the Management Board decided to only award a limited VC pool in light of the results for 2016. Over the course of 2016, the Bank showed strong resilience, in particular due to the hard work and dedication of its employees. In this context, the Bank was also able to make significant progress towards its strategic goals by resolving key matters and restructuring the Bank. Even though the Bank made these steps forward, the compensation decision also had to acknowledge that 2016 was a challenging year for the Bank overall. The Management Board is aware that there is still some way to go to strengthen the Bank and to make it more profitable again. Furthermore, the decisions on VC for 2016 had to take into account the financial impact of the settlement of key matters, as well as the Bank's resulting financial performance. The Management Board therefore decided that a substantial limitation of the VC pool for 2016 would be unavoidable in order to reflect the financial results and to appropriately balance the interests of shareholders and employees. This is especially true at a time when many jobs are being cut and the shareholders are only receiving a low annual dividend. Against this background, the senior employees of the Bank (Corporate Titles 'Vice President', 'Director' and 'Managing Director') received a "Group Component" but not an "Individual Component" for the financial year 2016. This decision was the main factor that led to an overall amount of VC for 2016 of €0.5 billion, representing a decrease of approximately 77 % compared to 2015.

While the Management Board fully recognized the additional constraints this decision put on employees, it also strongly believes that this decision is in the best long-term interest and fundamental to building a more successful Deutsche Bank. To underline this, the Management Board has decided to voluntarily waive its Variable Compensation for the financial year 2016.

A limited number of employees in crucial positions for the further success of the Bank were granted "Retention Awards" as a special long-term incentive in early 2017, to a large part in the form of shares. This incentive is fully deferred for up to five years plus an additional retention period of twelve months.

## Regulatory Environment

Ensuring compliance with regulatory requirements is an overarching consideration in the Bank's Group Compensation Strategy. The Bank strives to be at the forefront of regulatory changes with respect to compensation and will continue to work closely with its prudential supervisor, the European Central Bank (ECB), to be in compliance with all existing and new requirements.

As an EU-headquartered institution, Deutsche Bank is subject to the CRD 4 requirements globally, as translated into German national law in the German Banking Act and Institutsvergütungsverordnung (InstVV). The Bank adopted the rules for all subsidiaries and branches world-wide to the extent required in accordance with Sec. 27 InstVV. The Bank also identifies all employees whose work is deemed to have a material impact on the overall risk profile ("Material Risk Takers" or "MRTs") in accordance with criteria stipulated under the Commission Delegated Regulation (EU) No. 604/2014 of 4 March 2014. MRTs are identified at a Group level and also at a single legal entity level for significant institutions in the meaning of Sec. 17 InstVV.

Pursuant to CRD 4 and the requirements subsequently adopted in the German Banking Act, the Bank is subject to a ratio of 1:1 with regard to fixed to variable remuneration components, which may be increased to 1:2 with shareholder approval. At the Bank's Annual General Meeting on May 22, 2014, and in accordance with Sec. 25a (5) German Banking Act, shareholder approval was granted to increase the ratio to 1:2 with an approval rate of 95.27 %. To emphasize the fixed proportion of remuneration for control function employees, the Bank has determined that individuals within the corporate control functions, as defined in the Bank's Internal Control Framework, remain subject to a 1:1 ratio.

As a result of sector specific legislation and in accordance with the InstVV, certain Asset Management subsidiaries fall under the 'Alternative Investments Fund Managers Directive' ("AIFMD") or the 'Undertakings for Collective Investments in Transferable Securities' ("UCITS") Directive and are subject to their respective remuneration provisions. One notable difference to CRD 4 and its implementation in German law is that AIFMD/UCITS Material Risk Takers are not subject to the fixed to variable ratio stipulated in CRD 4. The Bank identifies Material Risk Takers in AIFMD/UCITS regulated subsidiaries in accordance with the respective regulation and applies the remuneration provisions for InstVV MRTs also to AIFMD/UCITS MRTs except for the 1:2 ratio with regard to fixed to variable components.

The Bank is also cognizant of the guidelines under the 'Markets in Financial Instruments Directive' (MiFID) targeted at employees who engage directly or indirectly with the Bank's clients. The amended MaComp Circular published in January 2014 by the BaFin outlines compensation aspects of MiFID, and requires implementation of a specific compensation policy addressing general requirements, a review of compensation plans and identification of populations of employees deemed to be "Relevant Persons". All InstVV requirements apply to this population to the same extent.

The Bank also adheres to the requirements regarding compensation arrangements contained in the final rule implementing Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act globally (the "Volcker Rule").

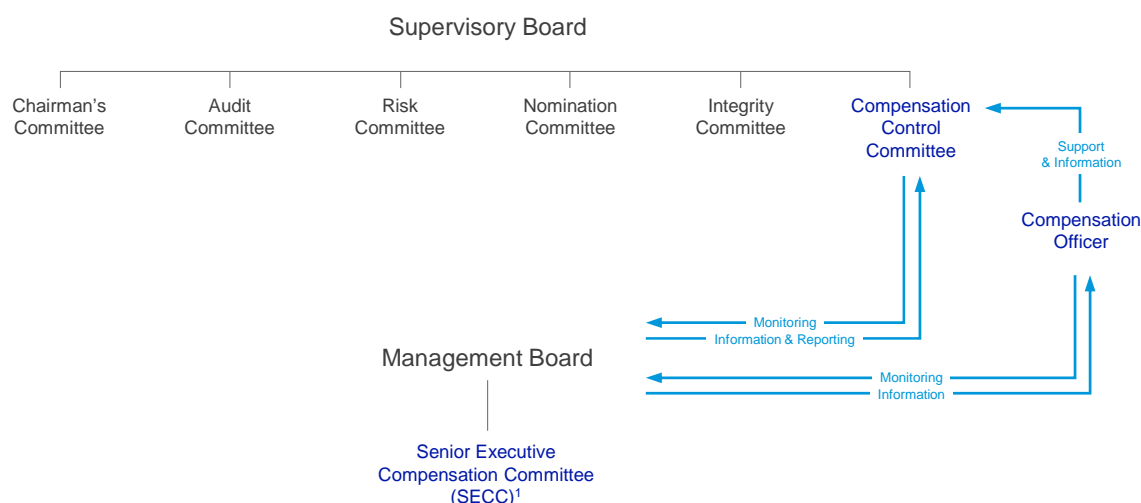
In addition to the foregoing, the Bank is also subject to specific rules and regulations implemented by certain local regulators. Many of these requirements are aligned with the InstVV, however, where variations are apparent, pro-active and open discussions with regulators have enabled the Bank to follow the local regulations whilst ensuring any impacted employees or locations remain within the Bank's overall global compensation framework. This includes, for example, the identification of "Covered Employees" in the United States under the requirements of the Federal Reserve Board. In any case, the Bank applies the InstVV requirements as minimum standards globally.

The Bank will continue to closely monitor the regulatory environment. For 2017, the Bank believes the most significant impact will result from the adoption of the new InstVV by the BaFin. Thorough analysis shows that the Bank's compensation system is already aligned to the new provisions to a large extent. However, there will be some notable changes to the remuneration system, such as the introduction of so-called "clawback" provisions.

## Compensation Governance

The Bank has established a robust governance structure enabling it to operate within the clear parameters of the Compensation Strategy and the Compensation Policies. In accordance with the German two-tier board structure, the Supervisory Board governs the compensation of the Management Board members while the Management Board oversees compensation matters for all other employees in the Group. Both the Supervisory Board and the Management Board are supported by specific committees and functions, in particular the Compensation Control Committee (CCC) and the Senior Executive Compensation Committee (SECC).

### Reward Governance structure



<sup>1</sup> The relevant tasks are performed by the SECC on behalf of the Management Board.

### Compensation Control Committee

The Supervisory Board has established the CCC in accordance with Sec. 25d (12) German Banking Act. It consists of the Chairperson of the Supervisory Board and three further Supervisory Board Members, two from among the employee representatives, and had twelve meetings in the calendar year 2016, four of them being joint meetings with the Risk Committee and one of them being a joint meeting with the Chairman's Committee.

The responsibilities of the CCC include supporting the Supervisory Board in establishing and monitoring the appropriate structure of the compensation system for the Management Board Members of Deutsche Bank AG, considering, in particular, the effects on the risks and risk management in accordance with the InstVV. Furthermore, the CCC monitors the appropriate structure of the compensation system for the employees, as established by the Management Board and the Senior Executive Compensation Committee. The CCC checks regularly whether the total amount of VC is appropriate and set in accordance with the InstVV.

The CCC also assesses the impact of the compensation systems on the management of risk, capital and liquidity and seeks to ensure that the compensation systems are aligned to the business and risk strategies. Furthermore, the CCC supports the Supervisory Board in monitoring whether the internal control functions and the other relevant areas are properly involved in the structuring of the compensation systems.

### Compensation Officer

In accordance with Sec. 23 InstVV, the Management Board, in cooperation with the CCC, has appointed a Compensation Officer. The Compensation Officer supports the Supervisory Board and the CCC in performing their duties relating to the compensation systems and cooperates closely with the Chairperson of the CCC. The Compensation Officer is

involved in the conceptual review, development, monitoring and the application of the employee's compensation systems on an ongoing basis. The Compensation Officer performs his monitoring obligations independently and provides an assessment on the appropriateness of design and practices of the compensation systems for employees at least annually.

#### Senior Executive Compensation Committee

The SECC is a delegated committee established by the Management Board which has the mandate to develop sustainable compensation principles, to prepare recommendations on Total Compensation levels and to ensure appropriate compensation governance and oversight. The SECC establishes the Group Compensation Strategy and Compensation Policy. The SECC also utilizes quantitative and qualitative factors to assess performance as a basis for compensation decisions and makes recommendations to the Management Board regarding the annual VC pool and its allocation across Business Divisions and Infrastructure Functions.

In order to maintain its independence, only representatives from Infrastructure Functions who are not aligned to any of the Business Divisions are members of the SECC. In 2016, the SECC's membership comprised of the Chief Administration Officer and the Chief Financial Officer as Co-Chairpersons, as well as the Chief Risk Officer (all of whom are Management Board Members), the Global Head of Human Resources and an additional Finance representative as Voting Members. The Compensation Officer, the Deputy Compensation Officer and one of the Global Co-Heads of HR Manage & Reward Performance were Non-Voting Members. The SECC generally meets on a monthly basis and it had 13 meetings with regard to the performance year 2016 compensation process.

## Compensation Strategy

Deutsche Bank recognizes that its compensation system plays a vital role in supporting its strategic objectives. It enables the Bank to attract and retain the individuals required to achieve the Bank's objectives. It also encourages employees to reach their full potential. The Group Compensation Strategy is aligned to the Bank's strategic objectives and to its corporate values and beliefs.

#### Five key objectives of our compensation practices

- To support the delivery of the Bank's client-focused, global bank strategy by attracting and retaining talent across its full range of diverse business models and country locations
- To support the long-term, sustainable performance and development of the Bank and a corresponding risk strategy
- To promote and support long-term performance based on cost discipline and efficiency
- To ensure that the Bank's compensation practices are safe, by way of risk-adjusting performance outcomes, preventing inappropriate risk taking, ensuring sustained compatibility with capital and liquidity planning, and complying with regulation
- To apply and promote the Bank's corporate values of integrity, sustainable performance, client centricity, innovation, discipline and partnership

#### Core remuneration principles

- Align compensation to shareholder interests and sustained bank-wide profitability, taking account of risk
- Maximize sustainable performance, both at the employee and the bank-wide level
- Attract and retain the best talent
- Calibrate compensation to reflect different divisions and levels of responsibility
- Apply a simple and transparent compensation design
- Ensure compliance with regulatory requirements



The Group Compensation Policy is an internal document focused on informing and educating employees with regard to the Bank's Compensation Strategy, governance processes as well as compensation practices and structures. Together, the Group Compensation Strategy and the Group Compensation Policy provide a clear and documented link between compensation practices and the wider Group strategy. Both documents have been published on the Bank's intranet site and are available to all employees.

## Total Compensation Structure

As part of the Compensation Strategy, the Bank employs a so-called "Total Compensation philosophy", which comprises Fixed Pay and VC. Total Compensation provides an equitable basis for differentiating competitive pay outcomes while reinforcing the Bank's overall strategy within a sound risk management and governance framework, giving due consideration to market factors and regulatory requirements.

In 2016, the Bank introduced a new compensation framework to align employee compensation even more closely with the strategic and business objectives of the Bank, while reducing complexity at the same time. The new compensation framework also puts a stronger emphasis on Fixed Pay over VC and aims to ensure that these components are appropriately balanced.

Fixed Pay is used to compensate employees for their skills, experience and competencies, commensurate with the requirements, size and scope of their role. The appropriate level of Fixed Pay is determined with reference to the prevailing market rates for each role, internal comparisons and applicable regulatory requirements. It plays a key role in permitting the Bank to meet its strategic objectives by attracting and retaining the right talent. For the majority of employees, Fixed Pay is the primary compensation component, and the share of fixed compensation within Total Compensation is far greater than 50 %. This is appropriate to many businesses and will continue to be a significant feature of Total Compensation going forward.

VC has the advantage of being able to differentiate between individual performance and drive behavior through appropriate incentive systems that can positively influence culture. It also allows for flexibility in the cost base. Under the new compensation framework, VC generally consists of two elements – the "Group Component" and the "Individual Component".

In particular, one of the overarching goals of the new compensation framework is to strengthen the link between VC and the performance of the Group. To that end, the Management Board decided to align the "Group Component" directly and in a manner comprehensible for the employees to the Bank's achievements in reaching strategic targets. To assess progress towards the strategic aspirations, the Management Board has decided to utilize four Key Performance Indicators (KPIs) that are significant metrics for the capital, risk, cost and revenue profile of the Bank: Common Equity Tier 1 (CET1) capital ratio (fully loaded), Leverage ratio, Adjusted cost base (without Postbank and NCOU) and Post-tax return on tangible equity (RoTE). These four KPIs are relevant for regulators, investors and other external stakeholders as they show the progress on the implementation of the strategy and thereby recognize that every employee contributes to the Bank's success.

Depending on eligibility, the "Individual Component" is delivered either in the form of Individual VC or a Recognition Award.

Whereas the "Group Component" links to Group performance, Individual VC takes into consideration a number of financial and non-financial factors. These include the applicable divisional performance, the employee's individual performance and conduct, relativities within the employee's peer group and retention considerations.

The Recognition Award program is targeted at non-tariff employees at the lower hierarchy levels. It provides the opportunity to acknowledge and reward outstanding contributions made by the target population in a transparent and timely manner. Generally, there are two nomination cycles per year.

Under the new compensation framework, there continues to be no guarantee of VC in an existing employment relationship.

#### Overview on compensation elements

### Fixed Pay<sup>1</sup>

Used to compensate employees for their skills, experience and competencies

Linked to requirements, size and scope of the role

### Variable Compensation

#### Group Component

##### KPIs

##### Weighting

CET1 ratio

25%

Leverage ratio

25%

Adjusted cost base (without Postbank and NCOU)

25%

Post-tax return on tangible equity

25%

#### Individual Component

Individual Variable Compensation

Component for more senior employees based on

- individual objectives and expectations
- financial and non-financial factors
- divisional success

Recognition Award

Acknowledges outstanding contributions of employees of lower hierarchical levels with generally two nomination cycles per year

### Benefits

Granted in accordance with respective local market practice, requirements and demands (including company pension schemes)

May be linked to certain seniority or to certain length of service without direct link to performance

<sup>1</sup> Fixed Pay may include an Additional Fixed Pay Supplement, regional allowances, or other non-salary elements or allowances where applicable.

## Determination of Variable Compensation – Methodology

The Bank has a robust methodology in place, aimed at ensuring that the determination of variable compensation (VC) reflects the risk-adjusted performance as well as the capital position of the Bank and its divisions. The Group VC pool is primarily driven by (i) Group affordability (i.e. what “can” the Bank award in alignment with regulatory requirements) and (ii) Group strategy (what “should” the Bank award in order to provide an appropriate compensation while protecting the long-term health of the franchise). In 2016, the Bank has revised the methodology to reflect the new compensation framework and its compensation elements.

### Determination of Variable Compensation

Parameter	Description
Group affordability assessment	<p>Group affordability is assessed, as a first step, to determine if the Bank is in a position to award VC. This includes conducting the so-called ‘Net Results Test’ and reviewing the outcome in the context of the defined Group affordability parameters. The affordability parameters used are fully aligned to the Bank’s Risk Appetite Framework and include: CET 1 Ratio, Economic Capital Adequacy Ratio, Leverage Ratio, Stressed Net Liquidity Position and Liquidity Coverage Ratio. The Group VC pool is considered affordable if aligned with these key parameters and if consistent with the projected fulfilment of future regulatory and strategic goals.</p>
Group Component	<p>The Group Component aligns a portion of all employees’ compensation with the performance of the Bank vis-à-vis strategic targets. The Group Component is determined based upon the performance of four equally weighted Key Performance Indicators (KPIs): CET 1 ratio (fully loaded), Leverage ratio, Adjusted cost base (without Postbank and NCOU) and Post-tax Return on Tangible Equity. These four KPIs represent important metrics for the capital, risk, cost and the revenue profile of the Bank and provide a good indication of the sustainable performance of the Bank.</p>
Individual VC	<p>The Bank references a range of considerations as part of its Individual VC determination methodology.</p> <p>For the Business Divisions, the starting point of any pool determination is their financial performance. This is assessed in context of divisional targets and appropriately risk-adjusted, in particular by referencing the degree of future potential risks to which the Bank may be exposed, and the amount of capital required to absorb severe unexpected losses arising from these risks.</p> <p>For the Infrastructure Functions, the performance assessment is based on achievement of cost performance &amp; control targets. While Infrastructure VC pools depend on the overall performance of the Bank, they are not dependent on the performance of the division(s) they oversee in line with regulatory requirements.</p> <p>In addition, the Bank retains the ability to adjust the total amount of Individual VC on the basis of a discretionary decision with due consideration given to key quantitative and qualitative factors, including strategic qualitative factors, e.g. progress on strategic objectives, balance of employee protection and shareholder return, strategic importance of the division to the Group, future business strategy needs such as franchise protection and growth, relative performance vs. peers and market position / trends.</p>
Recognition Award	<p>The purpose of the Recognition Award is to recognize outstanding contributions from the Bank’s population on lower hierarchical levels. The size of the Recognition Award Program is directly linked to a set percentage of Fixed Pay for the in scope employee population and it is generally paid out twice a year.</p>

## Compensation Decisions for 2016

Given the current operating environment, the Management Board decided that a limited VC pool for 2016 is in the best long-term interest of the franchise and is required to appropriately balance the interests of shareholders and employees.

Specifically, the Management Board decided that the Bank's senior employees (Corporate Titles 'Vice President', 'Director' and 'Managing Director') would only receive a "Group Component" but no "Individual Component". To protect junior employees, employees up to the 'Assistant Vice President' level who were not eligible for a Recognition Award remained eligible to receive a limited Individual VC. For the same reason, the two nomination cycles for the Recognition Awards for the financial year 2016 were carried out as planned. Binding contractual agreements, such as bonuses covered by collective labor agreements, were also fulfilled. Those subsidiaries which have not introduced the new compensation framework in 2016 yet, only granted limited VC pools as well. The respective VC pools were then distributed according to the relevant frameworks.

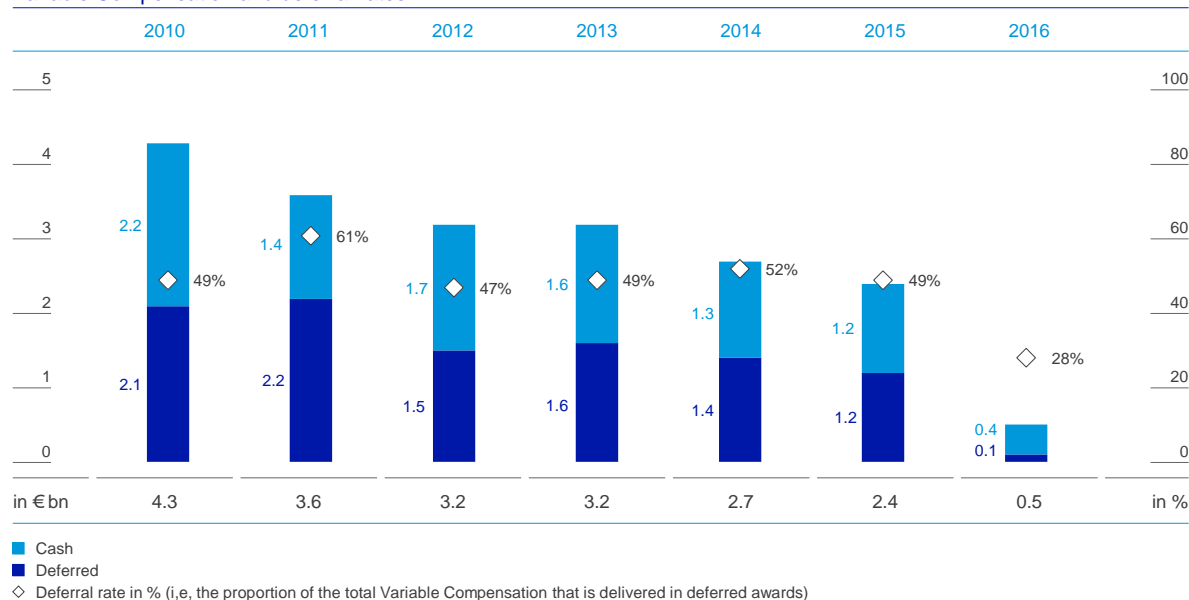
The "Group Component" was awarded to all eligible employees in line with the assessment of the defined four KPIs, as outlined on the previous pages. Based on the fact that solid progress was made during 2016 in improving three of the four KPIs against the Bank's public targets, the Management Board determined a target achievement rate of 50 %. This rate formed the basis for determining employees' specific "Group Component" payout.

In total, these decisions resulted in an overall VC pool for 2016 amounting to €0.5 billion which represents a decrease of approximately 77 % compared to the VC for performance year 2015, granted in March 2016.

Compared to 2015, Fixed Pay for 2016 increased slightly by approximately 3 % from €8.1 billion to €8.3 billion. The main reason for this increase was a rebalancing of the fixed and variable remuneration elements in context of the introduction of the new compensation framework.

In addition, a number of employees in crucial positions for the further success of the Bank were granted so-called "Retention Awards" as a special long-term incentive in early 2017, partly in the form of shares, which is fully deferred for up to five years with an additional retention period of twelve months. This incentive is not designed to compensate the recipients for their performance in 2016 and therefore does not form part of 2016 compensation. It has been granted in order to foster retention of the recipients. Further information can be found in the chapter "2017 Retention Award Program".

### Variable Compensation and deferral rates



### Compensation expenses 2016

	2016							2015	
in € m. (unless stated otherwise) <sup>1</sup>	GM	CIB	PW&CC	Deutsche AM	NCOU	Independent Control Functions <sup>2</sup>	Corporate Functions <sup>3</sup>	Group Total <sup>4</sup>	Group Total
Number of employees (full-time equivalent) at period end	4,737	7,116	24,514	2,547	116	6,084	36,518	99,744	101,104
Total Com- pensation	1,203	1,208	1,826	400	28	622	2,534	8,887	10,528
thereof:									
Fixed	1,054	1,068	1,739	356	26	598	2,435	8,341	8,122
Variable	149	140	87	44	2	24	99	546	2,406

<sup>1</sup> The table may contain marginal rounding differences.

<sup>2</sup> In accordance with regulatory guidance, "Independent Control Functions" for the purposes of this table include the areas of the Chief Risk Officer, the Chief Regulatory Officer as well as Group Audit. Internally, the Bank has identified further Infrastructure Functions as "Independent Control Functions" to which the Bank also applies the fixed to variable remuneration ratio of 1:1.

<sup>3</sup> "Corporate Functions" comprise any Infrastructure Function that is not captured as an Independent Control Function for the purposes of this table.

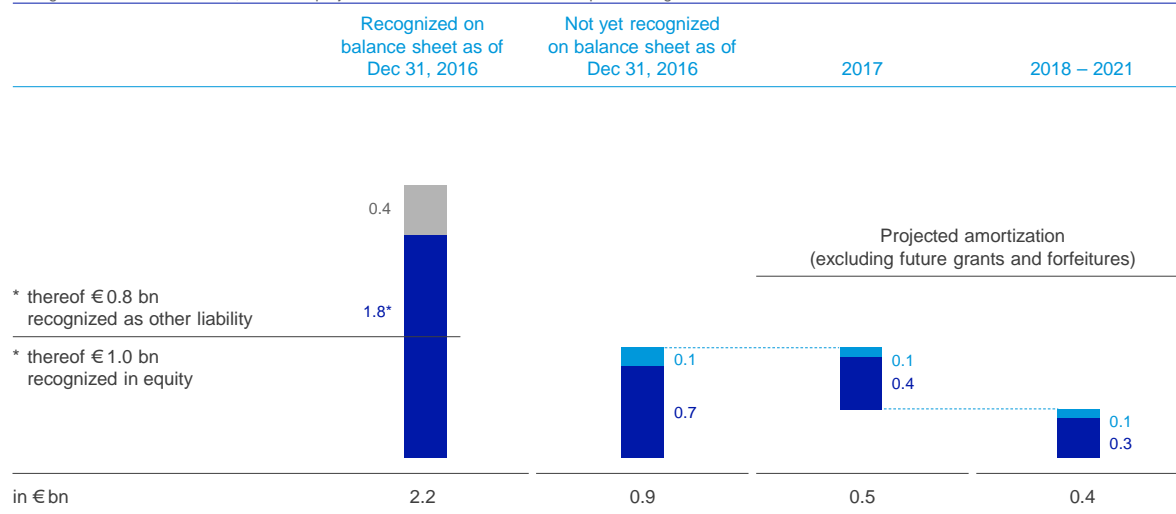
<sup>4</sup> In addition to the information included on divisional level, the 2016 Group Total also includes employees of Postbank Group (18,112 employees) as well as Postbank Total Fixed Pay figures (€ 1,065 million). Variable remuneration granted by Postbank Group is not included in the above variable amount. For Postbank Group, a total amount of variable remuneration of € 85.6 million is envisaged.

## Recognition and Amortization of Variable Compensation

As of December 31, 2016, including awards granted in early March 2017 for financial year 2016, unamortized deferred VC expenses amount to approximately €0.9 billion. The following graph visualizes the amount of VC recognized on the balance sheet for 2016 and the projected future amortization of outstanding VC over the next financial years (future grants and forfeitures excluded).

**Variable Compensation**

Recognition as of December 31, 2016 and projected amortization of deferred compensation granted



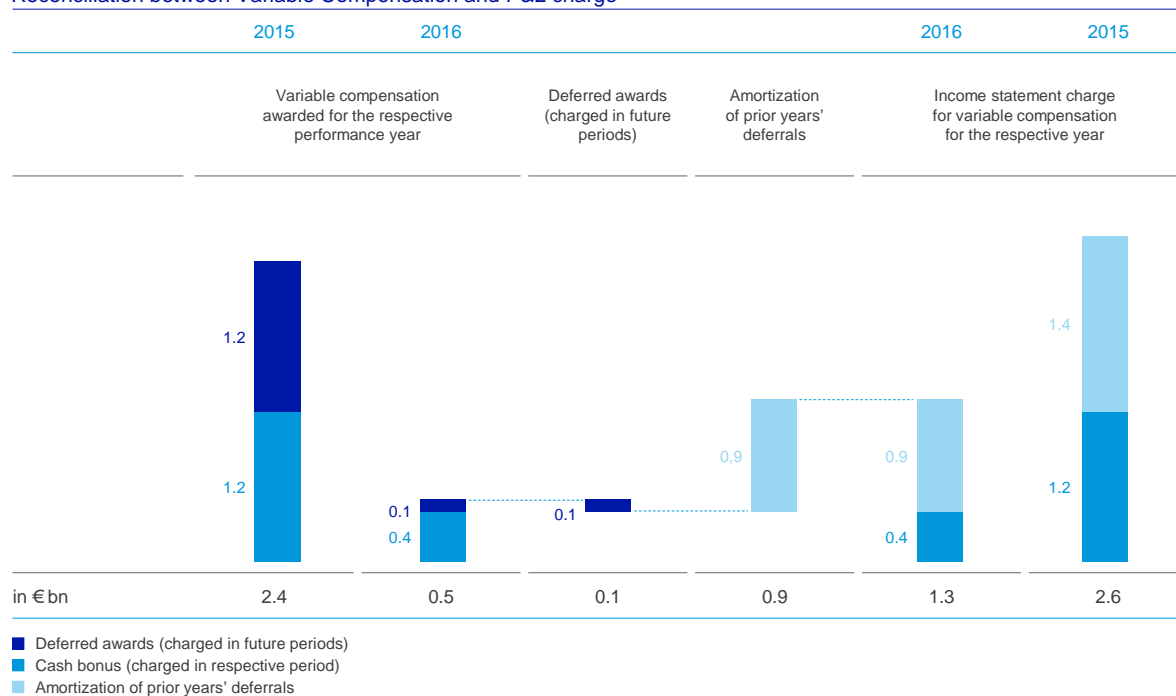
■ Cash portion of variable compensation granted for performance year 2016 recognized as part of other liabilities.

■ Deferred variable compensation granted for performance year 2015 or earlier.

■ Deferred variable compensation granted for performance year 2016.

Due to rounding, numbers presented may not add up precisely to the totals provided.

Of the VC for 2016, €0.4 billion are charged to the income statement for 2016 and €0.1 billion will be charged to future years. In addition, the income statement for 2016 was charged with a VC of €0.9 billion stemming from prior years' deferrals.

**Reconciliation between Variable Compensation and P&L charge**

## Variable Compensation Structure and Vehicles

The Bank's compensation structures are designed not to provide any incentive to engage in excessive risk-taking. They aim to ensure that the alignment of the VC to the sustainable performance of the Group increases with the level of responsibility and the overall amount of compensation awarded. In this context, the Bank continues to believe that the use of shares or share-based instruments for remuneration purposes is an effective way to align the compensation with the Bank's long-term performance and the interests of shareholders. By using Deutsche Bank shares, the value of the individual's remuneration is linked to the Bank's share price over the vesting and retention period, if applicable, and is therefore tied to the long-term performance of the Bank.

As in previous years, the Bank has decided to exceed certain regulatory restrictions regarding VC, meaning that the Bank is putting structures and restrictions in place that are stricter than certain regulatory requirements. 40 % of VC (60 % for Executive Directors) for material risk takers (MRT) is deferred for four years on a pro rata vesting schedule. Additionally, the Bank identified a so-called "Senior Leadership Cadre" (SLC) consisting of the Bank's most senior employees who are the significant influencers and stewards of the Bank's long-term health and performance. To further align the compensation of this group with the sustained performance of the Bank, their deferred equity awards are subject to four and a half years cliff vesting. As for Executive Directors, their deferral rate is 60 %.

All MRTs receive 50 % of their Deferred Awards in Restricted Equity and 50 % in Restricted Cash. In addition, 50 % of the upfront VC award is also granted as equity. All equity awards for MRTs are subject to an additional retention period upon the vesting of each tranche, during which employees are not permitted to sell their shares. In accordance with respective guidance provided by the BaFin, these requirements do not apply for MRTs whose VC is less than €50,000. Due to the limited VC pool for 2016, 1,947 MRTs were below this threshold and therefore received their entire VC award in cash.

The Bank chose to apply the MRT remuneration structures consistently to all other senior employees (Corporate Titles 'Vice President', 'Director' and 'Managing Director') who have not been identified as MRT, with the exception of the upfront VC proportion which is awarded 100 % in cash. Any deferred equity proportion is also not subject to an additional retention period.

### Overview on award structure

Award Type	Weighting	Proportion	Deferral Period	Retention Period
Upfront Compensation	60% of VC <sup>1</sup>	50% cash (Cash Bonus) <sup>2</sup>	N/A	N/A
		50% equity (Equity Upfront Award ("EUA")) <sup>2</sup>	N/A	12 months <sup>3</sup>
Deferred Compensation	40% of VC <sup>1</sup>	50% cash (Restricted Incentive Award ("RIA"))	Pro rata over 4 years	N/A
		50% equity (Restricted Equity Award ("REA"))	Pro rata over 4 years; 4.5 year cliff vesting for SLC	6 months <sup>3</sup>

N/A – Not applicable.

<sup>1</sup> 40 % deferral for awards ≥ €50,000 (60 % for Executive Directors and Senior Leadership Cadre); employees with a Variable Compensation of < €50,000 receive 100 % cash.

<sup>2</sup> Non-MRTs receive 100 % of their upfront compensation in cash.

<sup>3</sup> Only applies to MRTs.



## Ex-post Risk Adjustment of Variable Compensation

Performance conditions and forfeiture provisions are key elements of the Bank's deferred compensation structures and support the alignment of awards with future employee conduct and performance while also allowing for an appropriate back-testing of the initial performance assessment. While all deferred awards are subject to numerous performance conditions and forfeiture provisions, the specific applicability depends on the award component, the employees' division and any identification as an MRT. An overview on the performance conditions and forfeiture provisions can be found below.

### Overview on performance conditions and forfeiture provisions of Variable Compensation

Provision	Description	Forfeiture
Group's CET 1 Ratio	If at the quarter end prior to vesting and delivery the Group's CET 1 Ratio is below a certain threshold	Next tranche of equity based deferred award due for delivery (100% of all undelivered Equity Upfront Awards) <sup>1</sup>
Negative Group IBIT	If the Management Board determines that prior to delivery Group IBIT is negative	Next tranche of equity based deferred award due for delivery (applies also to cash based deferred award of MRTs) <sup>2</sup>
Negative Divisional IBIT	If the Management Board determines that prior to delivery Divisional IBIT is negative	Next tranche of deferred award due for delivery (applies only to MRTs in Business Divisions excluding NCOU MRTs) <sup>2</sup>
Impairment	If any award was based on performance measures or assumptions that are later deemed to be materially inaccurate or if a deal, trade or transaction considered to be attributable to an employee has a significant adverse effect	Up to 100% of undelivered awards
Policy / Regulatory Breach	In the event of an internal policy or procedure breach, or breach of any applicable laws or regulations	Up to 100% of undelivered awards
Material Control Failure	If a Material Control Failure occurs which is considered to be attributable to the employee	Up to 100% of undelivered awards
Regulatory Requirements	If forfeiture is required to comply with prevailing regulatory requirements	Up to 100% of undelivered awards

<sup>1</sup> For award types subject to cliff-vesting, the whole award will be forfeited if at quarter end prior to vesting or settlement the Group's CET 1 ratio is below the threshold.

<sup>2</sup> For award types subject to cliff-vesting, a certain award proportion (20 % for REA of the SLC) will be forfeited in respect of a year, if the IBIT is negative for that year.

With respect to deferred awards from prior financial years scheduled to be delivered in the first quarter of 2017, the Management Board has confirmed that the performance conditions relating to Group-wide and divisional IBIT for the financial year 2016 have been met.

## 2017 Retention Award Program

A limited number of employees have been granted a special long-term incentive ("Retention Award") in early 2017. In order to mitigate retention risks and to protect the franchise, the Management Board decided to grant these Retention Awards to employees who are key contributors to the Bank's future success in crucial roles, who are in high demand in the market and who would be very difficult to replace.

These Retention Awards are not designed to compensate the recipients for their performance in 2016 and therefore do not form part of 2016 compensation. The awards were granted in order to foster retention of the recipients. As opposed to annual VC, the awards are 100 % deferred, without any upfront compensation elements, 50 % in the form of equity and 50 % as cash. The awards are deferred for three to five years and are subject to the same measures of ex-post risk-adjustment as described on the previous page. The earliest payout date for parts of these awards is therefore early 2018 for non-Material Risk Takers and 2020 for MRTs respectively. The equity proportions for MRTs are subject to an additional retention period, meaning that the respective award portions are only delivered after up to six years. To benefit from these awards, Retention Award recipients need to stay at Deutsche Bank. If they leave for a competitor, any undelivered portion of an award will be forfeited.

Overall, Retention Awards were awarded to 5,522 employees or approximately 5 % of Deutsche Bank's global workforce. €554 million were granted in deferred cash, deferred for up to three to five years, and €554 million were granted in deferred equity. To further align the awards with the long-term health of the Bank and the interests of shareholders, this equity portion will not vest, meaning that this portion will lapse, if the Bank's share price does not reach a certain share price target. If the share price target is met, the equity portion is paid out after three years for non-MRTs, and after five to six years for MRTs.

### Overview of structure of Retention Awards

Population	Weighting	Proportion	Deferral Period	Retention Period
Material Risk Takers	100% deferred	50% cash (RIA)	50% in year 4, 50% in year 5	N/A
		50% equity (REA)	50% in year 4, 50% in year 5	12 months
Non-Material Risk Takers	100% deferred	50% cash (RIA)	3 year pro rata vesting with annual tranches	N/A
		50% equity (REA)	Cliff vesting after 3 years	N/A

N/A – Not applicable.

## Compensation disclosure pursuant to Sec. 16 InstVV and Art. 450 CRR

On a global basis, 3,056 employees were identified as InstVV Material Risk Takers (InstVV MRTs) for financial year 2016. The collective remuneration elements for InstVV MRTs are detailed in the tables below in accordance with Sec. 16 InstVV and Art. 450 CRR.

### Aggregate remuneration for InstVV Material Risk Takers

	Business units								2016	2015
	Senior Management <sup>2</sup>	GM	CIB	PW&CC	Deutsche AM	NCOU	Independent Control Functions <sup>3</sup>	Corporate Functions <sup>4</sup>	Group Total	Group Total
in € m. (unless stated otherwise) <sup>1</sup>										
Number of MRTs (headcount)	203	1,098	784	314	202	24	153	278	3,056	3,005
Number of MRTs (FTE)	202	1,095	783	313	201	24	153	276	3,047	2,997
Total Pay	187	585	427	148	104	13	58	127	1,648	2,670
Total Fixed Pay	164	515	381	117	77	12	53	118	1,438	1,423
Total Variable Pay for period	23	70	45	31	27	1	4	9	210	1,246
thereof:										
in cash	12	46	30	21	13	1	4	7	134	498
in shares	11	24	16	10	9	0	1	1	71	745
in other types of instruments	0	0	0	0	5	0	0	0	5	3
Total Variable Pay for period, deferred	14	32	19	18	21	0	1	1	106	904
thereof:										
in cash	7	16	9	9	8	0	0	1	51	317
in shares	7	16	9	9	8	0	0	1	51	587
in other types of instruments	0	0	0	0	5	0	0	0	5	0
Article 450 (1) h(iii) of the CRR in conjunction with article 450 (1) h(iv) of the CRR on deferred variable remuneration from previous years and on explicit risk adjustments										
Total amount of variable pay still outstanding at the beginning of the year that was deferred in previous years										
	382	810	613	152	135	22	32	173	2,318	2,283
thereof:										
vested	114	395	292	67	54	10	14	64	1,009	1,058
unvested	268	415	321	85	81	13	18	109	1,309	1,225
Deferred Variable Pay awarded, paid out or reduced during period										
awarded during period	154	399	325	101	83	9	20	69	1,160	1,131
paid out during period	85	275	204	42	58	7	10	45	725	1,137
reduced through explicit risk adjustments									13	26
Article 450 (1) h(v) of the CRR on hiring bonuses										
Number of beneficiaries of guaranteed variable remuneration (hiring bonuses)										
	7	15	10	2	1	0	4	3	42	94
Total amount of guaranteed variable pay (hiring bonuses)										
	21	19	19	1	0	0	1	0	61	66
Article 450 (1) h(v) and (vi) of the CRR on severance payments										
Total amount of severance payments granted										
	0	12	7	6	6	0	5	6	42	38
Number of beneficiaries of severance payments granted by headcount/FTE										
	0	48	24	6	19	1	4	12	114	70
Highest severance payment granted to an individual										
									4	5

<sup>1</sup> Figures may include rounding differences.

<sup>2</sup> Refers to Management Board members and Executive Directors of significant institutions in accordance with Sec. 17 InstVV and to members of the Senior Leadership Cadre. Supervisory Board Members / Non-Executive Directors are also included in "Senior Management" headcount (thereof 47) and FTE (thereof 46) but not in any other lines as they receive no variable remuneration elements for these activities and as their fixed compensation elements are not meaningful.

<sup>3</sup> In accordance with regulatory guidance, "Independent Control Functions" for the purposes of this table include the areas of the Chief Risk Officer, the Chief Regulatory Officer as well as Group Audit. Internally, the Bank has identified more Infrastructure Functions as "Independent Control Functions" to which the Bank also applies the fixed to variable remuneration ratio of 1:1.

<sup>4</sup> Corporate Functions comprise any Infrastructure Function that is not captured as Independent Control Function for the purposes of this table.

## Remuneration of high earners

in €	2016
	Number of employees
Total Pay	
1,000,000 to 1,499,999	183
1,500,000 to 1,999,999	62
2,000,000 to 2,499,999	36
2,500,000 to 2,999,999	15
3,000,000 to 3,499,999	14
3,500,000 to 3,999,999	2
4,000,000 to 4,499,999	1
4,500,000 to 4,999,999	0
5,000,000 to 5,999,999	1
6,000,000 to 6,999,999	2

In total, 316 employees received a Total Pay of € 1 million or more for 2016, compared to 756 employees in 2015.

## Compensation System for Supervisory Board Members

The compensation principles for Supervisory Board members are set forth in our Articles of Association, which our shareholders amend from time to time at the Annual General Meeting. Such compensation provisions were last amended by resolution of the Annual General Meeting on May 22, 2014 which became effective on July 17, 2014. Accordingly, the following provisions apply:

The members of the Supervisory Board receive fixed annual compensation ("Supervisory Board Compensation"). The annual base compensation amounts to €100,000 for each Supervisory Board member. The Supervisory Board Chairman receives twice that amount and the Deputy Chairperson one and a half times that amount.

Members and chairs of the committees of the Supervisory Board are paid additional fixed annual compensation as follows:

Committee in €	Dec 31, 2016	
	Chairperson	Member
Audit Committee	200,000	100,000
Risk Committee	200,000	100,000
Nomination Committee	100,000	50,000
Mediation Committee	0	0
Integrity Committee	200,000	100,000
Chairman's Committee	100,000	50,000
Compensation Control Committee	100,000	50,000

75 % of the compensation determined is disbursed to each Supervisory Board member after submitting invoices in February of the following year. The other 25 % is converted by the company at the same time into company shares based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, calculated to three digits after the decimal point. The share value of this number of shares is paid to the respective Supervisory Board member in February of the year following his departure from the Supervisory Board or the expiration of his term of office, based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, provided that the member does not leave the Supervisory Board due to important cause which would have justified dismissal.

In case of a change in Supervisory Board membership during the year, compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months. For the year of departure, the entire compensation is paid in cash; a forfeiture regulation applies to 25 % of the compensation for that financial year.

The company reimburses the Supervisory Board members for the cash expenses they incur in the performance of their office, including any value added tax (VAT) on their compensation and reimbursements of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their Supervisory Board work shall be paid for each Supervisory Board member affected. Finally, the Supervisory Board Chairman will be appropriately reimbursed for travel expenses incurred in performing representative tasks that his function requires and for the costs of security measures required on account of his function.

In the interest of the company, the members of the Supervisory Board will be included in an appropriate amount, with a deductible, in any financial liability insurance policy held by the company. The premiums for this are paid by the company.

## Supervisory Board Compensation for the 2016 Financial Year

Individual members of the Supervisory Board received the following compensation for the 2016 financial year (excluding value added tax).

Members of the Supervisory Board in €	Compensation for fiscal year 2016		Compensation for fiscal year 2015	
	Fixed	Thereof payable in February 2017	Fixed	Thereof payable in February 2016
Dr. Paul Achleitner	800,000	600,000	808,333	606,250
Alfred Herling <sup>1</sup>	300,000	300,000	300,000	225,000
Wolfgang Böhr	141,667	106,250	8,333	6,250
Frank Bsirske	250,000	187,500	250,000	187,500
John Cryan	0	0	200,000	200,000
Dina Dublon	300,000	225,000	291,667	218,750
Jan Duschek <sup>2</sup>	41,667	31,250	0	0
Katherine Garrett-Cox <sup>3</sup>	125,000	104,167	100,000	75,000
Timo Heider	200,000	150,000	200,000	150,000
Sabine Irrgang	200,000	150,000	200,000	150,000
Prof. Dr. Henning Kagermann	250,000	187,500	250,000	187,500
Martina Klee	200,000	150,000	200,000	150,000
Peter Löscher	200,000	150,000	200,000	150,000
Henriette Mark	200,000	150,000	200,000	150,000
Richard Meddings	400,000	300,000	100,000	75,000
Louise Parent	333,333	250,000	200,000	150,000
Gabriele Platscher	200,000	150,000	200,000	150,000
Bernd Rose	200,000	150,000	200,000	150,000
Prof. Dr. Stefan Simon <sup>4</sup>	33,333	25,000	0	0
Rudolf Stockem <sup>5</sup>	116,667	116,667	200,000	150,000
Stephan Szukalski <sup>6</sup>	0	0	91,667	91,667
Dr. Johannes Teyssen	216,667	162,500	150,000	112,500
Georg Thoma <sup>7</sup>	108,333	108,333	300,000	225,000
Prof. Dr. Klaus Rüdiger Trützschler	200,000	150,000	200,000	150,000
<b>Total</b>	<b>5,016,667</b>	<b>3,904,167</b>	<b>4,850,000</b>	<b>3,710,417</b>

<sup>1</sup> Member until December 31, 2016.

<sup>2</sup> Member since August 2, 2016.

<sup>3</sup> Member was re-elected on May 19, 2016.

<sup>4</sup> Member since August 23, 2016.

<sup>5</sup> Member until July 31, 2016.

<sup>6</sup> Member until November 30, 2015.

<sup>7</sup> Member until May 28, 2016.

Following the submission of invoices in February 2017, 25 % of the compensation determined for each Supervisory Board member for the 2016 financial year was converted into notional shares of the company on the basis of a share price of €18.455 (average closing price on the Frankfurt Stock Exchange (Xetra) during the last ten trading days of January 2017, calculated to three digits after the decimal point). Members who left the Supervisory Board in 2016 were paid the entire amount of compensation in cash.

The following table shows the number of notional shares of the Supervisory Board members, to three digits after the decimal point, that were awarded in February 2017 as part of their 2016 compensation as well as the number of notional shares accumulated during the respective membership in the Supervisory Board and the amounts paid out in February 2017 for departed or re-elected members.

	Number of notional shares			
	Converted in February 2017 as part of the compensation 2016	Total prior-year amounts from 2013 to 2015	Total (cumulative)	In February 2017 payable in € <sup>1</sup>
Members of the Supervisory Board				
Dr. Paul Achleitner	10,837.171	24,005.183	34,842.354	0
Alfred Herling <sup>2</sup>	0.000	8,254.647	8,254.647	152,340
Wolfgang Böhr	1,919.082	120.250	2,039.332	0
Frank Bsirske	3,386.616	6,425.919	9,812.535	0
Dina Dublon	4,063.939	6,381.695	10,445.634	0
Jan Duscheck <sup>3</sup>	564.436	0.000	564.436	0
Katherine Garrett-Cox <sup>4</sup>	1,128.872	3,093.464	4,222.336	57,090
Timo Heider	2,709.293	5,161.183	7,870.476	0
Sabine Irrgang	2,709.293	5,161.183	7,870.476	0
Prof. Dr. Henning Kagermann	3,386.616	7,130.910	10,517.526	0
Martina Klee	2,709.293	5,443.179	8,152.472	0
Peter Löscher	2,709.293	5,443.179	8,152.472	0
Henriette Mark	2,709.293	6,186.930	8,896.223	0
Richard Meddings	5,418.586	1,443.001	6,861.587	0
Louise Parent	4,515.488	3,778.536	8,294.024	0
Gabriele Platscher	2,709.293	5,904.933	8,614.226	0
Bernd Rose	2,709.293	5,622.937	8,332.230	0
Prof. Dr. Stefan Simon <sup>5</sup>	451.549	0.000	451.549	0
Rudolf Stockem <sup>6</sup>	0.000	5,904.933	5,904.933	108,976
Dr. Johannes Teyssen	2,935.067	4,037.444	6,972.511	0
Georg Thoma <sup>7</sup>	0.000	7,510.895	7,510.895	138,614
Prof. Dr. Klaus Rüdiger Trützschler	2,709.293	6,186.930	8,896.223	0
<b>Total</b>	<b>60,281.766</b>	<b>123,197.331</b>	<b>183,479.097</b>	<b>457,020</b>

<sup>1</sup> At a value of €18.455 based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of January 2017.

<sup>2</sup> Member until December 31, 2016.

<sup>3</sup> Member since August 2, 2016.

<sup>4</sup> Member was re-elected on May 19, 2016.

<sup>5</sup> Member since August 23, 2016.

<sup>6</sup> Member until July 31, 2016.

<sup>7</sup> Member until May 28, 2016.

All employee representatives on the Supervisory Board, with the exception of Frank Bsirske, Rudolf Stockem (until July 31, 2016) and Jan Duscheck (since August 2, 2016), are employed by us. In the 2016 financial year, we paid such members a total amount of €1.05 million in the form of salary, retirement and pension compensation in addition to their Supervisory Board compensation.

We do not provide members of the Supervisory Board with any benefits after they have left the Supervisory Board, though members who are or were employed by us are entitled to the benefits associated with the termination of such employment. During 2016, we set aside €0.08 million for pension, retirement or similar benefits for the members of the Supervisory Board who are or were employed by us.

With the agreement of the Bank's Management Board, Dr. Paul Achleitner performs representative functions in various ways on an unpaid basis for the Bank and participates in opportunities for referrals of business for the Bank. These tasks are related to the functional responsibilities of the Chairman of the Supervisory Board of Deutsche Bank AG. In this respect, the reimbursement of costs is regulated in the Articles of Association. On the basis of a separate contractual agreement, the Bank provides Dr. Paul Achleitner with infrastructure and support services free of charge for his services in the interest of the Bank. He is therefore entitled to avail himself of internal resources for preparing and carrying out his activities. The Bank's security and car services are available for Dr. Paul Achleitner to use free of charge for these tasks. The Bank also reimburses travel expenses and participation fees and covers the taxes for any non-cash benefits provided. On September 24, 2012, the Chairman's Committee approved the conclusion of this agreement. The provisions apply for the duration of Dr. Paul Achleitner's tenure as Chairman of the Supervisory Board and are reviewed on an annual basis for appropriateness. Under this agreement between Deutsche Bank and Dr. Achleitner, support services equivalent to €225,000 (2015: €203,000) were provided and reimbursements for expenses amounting to €234,488 (2015: €233,867) were paid during the 2016 financial year.



[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

# Employees

## Group Headcount

As of December 31, 2016, we employed a total of 99,744 staff members as compared to 101,104 as of December 31, 2015. We calculate our employee figures on a full-time equivalent basis, meaning we include proportionate numbers of part-time employees.

The following table shows our numbers of full-time equivalent employees as of December 31, 2016, 2015 and 2014.

Employees <sup>1</sup>	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014
Germany	44,600	45,757	45,392
Europe (outside Germany), Middle East and Africa	24,062	23,767	23,063
Asia/Pacific	20,099	20,144	19,023
North America <sup>2</sup>	10,611	10,842	10,054
Latin America	373	595	606
<b>Total employees</b>	<b>99,744</b>	<b>101,104</b>	<b>98,138</b>

<sup>1</sup> Full-time equivalent employees.

<sup>2</sup> Primarily the United States.

The number of our employees decreased in 2016 by 1,360 or 1.3 % driven by implementation of our targets originally announced in October 2015:

- Germany (-1,157; -2.5 %) driven by the implementation of restructuring measures, primarily in Private, Wealth and Commercial Clients and by reductions related to Postbank;
- North America (-230; -2.1 %) mainly related to the divestment of Private Client Services;
- Latin America (-222; -37.3 %) as a result of the implementation of our footprint strategy;
- EMEA ex Germany (+295; +1.2 %) mainly driven by UK primarily related to the insourcing of external roles predominantly in COO and due to strengthening of control functions, e.g. Compliance, Anti-Financial Crime, Risk and Audit.

Employees	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014
Global Markets	4.7 %	4.9 %	5.2 %
Corporate & Investment Banking	7.1 %	7.3 %	7.4 %
Private, Wealth & Commercial Clients	24.6 %	25.4 %	26.2 %
Deutsche Asset Management	2.6 %	2.7 %	2.6 %
Postbank	18.2 %	18.5 %	19.1 %
Non-Core Operations Unit	0.1 %	0.1 %	0.2 %
Infrastructure / Regional Management	42.7 %	41.1 %	39.3 %

- Global Markets (-185; -3.8 %) due to reduced engagements primarily in India, in the US, in Latin America and in the Russian Federation;
- Corporate & Investment Banking (-244; -3.3 %) driven by Corporate Finance (-161; -5.2 %) and by Global Transaction Banking (-84; -2.0 %);
- Private, Wealth & Commercial Clients (-1,156; -4.5 %) driven by reductions primarily in Germany and by the divestment of Private Client Services in the US;
- Deutsche Asset Management (-157; -5.8 %) particularly a result of the development in the US, in UK and the divestment of Deutsche Asset Management (India);
- Postbank (-547; -2.9 %) primarily due to reductions in the branch network;
- Non-Core Operations Unit (-25; -17.4 %) primarily due to investment banking related Non-Core Operations;
- Infrastructure functions (+953; +2.3 %) mainly driven by insourcing of external roles primarily in COO and due to strengthening of control functions, e.g. Compliance, Anti-Financial Crime, Risk and Audit.

## Labor Relations

In Germany, labor unions and employers' associations generally negotiate collective bargaining agreements on salaries and benefits for employees below the management level. Many companies in Germany, including ourselves and our material German subsidiaries, are members of employers' associations and are bound by collective bargaining agreements.

Each year, our employers' association, the Arbeitgeberverband des privaten Bankgewerbes e.V., ordinarily renegotiates the collective bargaining agreements that cover many of our employees. The current agreement reached in July 2016 includes the period from May 2016 onwards. After five months without any pay raise, a first pay raise of 1.5 % takes place from October 2016 on, a second pay rise of 1.1 % from January 2018 on, and a third pay raise of 1.1 % from November 2018 on. The existing collective bargaining agreement will last until January 31, 2019.

Our employers' association negotiates with the following unions:

- ver.di (Vereinigte Dienstleistungsgewerkschaft), a union formed in July 2001 resulting from the merger of five unions, including the former bank unions Deutsche Angestellten Gewerkschaft and Gewerkschaft Handel, Banken und Versicherungen;
- Deutscher Bankangestellten Verband (DBV – Gewerkschaft der Finanzdienstleister);
- Deutscher Handels- und Industrieangestellten Verband (DHV – Die Berufsgewerkschaft);
- Komba Gewerkschaft (public service union, only relevant for Postbank);
- DPVKom – Die Kommunikationsgewerkschaft (only relevant for Postbank).

German law prohibits us from asking our employees whether they are members of labor unions. Therefore, we do not know how many of our employees are union members. Approximately 15 % of the employees in the German banking industry are unionized. We estimate that less than 15 % of our employees in Germany are unionized (excluding Postbank, which itself traditionally has a significantly higher unionization rate of approximately 60 %). On a worldwide basis, we estimate that approximately 15 % of our employees are members of labor unions (including Postbank, less than 25 %).

As of December 31, 2016, 32 % of Postbank staff members in Germany are civil servants (full-time equivalent basis), compared to 33 % as of December 31, 2015.

## Post-Employment Benefit Plans

We sponsor a number of post-employment benefit plans on behalf of our employees, both defined contribution plans and defined benefit plans.

In our globally coordinated accounting process covering defined benefit plans with a defined benefit obligation exceeding €2 million our global actuary reviews the valuations provided by locally appointed actuaries in each country.

By applying our global principles for determining the financial and demographic assumptions we ensure that the assumptions are best-estimate, unbiased and mutually compatible, and that they are globally consistent.

For a further discussion on our employee benefit plans see Note 36 "Employee Benefits" to our consolidated financial statements.

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
[Information pursuant to Section – 315 \(4\)  
of the German Commercial Code and  
Explanatory Report – 261](#)  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
[Information pursuant to Section – 315 \(4\)  
of the German Commercial Code and  
Explanatory Report – 261](#)  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
[Information pursuant to Section – 315 \(4\)  
of the German Commercial Code and  
Explanatory Report – 261](#)  
Corporate Governance Statement pursuant to  
Sections 289a and 315 (5) of the German  
Commercial Code – 267

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Operating and Financial Review – 36  
Outlook – 78  
Risk and Opportunities – 86  
Risk Report – 88  
Compensation Report – 199  
Corporate Responsibility – 250  
Employees – 252

Internal Control over Financial Reporting – 257  
Information pursuant to Section – 315 (4)  
of the German Commercial Code and  
Explanatory Report – 261  
[Corporate Governance Statement pursuant to  
Sections 289a and 315 \(5\) of the German  
Commercial Code – 267](#)

[Page intentionally left blank for SEC filing purposes]

# 2

## Consolidated Financial Statements

269	Consolidated Statement of Income	23	Assets Pledged and Received as Collateral – 345
270	Consolidated Statement of Comprehensive Income	24	Property and Equipment – 346
271	Consolidated Balance Sheet	25	Leases – 347
272	Consolidated Statement of Changes in Equity	26	Goodwill and Other Intangible Assets – 348
274	Consolidated Statement of Cash Flows	27	Non-Current Assets and Disposal Groups Held for Sale – 357
275	Notes to the Consolidated Financial Statements	28	Other Assets and Other Liabilities – 361
1 –	Significant Accounting Policies and Critical Accounting Estimates – 275	29 –	Deposits – 361
2 –	Recently Adopted and New Accounting Pronouncements – 300	30 –	Provisions – 362
3 –	Acquisitions and Dispositions – 304	31 –	Credit related Commitments – 377
4 –	Business Segments and Related Information – 305	32 –	Other Short-Term Borrowings – 379
309	Notes to the Consolidated Income Statement	33 –	Long-Term Debt and Trust Preferred Securities – 379
5 –	Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss – 309	34 –	Maturity Analysis of the earliest contractual undiscounted cash flows of Financial Liabilities – 380
6 –	Commissions and Fee Income – 311	374	Additional Notes
7 –	Net Gains (Losses) on Financial Assets Available for Sale – 311	35 –	Common Shares – 382
8 –	Other Income – 312	36 –	Employee Benefits – 383
9 –	General and Administrative Expenses – 312	37 –	Income Taxes – 397
10 –	Restructuring – 312	38 –	Derivatives – 399
11 –	Earnings per Share – 313	39 –	Related Party Transactions – 401
315	Notes to the Consolidated Balance Sheet	40 –	Information on Subsidiaries – 404
12 –	Financial Assets/Liabilities at Fair Value through Profit or Loss – 315	41 –	Structured Entities – 405
13 –	Amendments to IAS 39 and IFRS 7, “Re-classification of Financial Assets” – 316	42 –	Insurance and Investment Contracts – 410
14 –	Financial Instruments carried at Fair Value – 319	43 –	Current and Non-Current Assets and Liabilities – 411
15 –	Fair Value of Financial Instruments not carried at Fair Value – 333	44 –	Events after the Reporting Period – 413
16 –	Financial Assets Available for Sale – 336	45 –	Condensed Deutsche Bank AG (Parent Company only) Financial Information – 413
17 –	Financial Instruments Held to Maturity – 336	46 –	SEC Registered Trust Preferred Securities – 416
18 –	Equity Method Investments – 337		
19 –	Offsetting Financial Assets and Financial Liabilities – 338	434	Confirmations
20 –	Loans – 342		
21 –	Allowance for Credit Losses – 342		
22 –	Transfers of Financial Assets – 343		

## Consolidated Statement of Income

in € m.	Notes	2016	2015	2014
Interest and similar income	5	25,636	25,967	25,001
Interest expense	5	10,929	10,086	10,729
<b>Net interest income</b>	5	<b>14,707</b>	<b>15,881</b>	<b>14,272</b>
Provision for credit losses	21	1,383	956	1,134
<b>Net interest income after provision for credit losses</b>		<b>13,324</b>	<b>14,925</b>	<b>13,138</b>
Commissions and fee income	6	11,744	12,765	12,409
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	5	1,401	3,842	4,299
Net gains (losses) on financial assets available for sale	7	653	203	242
Net income (loss) from equity method investments	18	455	164	619
Net income (loss) from securities held to maturity	17	0	0	0
Other income (loss)	8	1,053	669	108
<b>Total noninterest income</b>		<b>15,307</b>	<b>17,644</b>	<b>17,677</b>
Compensation and benefits	36	11,874	13,293	12,512
General and administrative expenses	9	15,454	18,632	14,654
Policyholder benefits and claims		374	256	289
Impairment of goodwill and other intangible assets	26	1,256	5,776	111
Restructuring activities	10	484	710	133
<b>Total noninterest expenses</b>		<b>29,442</b>	<b>38,667</b>	<b>27,699</b>
<b>Income (loss) before income taxes</b>		<b>(810)</b>	<b>(6,097)</b>	<b>3,116</b>
Income tax expense	37	546	675	1,425
<b>Net income (loss)</b>		<b>(1,356)</b>	<b>(6,772)</b>	<b>1,691</b>
Net income attributable to noncontrolling interests		45	21	28
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components		(1,402)	(6,794)	1,663

## Earnings per Share

in €	Notes	2016	2015	2014
<b>Earnings per share:<sup>1,2</sup></b>	11			
Basic		(€ 1.21)	(€ 5.06)	€ 1.34
Diluted		(€ 1.21)	(€ 5.06)	€ 1.31
<b>Number of shares in million:<sup>1</sup></b>				
Denominator for basic earnings per share – weighted-average shares outstanding		1,388.1	1,387.9	1,241.9
Denominator for diluted earnings per share – adjusted weighted-average shares after assumed conversions <sup>3</sup>		1,388.1	1,387.9	1,269.5

<sup>1</sup> The number of average basic and diluted shares outstanding has been adjusted for all periods before June 2014 in order to reflect the effect of the bonus component of subscription rights issued in June 2014 in connection with the capital increase.

<sup>2</sup> Earnings were adjusted by € 276 and € 228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2016 and April 2015.

<sup>3</sup> Due to the net loss situation for 2016 and 2015 potentially dilutive shares are generally not considered for the earnings per share calculation, because to do so would decrease the net loss per share. Under a net income situation however, the number of adjusted weighted average shares after assumed conversion would have been increased by 27 million shares for 2016 and 2015.

The accompanying notes are an integral part of the Consolidated Financial Statements.

# Consolidated Statement of Comprehensive Income

in € m.	2016	2015	2014
Net income (loss) recognized in the income statement	(1,356)	(6,772)	1,691
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement gains (losses) related to defined benefit plans, before tax	(861)	203	(403)
Total of income tax related to items that will not be reclassified to profit or loss	344	(213)	407
Items that are or may be reclassified to profit or loss			
Financial assets available for sale			
Unrealized net gains (losses) arising during the period, before tax	(2)	(242)	1,912
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(571)	(163)	(87)
Derivatives hedging variability of cash flows			
Unrealized net gains (losses) arising during the period, before tax	62	1	(6)
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(2)	20	339
Assets classified as held for sale			
Unrealized net gains (losses) arising during the period, before tax	529	662	0
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(1,191)	0	(3)
Foreign currency translation			
Unrealized net gains (losses) arising during the period, before tax	203	2,156	2,955
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(2)	4	3
Equity Method Investments			
Net gains (losses) arising during the period	11	48	(35)
Total of income tax related to items that are or may be reclassified to profit or loss	117	19	(672)
Other comprehensive income (loss), net of tax	(1,364)	2,493	4,410
Total comprehensive income (loss), net of tax	(2,721)	(4,278)	6,102
Attributable to:			
Noncontrolling interests	52	45	54
Deutsche Bank shareholders and additional equity components	(2,773)	(4,323)	6,048

The accompanying notes are an integral part of the Consolidated Financial Statements.

## Consolidated Balance Sheet

in € m.	Notes	Dec 31, 2016	Dec 31, 2015
<b>Assets:</b>			
Cash and central bank balances		181,364	96,940
Interbank balances (w/o central banks)		11,606	12,842
Central bank funds sold and securities purchased under resale agreements	22, 23	16,287	22,456
Securities borrowed	22, 23	20,081	33,557
Financial assets at fair value through profit or loss			
Trading assets		171,044	196,035
Positive market values from derivative financial instruments		485,150	515,594
Financial assets designated at fair value through profit or loss		87,587	109,253
Total financial assets at fair value through profit or loss	12, 16, 22, 23, 38	743,781	820,883
Financial assets available for sale	16, 22, 23	56,228	73,583
Equity method investments	18	1,027	1,013
Loans	20, 21, 22, 23	408,909	427,749
Securities held to maturity	17	3,206	0
Property and equipment	24	2,804	2,846
Goodwill and other intangible assets	26	8,982	10,078
Other assets	27, 28	126,045	118,137
Assets for current tax	37	1,559	1,285
Deferred tax assets	37	8,666	7,762
<b>Total assets</b>		<b>1,590,546</b>	<b>1,629,130</b>
<b>Liabilities and equity:</b>			
Deposits	29	550,204	566,974
Central bank funds purchased and securities sold under repurchase agreements	22, 23	25,740	9,803
Securities loaned	22, 23	3,598	3,270
Financial liabilities at fair value through profit or loss	12, 16, 38		
Trading liabilities		57,029	52,304
Negative market values from derivative financial instruments		463,858	494,076
Financial liabilities designated at fair value through profit or loss		60,492	44,852
Investment contract liabilities		592	8,522
Total financial liabilities at fair value through profit or loss		581,971	599,754
Other short-term borrowings	32	17,295	28,010
Other liabilities	27, 28	155,440	175,005
Provisions	21, 30	10,973	9,207
Liabilities for current tax	37	1,329	1,699
Deferred tax liabilities	37	486	746
Long-term debt	33	172,316	160,016
Trust preferred securities	33	6,373	7,020
Obligation to purchase common shares		0	0
<b>Total liabilities</b>		<b>1,525,727</b>	<b>1,561,506</b>
Common shares, no par value, nominal value of € 2.56	35	3,531	3,531
Additional paid-in capital		33,765	33,572
Retained earnings		18,987	21,182
Common shares in treasury, at cost	35	0	(10)
Equity classified as obligation to purchase common shares		0	0
Accumulated other comprehensive income (loss), net of tax		3,550	4,404
<b>Total shareholders' equity</b>		<b>59,833</b>	<b>62,678</b>
Additional equity components		4,669	4,675
Noncontrolling interests		316	270
<b>Total equity</b>		<b>64,819</b>	<b>67,624</b>
<b>Total liabilities and equity</b>		<b>1,590,546</b>	<b>1,629,130</b>

The accompanying notes are an integral part of the Consolidated Financial Statements.



# Consolidated Statement of Changes in Equity

in € m.	Common shares (no par value)	Additional paid-in capital	Retained earnings	Common shares in treasury, at cost	Equity classified as obligation to purchase common shares	Unrealized net gains (losses) on financial assets available for sale, net of applicable tax and other <sup>2</sup>
<b>Balance as of December 31, 2013</b>	<b>2,610</b>	<b>26,204</b>	<b>28,376</b>	<b>(13)</b>	<b>0</b>	<b>303</b>
Total comprehensive income, net of tax <sup>1</sup>	0	0	1,663	0	0	1,372
Common shares issued	921	7,587	0	0	0	0
Cash dividends paid	0	0	(765)	0	0	0
Coupon on additional equity components, net of tax	0	0	0	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	5	0	0	0
Net change in share awards in the reporting period	0	(103)	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	840	0	0
Tax benefits related to share-based compensation plans	0	(32)	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(65)	0	0	0	0
Purchases of treasury shares	0	0	0	(9,187)	0	0
Sale of treasury shares	0	0	0	8,352	0	0
Net gains (losses) on treasury shares sold	0	(6)	0	0	0	0
Other	0	41	0	0	0	0
<b>Balance as of December 31, 2014</b>	<b>3,531</b>	<b>33,626</b>	<b>29,279</b>	<b>(8)</b>	<b>0</b>	<b>1,675</b>
Total comprehensive income, net of tax <sup>1</sup>	0	0	(6,794)	0	0	(291)
Common shares issued	0	0	0	0	0	0
Cash dividends paid	0	0	(1,034)	0	0	0
Coupon on additional equity components, net of tax	0	0	(228)	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(10)	0	0	0
Net change in share awards in the reporting period	0	(80)	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	880	0	0
Tax benefits related to share-based compensation plans	0	0	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(34)	0	0	0	0
Purchases of treasury shares	0	0	0	(9,177)	0	0
Sale of treasury shares	0	0	0	8,295	0	0
Net gains (losses) on treasury shares sold	0	(3)	0	0	0	0
Other	0	63	(31)	0	0	0
<b>Balance as of December 31, 2015</b>	<b>3,531</b>	<b>33,572</b>	<b>21,182</b>	<b>(10)</b>	<b>0</b>	<b>1,384</b>
Total comprehensive income, net of tax <sup>1</sup>	0	0	(1,402)	0	0	(472)
Common shares issued	0	0	0	0	0	0
Cash dividends paid	0	0	0	0	0	0
Coupon on additional equity components, net of tax	0	0	(276)	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(517)	0	0	0
Net change in share awards in the reporting period	0	64	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	239	0	0
Tax benefits related to share-based compensation plans	0	2	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(129)	0	0	0	0
Purchases of treasury shares	0	0	0	(5,264)	0	0
Sale of treasury shares	0	0	0	5,035	0	0
Net gains (losses) on treasury shares sold	0	(7)	0	0	0	0
Other	0	263	0	0	0	0
<b>Balance as of December 31, 2016</b>	<b>3,531</b>	<b>33,765</b>	<b>18,987</b>	<b>0</b>	<b>0</b>	<b>912</b>

<sup>1</sup> Excluding remeasurement gains (losses) related to defined benefit plans, net of tax.

<sup>2</sup> Excluding unrealized net gains (losses) from equity method investments.

Unrealized net gains (losses) on derivatives hedging variability of cash flows, net of tax <sup>2</sup>	Unrealized net gains (losses) on assets classified as held for sale, net of tax <sup>2</sup>	Foreign currency translation, net of tax <sup>2</sup>	Unrealized net gains (losses) from equity method investments	Accumulated other comprehensive income, net of tax <sup>1</sup>	Total shareholders' equity	Additional equity components <sup>3</sup>	Noncontrolling interests	Total equity
(101)	2	(2,713)	53	(2,457)	54,719	0	247	54,966
181	(2)	2,865	(35)	4,380	6,043	0	54	6,097
0	0	0	0	0	8,508	0	0	8,508
0	0	0	0	0	(765)	0	(4)	(769)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	5	0	0	5
0	0	0	0	0	(103)	0	0	(103)
0	0	0	0	0	840	0	0	840
0	0	0	0	0	(32)	0	0	(32)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(65)	0	0	(65)
0	0	0	0	0	(9,187)	0	0	(9,187)
0	0	0	0	0	8,352	0	0	8,352
0	0	0	0	0	(6)	0	0	(6)
0	0	0	0	0	41	4,619 <sup>4</sup>	(44)	4,616
79	0	151	18	1,923	68,351	4,619	253	73,223
18	662	2,044	48	2,481	(4,313)	0	45	(4,269)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(1,034)	0	(10)	(1,044)
0	0	0	0	0	(228)	0	0	(228)
0	0	0	0	0	(10)	0	0	(10)
0	0	0	0	0	(80)	0	0	(80)
0	0	0	0	0	880	0	0	880
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(34)	0	0	(34)
0	0	0	0	0	(9,177)	0	0	(9,177)
0	0	0	0	0	8,295	0	0	8,295
0	0	0	0	0	(3)	0	0	(3)
0	0	0	0	0	33	56 <sup>5</sup>	(17)	72
97	662	2,196	66	4,404	62,678	4,675	270	67,624
46	(662)	223	11	(854)	(2,256)	0	52	(2,204)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	(11)	(11)
0	0	0	0	0	(276)	0	0	(276)
0	0	0	0	0	(517)	0	0	(517)
0	0	0	0	0	64	0	0	64
0	0	0	0	0	239	0	0	239
0	0	0	0	0	2	0	0	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(129)	0	0	(129)
0	0	0	0	0	(5,264)	0	0	(5,264)
0	0	0	0	0	5,035	0	0	5,035
0	0	0	0	0	(7)	0	0	(7)
0	0	0	0	0	263	(6) <sup>5</sup>	4	262
143	0	2,418	77	3,550	59,833	4,669	316	64,819

<sup>3</sup> Includes Additional Tier 1 Notes, which constitute unsecured and subordinated notes of Deutsche Bank and are classified as equity in accordance with IFRS.<sup>4</sup> Includes net proceeds from issuance, purchase and sale of Additional Equity Components.<sup>5</sup> Includes net proceeds from purchase and sale of Additional Equity Components.

The accompanying notes are an integral part of the Consolidated Financial Statements.

# Consolidated Statement of Cash Flows

in € m.	2016	2015	2014
<b>Net Income (loss)</b>	<b>(1,356)</b>	<b>(6,772)</b>	<b>1,691</b>
Cash flows from operating activities:			
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Provision for credit losses	1,383	956	1,134
Restructuring activities	484	710	133
Gain on sale of financial assets available for sale, equity method investments, and other	(899)	(430)	(391)
Deferred income taxes, net	(312)	(987)	673
Impairment, depreciation and other amortization, and accretion	3,745	8,908	4,567
Share of net income from equity method investments	(183)	(708)	(569)
<b>Income adjusted for noncash charges, credits and other items</b>	<b>2,862</b>	<b>1,677</b>	<b>7,238</b>
Adjustments for net change in operating assets and liabilities:			
Interest-earning time deposits with central banks and with banks w/o central banks	(2,814)	30,096	8,959
Central bank funds sold, securities purchased under resale agreements, securities borrowed	19,440	(10,108)	5,450
Financial assets designated at fair value through profit or loss	20,337	12,935	70,639
Loans	18,190	(14,015)	(26,909)
Other assets	(7,847)	26,756	(28,812)
Deposits	(15,237)	26,537	1,551
Financial liabilities designated at fair value through profit or loss and investment contract liabilities	8,686	6,101	(54,334)
Central bank funds purchased, securities sold under repurchase agreements, securities loaned	16,362	(1,120)	(2,963)
Other short-term borrowings	(10,632)	(16,149)	(17,875)
Other liabilities	(12,888)	(14,177)	22,183
Senior long-term debt	12,328	13,536	14,315
Trading assets and liabilities, positive and negative market values from derivative financial instruments, net	30,341	13,788	4,288
Other, net	(8,518)	(8,605)	(1,678)
<b>Net cash provided by (used in) operating activities</b>	<b>70,610</b>	<b>67,252</b>	<b>2,052</b>
Cash flows from investing activities:			
Proceeds from:			
Sale of financial assets available for sale	26,855	18,027	11,974
Maturities of financial assets available for sale	6,029	3,986	8,745
Maturities of securities held to maturity	0	0	0
Sale of equity method investments	50	165	124
Sale of property and equipment	206	272	133
Purchase of:			
Financial assets available for sale	(21,639)	(29,665)	(34,158)
Securities held to maturity	0	0	0
Equity method investments	(81)	(95)	(78)
Property and equipment	(725)	(432)	(669)
Net cash received in (paid for) business combinations/divestitures	2,023	555	1,931
Other, net	(1,479)	(1,055)	(826)
<b>Net cash provided by (used in) investing activities</b>	<b>11,239</b>	<b>(8,242)</b>	<b>(12,824)</b>
Cash flows from financing activities:			
Issuances of subordinated long-term debt	815	2,942	101
Repayments and extinguishments of subordinated long-term debt	(1,102)	(2,043)	(3,142)
Issuances of trust preferred securities	121	788	49
Repayments and extinguishments of trust preferred securities	(840)	(5,114)	(2,709)
Common shares issued	0	0	8,508
Purchases of treasury shares	(5,264)	(9,177)	(9,187)
Sale of treasury shares	4,983	8,316	8,318
Additional Equity Components (AT1) issued	0	0	4,676
Purchases of Additional Equity Components (AT1)	(207)	(407)	(921)
Sale of Additional Equity Components (AT1)	202	442	888
Coupon on additional equity components, pre tax	(333)	(269)	0
Dividends paid to noncontrolling interests	(11)	(10)	(4)
Net change in noncontrolling interests	(13)	(17)	(17)
Cash dividends paid to Deutsche Bank shareholders	0	(1,034)	(765)
<b>Net cash provided by (used in) financing activities</b>	<b>(1,649)</b>	<b>(5,583)</b>	<b>5,795</b>
<b>Net effect of exchange rate changes on cash and cash equivalents</b>	<b>(28)</b>	<b>94</b>	<b>897</b>
Net increase (decrease) in cash and cash equivalents	80,172	53,521	(4,080)
Cash and cash equivalents at beginning of period	105,478	51,960	56,041
Cash and cash equivalents at end of period	185,649	105,478	51,960
<b>Net cash provided by (used in) operating activities include</b>			
Income taxes paid (received), net	1,572	902	377
Interest paid	10,808	10,608	11,423
Interest and dividends received	25,835	26,177	25,404
<b>Cash and cash equivalents comprise</b>			
Cash and central bank balances (not included Interest-earning time deposits with central banks)	178,292	94,923	47,169
Interbank balances (w/o central banks) (not included: time deposits with banks of € 7,079 m. as of December 31, 2016, € 4,304 m. as of December 31, 2015 and € 31,612 m as of December 31, 2014)	7,599	10,555	4,791
<b>Total</b>	<b>185,891</b>	<b>105,478</b>	<b>51,960</b>

The accompanying notes are an integral part of the Consolidated Financial Statements.

# Notes to the Consolidated Financial Statements

## 01 – Significant Accounting Policies and Critical Accounting Estimates

### Basis of Accounting

Deutsche Bank Aktiengesellschaft (“Deutsche Bank” or the “Parent”) is a stock corporation organized under the laws of the Federal Republic of Germany. Deutsche Bank together with all entities in which Deutsche Bank has a controlling financial interest (the “Group”) is a global provider of a full range of corporate and investment banking, private clients and asset management products and services.

The accompanying consolidated financial statements are stated in euros, the presentation currency of the Group. All financial information presented in million euros has been rounded to the nearest million. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) and endorsed by the European Union (“EU”). The Group’s application of IFRS results in no differences between IFRS as issued by the IASB and IFRS as endorsed by the EU.

Some IFRS disclosures incorporated in the Management Report are an integral part of the Consolidated Financial Statements. These disclosures include Segmental Results of Operations and Entity Wide disclosures on Net Revenue Components under IFRS 8, “Operating Segments” provided in the Operating and Financial Review of the Management Report. Additionally the Risk Report includes disclosures about the nature and the extent of risks arising from financial instruments as required by IFRS 7, “Financial Instruments: Disclosures”, capital disclosures as required under IAS 1, “Presentation of Financial Statements” and disclosures in relation to insurance contracts as described in IFRS 4, “Insurance Contracts”. These audited disclosures are identified by bracketing in the margins of the Management Report. In addition, with respect to the table entitled “Transitional template for regulatory capital, RWA and capital ratios” set forth in the Risk Report within the section “Risk and Capital Performance: Capital and Leverage Ratio: Development of regulatory capital”, the columns captioned “CRR/CRD 4” for each of December 31, 2016 and December 31, 2015 (but not the columns captioned “CRR/CRD 4 fully loaded”) are also an integral part of the Consolidated Financial Statements, notwithstanding that they are not identified by bracketing in the margins. These disclosures are also audited.

### Critical Accounting Estimates

The preparation of financial statements under IFRS requires management to make estimates and assumptions for certain categories of assets and liabilities. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management’s estimates. The Group’s significant accounting policies are described in “Significant Accounting Policies”.

Certain of the Group’s accounting policies require critical accounting estimates that involve complex and subjective judgments and the use of assumptions, some of which may be for matters that are inherently uncertain and susceptible to change. Such critical accounting estimates could change from period to period and may have a material impact on the Group’s financial condition, changes in financial condition or results of operations. Critical accounting estimates

could also involve estimates where management could have reasonably used another estimate in the current accounting period. The Group has identified the following significant accounting policies that involve critical accounting estimates:

- the impairment of associates (see “Associates” below)
- the impairment of financial assets available for sale (see “Financial Assets and Liabilities – Financial Assets Classified as Available for Sale” below)
- the determination of fair value (see “Financial Assets and Liabilities – Determination of Fair Value” below)
- the recognition of trade date profit (see “Financial Assets and Liabilities – Recognition of Trade Date Profit” below)
- the impairment of loans and provisions for off-balance sheet positions (see “Impairment of Loans and Provision for Off-balance Sheet Positions” below)
- the impairment of goodwill and other intangibles (see “Goodwill and Other Intangible Assets” below)
- the recognition and measurement of deferred tax assets (see “Income Taxes” below)
- the accounting for legal and regulatory contingencies and uncertain tax positions (see “Provisions” below)

## Significant Accounting Policies

The following is a description of the significant accounting policies of the Group. Other than as previously described, these policies have been consistently applied for 2014, 2015 and 2016.

## Principles of Consolidation

The financial information in the Consolidated Financial Statements includes the parent company, Deutsche Bank AG, together with its consolidated subsidiaries, including certain structured entities presented as a single economic unit.

### Subsidiaries

The Group's subsidiaries are those entities which it directly or indirectly controls. Control over an entity is evidenced by the Group's ability to exercise its power in order to affect any variable returns that the Group is exposed to through its involvement with the entity.

The Group sponsors the formation of structured entities and interacts with structured entities sponsored by third parties for a variety of reasons, including allowing clients to hold investments in separate legal entities, allowing clients to invest jointly in alternative assets, for asset securitization transactions, and for buying or selling credit protection.

When assessing whether to consolidate an entity, the Group evaluates a range of control factors, namely:

- the purpose and design of the entity
- the relevant activities and how these are determined
- whether the Group's rights result in the ability to direct the relevant activities
- whether the Group has exposure or rights to variable returns
- whether the Group has the ability to use its power to affect the amount of its returns

Where voting rights are relevant, the Group is deemed to have control where it holds, directly or indirectly, more than half of the voting rights over an entity unless there is evidence that another investor has the practical ability to unilaterally direct the relevant activities.

Potential voting rights that are deemed to be substantive are also considered when assessing control.

Likewise, the Group also assesses existence of control where it does not control the majority of the voting power but has the practical ability to unilaterally direct the relevant activities. This may arise in circumstances where the size and dispersion of holdings of the shareholders give the Group the power to direct the activities of the investee.

Subsidiaries are consolidated from the date on which control is transferred to the Group and are deconsolidated from the date that control ceases.

The Group reassesses the consolidation status at least at every quarterly reporting date. Therefore, any changes in the structure leading to a change in one or more of the control factors, require reassessment when they occur. This includes changes in decision making rights, changes in contractual arrangements, changes in the financing, ownership or capital structure as well as changes following a trigger event which was anticipated in the original documentation.

All intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated on consolidation.

Consistent accounting policies are applied throughout the Group for the purposes of consolidation. Issuances of a subsidiary's stock to third parties are treated as noncontrolling interests. Profit or loss attributable to noncontrolling interests are reported separately in the Consolidated Statement of Income and Consolidated Statement of Comprehensive Income.

At the date that control of a subsidiary is lost, the Group a) derecognizes the assets (including attributable goodwill) and liabilities of the subsidiary at their carrying amounts, b) derecognizes the carrying amount of any noncontrolling interests in the former subsidiary, c) recognizes the fair value of the consideration received and any distribution of the shares of the subsidiary, d) recognizes any investment retained in the former subsidiary at its fair value and e) recognizes any resulting difference of the above items as a gain or loss in the income statement. Any amounts recognized in prior periods in other comprehensive income in relation to that subsidiary would be reclassified to the Consolidated Statement of Income or transferred directly to retained earnings if required by other IFRSs.

## Associates

An associate is an entity in which the Group has significant influence, but not a controlling interest, over the operating and financial management policy decisions of the entity. Significant influence is generally presumed when the Group holds between 20 % and 50 % of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Group has significant influence. Among the other factors that are considered in determining whether the Group has significant influence are representation on the board of directors (supervisory board in the case of German stock corporations) and material intercompany transactions. The existence of these factors could require the application of the equity method of accounting for a particular investment even though the Group's investment is less than 20 % of the voting stock.

Investments in associates are accounted for under the equity method of accounting. The Group's share of the results of associates is adjusted to conform to the accounting policies of the Group and is reported in the Consolidated Statement of Income as Net income (loss) from equity method investments. The Group's share in the associate's profits and losses resulting from intercompany sales is eliminated on consolidation.

If the Group previously held an equity interest in an entity (for example, as available for sale) and subsequently gained significant influence, the previously held equity interest is remeasured to fair value and any gain or loss is recognized in the Consolidated Statement of Income. Any amounts previously recognized in other comprehensive income associated with the equity interest would be reclassified to the Consolidated Statement of Income at the date the Group gains significant influence, as if the Group had disposed of the previously held equity interest.

Under the equity method of accounting, the Group's investments in associates and jointly controlled entities are initially recorded at cost including any directly related transaction costs incurred in acquiring the associate, and subsequently increased (or decreased) to reflect both the Group's pro-rata share of the post-acquisition net income (or loss) of the associate or jointly controlled entity and other movements included directly in the equity of the associate or jointly controlled entity. Goodwill arising on the acquisition of an associate or a jointly controlled entity is included in the carrying value of the investment (net of any accumulated impairment loss). As goodwill is not reported separately it is not specifically tested for impairment. Rather, the entire equity method investment is tested for impairment at each balance sheet date.

If there is objective evidence of impairment, an impairment test is performed by comparing the investment's recoverable amount, which is the higher of its value in use and fair value less costs to sell, with its carrying amount. An impairment loss recognized in prior periods is only reversed if there has been a change in the estimates used to determine the investment's recoverable amount since the last impairment loss was recognized. If this is the case the carrying amount of the investment is increased to its higher recoverable amount.

At the date that the Group ceases to have significant influence over the associate or jointly controlled entity the Group recognizes a gain or loss on the disposal of the equity method investment equal to the difference between the sum of the fair value of any retained investment and the proceeds from disposing of the associate and the carrying amount of the investment. Amounts recognized in prior periods in other comprehensive income in relation to the associate are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities.

**Critical Accounting Estimates:** As the assessment of whether there is objective evidence of impairment may require significant management judgment and the estimates for impairment could change from period to period based on future events that may or may not occur, the Group considers this to be a critical accounting estimate.

## Foreign Currency Translation

The Consolidated Financial Statements are prepared in euro, which is the presentation currency of the Group. Various entities in the Group use a different functional currency, being the currency of the primary economic environment in which the entity operates.

An entity records foreign currency revenues, expenses, gains and losses in its functional currency using the exchange rates prevailing at the dates of recognition.

Monetary assets and liabilities denominated in currencies other than the entity's functional currency are translated at the period end closing rate. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the Consolidated Statement of Income as net gains (losses) on financial assets/liabilities at fair value through profit or loss in order to align the translation amounts with those recognized from foreign currency related transactions (derivatives) which hedge these monetary assets and liabilities.

Nonmonetary items that are measured at historical cost are translated using the historical exchange rate at the date of the transaction. Translation differences on nonmonetary items which are held at fair value through profit or loss are recognized in profit or loss. Translation differences on available for sale nonmonetary items (equity securities) are included in other comprehensive income and recognized in the Consolidated Statement of Income when the non-monetary item is sold as part of the overall gain or loss on sale of the item.

For purposes of translation into the presentation currency, assets, liabilities and equity of foreign operations are translated at the period end closing rate and items of income and expense are translated into euros at the rates prevailing on the dates of the transactions, or average rates of exchange where these approximate actual rates. The exchange differences arising on the translation of a foreign operation are included in other comprehensive income. For foreign operations that are subsidiaries, the amount of exchange differences attributable to any noncontrolling interests is recognized in noncontrolling interests.

Upon disposal of a foreign subsidiary and associate (which results in loss of control or significant influence over that operation) the total cumulative exchange differences recognized in other comprehensive income are reclassified to profit or loss.

Upon partial disposal of a foreign operation that is a subsidiary and which does not result in loss of control, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to noncontrolling interests as this is deemed a transaction with equity holders. For a partial disposal of an associate which does not result in a loss of significant influence, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to profit or loss.



## Interest, Commissions and Fees

Revenue is recognized when the amount of revenue and associated costs can be reliably measured, it is probable that economic benefits associated with the transaction will be realized and the stage of completion of the transaction can be reliably measured. This concept is applied to the key revenue generating activities of the Group as follows.

**Net Interest Income** – Interest from all interest-bearing assets and liabilities is recognized as net interest income using the effective interest method. The effective interest rate is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or expense over the relevant period using the estimated future cash flows. The estimated future cash flows used in this calculation include those determined by the contractual terms of the asset or liability, all fees that are considered to be integral to the effective interest rate, direct and incremental transaction costs and all other premiums or discounts.

Once an impairment loss has been recognized on a loan, held-to-maturity investment or available for sale debt instruments, although the accrual of interest in accordance with the contractual terms of the instrument is discontinued, interest income is recognized based on the rate of interest that was used to discount future cash flows for the purpose of measuring the impairment loss. For a loan this would be the original effective interest rate, but a new effective interest rate would be established each time an available for sale debt instrument is impaired as impairment is measured to fair value and would be based on a current market rate.

**Commissions and Fee Income** – The recognition of fee revenue (including commissions) is determined by the purpose of the fees and the basis of accounting for any associated financial instruments. If there is an associated financial instrument, fees that are an integral part of the effective interest rate of that financial instrument are included within the effective yield calculation. However, if the financial instrument is carried at fair value through profit or loss, any associated fees are recognized in profit or loss when the instrument is initially recognized, provided there are no significant unobservable inputs used in determining its fair value. Fees earned from services that are provided over a specified service period are recognized over that service period. Fees earned for the completion of a specific service or significant event are recognized when the service has been completed or the event has occurred.

Loan commitment fees related to commitments that are not accounted for at fair value through profit or loss are recognized in commissions and fee income over the life of the commitment if it is unlikely that the Group will enter into a specific lending arrangement. If it is probable that the Group will enter into a specific lending arrangement, the loan commitment fee is deferred until the origination of a loan and recognized as an adjustment to the loan's effective interest rate.

Performance-linked fees or fee components are recognized when the performance criteria are fulfilled.

The following fee income is predominantly earned from services that are provided over a period of time: investment fund management fees, fiduciary fees, custodian fees, portfolio and other management and advisory fees, credit-related fees and commission income. Fees predominantly earned from providing transaction-type services include underwriting fees, corporate finance fees and brokerage fees.

Expenses that are directly related and incremental to the generation of fee income are presented net in Commissions and Fee Income.

**Arrangements involving multiple services or products** – If the Group contracts to provide multiple products, services or rights to a counterparty, an evaluation is made as to whether an overall fee should be allocated to the different components of the arrangement for revenue recognition purposes. The assessment considers the value of items or services delivered to ensure that the Group's continuing involvement in other aspects of the arrangement are not essential to the items delivered. It also assesses the value of items not yet delivered and, if there is a right of return on delivered items, the probability of future delivery of remaining items or services. If it is determined that it is appropriate to look at the arrangements as separate components, the amounts received are allocated based on the relative value of each component.



If there is no objective and reliable evidence of the value of the delivered item or an individual item is required to be recognized at fair value then the residual method is used. The residual method calculates the amount to be recognized for the delivered component as being the amount remaining after allocating an appropriate amount of revenue to all other components.

## Financial Assets and Liabilities

The Group classifies its financial assets and liabilities into the following categories: financial assets and liabilities at fair value through profit or loss, loans, held-to-maturity, financial assets available for sale ("AFS") and other financial liabilities. Appropriate classification of financial assets and liabilities is determined at the time of initial recognition or when reclassified in the Consolidated Balance Sheet.

Financial instruments classified at fair value through profit or loss and financial assets classified as AFS are recognized or derecognized on trade date, which is the date on which the Group commits to purchase or sell the asset or issue or repurchase the financial liability.

### Financial Assets and Liabilities at Fair Value through Profit or Loss

The Group classifies certain financial assets and financial liabilities as either held for trading or designated at fair value through profit or loss. They are carried at fair value and presented as financial assets at fair value through profit or loss and financial liabilities at fair value through profit or loss, respectively. Related realized and unrealized gains and losses are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss. Interest on interest earning assets such as trading loans and debt securities and dividends on equity instruments are presented in interest and similar income for financial instruments at fair value through profit or loss.

**Trading Assets and Liabilities** – Financial instruments are classified as held for trading if they have been originated, acquired or incurred principally for the purpose of selling or repurchasing them in the near term, or they form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking. Trading assets include debt and equity securities, derivatives held for trading purposes, commodities and trading loans. Trading liabilities consist primarily of derivative liabilities and short positions.

**Financial Instruments Designated at Fair Value through Profit or Loss** – Certain financial assets and liabilities that do not meet the definition of trading assets and liabilities are designated at fair value through profit or loss using the fair value option. To be designated at fair value through profit or loss, financial assets and liabilities must meet one of the following criteria: (1) the designation eliminates or significantly reduces a measurement or recognition inconsistency; (2) a group of financial assets or liabilities or both is managed and its performance is evaluated on a fair value basis in accordance with a documented risk management or investment strategy; or (3) the instrument contains one or more embedded derivatives unless: (a) the embedded derivative does not significantly modify the cash flows that otherwise would be required by the contract; or (b) it is clear with little or no analysis that separation is prohibited. In addition, the Group allows the fair value option to be designated only for those financial instruments for which a reliable estimate of fair value can be obtained. Financial assets and liabilities which are designated at fair value through profit or loss, under the fair value option, include repurchase and reverse repurchase agreements, certain loans and loan commitments, debt and equity securities and structured note liabilities.

### Loan Commitments

Certain loan commitments are classified as derivatives held for trading or designated at fair value through profit or loss under the fair value option. All other loan commitments remain off-balance sheet. Therefore, the Group does not recognize and measure changes in fair value of these off-balance sheet loan commitments that result from changes in market interest rates or credit spreads. However, as specified in the discussion "Impairment of Loans and Provision for Off-Balance sheet positions", these off-balance sheet loan commitments are assessed for impairment individually and where appropriate, collectively.

## Loans

Loans include originated and purchased non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and which are not classified as financial assets at fair value through profit or loss, held-to-maturity or financial assets AFS. An active market exists when quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis.

Loans not acquired in a business combination or in an asset purchase are initially recognized at their transaction price representing the fair value, which is the cash amount advanced to the borrower. In addition, the net of direct and incremental transaction costs and fees are included in the initial carrying amount of loans. These loans are subsequently measured at amortized cost using the effective interest method less impairment.

Loans which have been acquired as either part of a business combination or as an asset purchase are initially recognized at fair value at the acquisition date. This includes loans for which an impairment loss had been established by the acquiree before their initial recognition by the Group. The fair value at the acquisition date incorporates expected cash flows which consider the credit quality of these loans including any incurred losses and becomes the new amortized cost base. Interest income is recognized using the effective interest method. Subsequent to the acquisition date the Group assesses whether there is objective evidence of impairment in line with the policies described in the section entitled "Impairment of Loans and Provision for Off-Balance Sheet Positions". If the loans are determined to be impaired then a loan loss allowance is recognized with a corresponding charge to the provision for credit losses line in the Consolidated Statement of Income. Releases of such loan loss allowances established after their initial recognition are included in the provision for credit losses line. Subsequent improvements in the credit quality of such loans for which no loss allowance had been recorded are recognized immediately through an adjustment to the current carrying value and a corresponding gain is recognized in interest income.

## Held-to-Maturity Investments

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and a fixed maturity that the Group has the positive intention and ability to hold to maturity and which are not classified as financial assets at fair value through profit or loss, loans or financial assets AFS.

Held-to-maturity investments are initially recorded at fair value plus any directly attributable transaction costs and are subsequently measured at amortized cost using the effective interest method. Subsequent to the acquisition date, the Group assesses whether there is objective evidence of impairment in line with the policies described in the section entitled "Impairment of Loans and Provision for Off-Balance Sheet provisions". If a held-to-maturity investment is considered impaired, then an impairment loss is recognized in the Consolidated Statement of Income.

## Financial Assets Classified as Available for Sale

Financial assets that are not classified as at fair value through profit or loss, loans or held-to-maturity are classified as AFS. A financial asset classified as AFS is initially recognized at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset. The amortization of premiums and accretion of discount are recorded in net interest income. Financial assets classified as AFS are carried at fair value with the changes in fair value reported in other comprehensive income, unless the asset is subject to a fair value hedge, in which case changes in fair value resulting from the risk being hedged are recorded in other income. For monetary financial assets classified as AFS (debt instruments), changes in carrying amounts relating to changes in foreign exchange rate are recognized in the Consolidated Statement of Income and other changes in carrying amount are recognized in other comprehensive income as indicated above. For financial assets classified as AFS that are nonmonetary items (equity instruments), the gain or loss that is recognized in other comprehensive income includes any related foreign exchange component.

In the case of equity investments classified as AFS, objective evidence includes a significant or prolonged decline in the fair value of the investment below cost. In the case of debt securities classified as AFS, impairment is assessed based on the same criteria as for loans.

If there is evidence of impairment, any amounts previously recognized in other comprehensive income are recognized in the consolidated statement of income for the period, reported in net gains (losses) on financial assets available for sale. This impairment loss for the period is determined as the difference between the acquisition cost (net of any principal repayments and amortization) and current fair value of the asset less any impairment loss on that investment previously recognized in the Consolidated Statement of Income.

When an AFS debt security is impaired, any subsequent decreases in fair value are recognized in the Consolidated Statement of Income as it is considered further impairment. Any subsequent increases are also recognized in the Consolidated Statement of Income until the asset is no longer considered impaired. When the fair value of the AFS debt security recovers to at least amortized cost it is no longer considered impaired and subsequent changes in fair value are reported in other comprehensive income.

Reversals of impairment losses on equity investments classified as AFS are not reversed through the Consolidated Statement of Income; increases in their fair value after impairment are recognized in other comprehensive income.

Realized gains and losses are reported in net gains (losses) on financial assets available for sale. Generally, the weighted-average cost method is used to determine the cost of financial assets. Unrealized gains and losses recorded in other comprehensive income are transferred to the Consolidated Statement of Income on disposal of an available for sale asset and reported in net gains (losses) on financial assets available for sale.

**Critical Accounting Estimates** – Because the assessment of objective evidence of impairment require significant management judgment and the estimate of impairment could change from period to period based upon future events that may or may not occur, the Group considers the impairment of Financial Assets classified as Available for Sale to be a critical accounting estimate. For additional information see Note 7 “Net Gains (Losses) on Financial Assets Available for Sale”.

## Financial Liabilities

Except for financial liabilities at fair value through profit or loss, financial liabilities are measured at amortized cost using the effective interest method.

Financial liabilities include long-term and short-term debt issued which are initially measured at fair value, which is the consideration received, net of transaction costs incurred. Repurchases of issued debt in the market are treated as extinguishments and any related gain or loss is recorded in the Consolidated Statement of Income. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

## Reclassification of Financial Assets

The Group may reclassify certain financial assets out of the financial assets at fair value through profit or loss classification (trading assets) and the AFS classification into the loans or held-to-maturity classification. For assets to be reclassified there must be a clear change in management intent with respect to the assets since initial recognition and the financial asset must meet the definition of a loan or held-to-maturity investment at the reclassification date. Additionally, there must be an intent and ability to hold the asset for the foreseeable future at the reclassification date. For held-to-maturity investments there must be a positive intention and ability to hold the asset until maturity.

Financial assets are reclassified at their fair value at the reclassification date. Any gain or loss already recognized in the Consolidated Statement of Income is not reversed. The fair value of the instrument at reclassification date becomes the new amortized cost of the instrument. The expected cash flows on the financial instruments are estimated at the reclassification date and these estimates are used to calculate a new effective interest rate for the instruments. If there is a subsequent increase in expected future cash flows on reclassified assets as a result of increased recoverability, the

effect of that increase is recognized as an adjustment to the effective interest rate from the date of the change in estimate rather than as an adjustment to the carrying amount of the asset at the date of the change in estimate. If there is a subsequent decrease in expected future cash flows the asset would be assessed for impairment as discussed in the section entitled “Impairment of Loans and Provision for Off-Balance Sheet Positions”. Any changes in the timing of the cash flows of reclassified assets which are not deemed impaired are recorded as an adjustment to the carrying amount of the asset.

For instruments reclassified from AFS to loans or held-to-maturity, any unrealized gain or loss recognized in other comprehensive income is subsequently amortized into interest income using the effective interest rate of the instrument. If the instrument is subsequently impaired, any unrealized loss which is held in accumulated other comprehensive income for that instrument at that date is immediately recognized in the Consolidated Statement of Income.

To the extent that assets categorized as loans are repaid, restructured or eventually sold and the amount received is less than the carrying value at that time, then a loss would be recognized in the Consolidated Statement of income as a component of the provision for credit losses, if the loan is impaired, or otherwise in other Income, if the loan is not impaired.

## Offsetting of Financial Instruments

Financial assets and liabilities are offset, with the net amount presented in the Consolidated Balance Sheet, only if the Group holds a currently enforceable legal right to set off the recognized amounts and there is an intention to settle on a net basis or to realize an asset and settle the liability simultaneously. The legal right to set off the recognized amounts must be enforceable in both the normal course of business, in the event of default, insolvency or bankruptcy of both the Group and its counterparty. In all other situations they are presented gross. When financial assets and financial liabilities are offset in the Consolidated Balance Sheet, the associated income and expense items will also be offset in the Consolidated Statement of Income, unless specifically prohibited by an applicable accounting standard.

The majority of the offsetting applied by the Group relates to derivatives and repurchase and reverse repurchase agreements. A significant portion of offsetting is applied to interest rate derivatives and related cash margin balances, which are cleared through central clearing parties such as the London Clearing House. The Group also offsets repurchase and reverse repurchase agreements for which the Group has the right to set off and has the intent to settle on a net basis or to realize an asset and settle a liability simultaneously. For further information please refer to Note 19 “Offsetting Financial Assets and Financial Liabilities”.

## Determination of Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an arm's length transaction between market participants at the measurement date. The fair value of instruments that are quoted in active markets is determined using the quoted prices where they represent those at which regularly and recently occurring transactions take place. The Group measures certain portfolios of financial assets and financial liabilities on the basis of their net risk exposures when the following criteria are met:

- The group of financial assets and liabilities is managed on the basis of its net exposure to a particular market risk (or risks) or to the credit risk of a particular counterparty, in accordance with a documented risk management strategy,
- the fair values are provided to key management personnel, and
- the financial assets and liabilities are measured at fair value through profit or loss.

This portfolio valuation approach is consistent with how the Group manages its net exposures to market and counterparty credit risks.

**Critical Accounting Estimates** – The Group uses valuation techniques to establish the fair value of instruments where prices quoted in active markets are not available. Therefore, where possible, parameter inputs to the valuation techniques are based on observable data derived from prices of relevant instruments traded in an active market. These valuation techniques involve some level of management estimation and judgment, the degree of which will depend on the price transparency for the instrument or market and the instrument's complexity.

In reaching estimates of fair value management judgment needs to be exercised. The areas requiring significant management judgment are identified, documented and reported to senior management as part of the valuation control process and the standard monthly reporting cycle. The specialist model validation and valuation control groups focus attention on the areas of subjectivity and judgment.

The level of management judgment required in establishing fair value of financial instruments for which there is a quoted price in an active market is usually minimal. Similarly there is little subjectivity or judgment required for instruments valued using valuation models which are standard across the industry and where all parameter inputs are quoted in active markets.

The level of subjectivity and degree of management judgment required is more significant for those instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less liquid or less observable. Management judgment is required in the selection and application of appropriate parameters, assumptions and modeling techniques. In particular, where data are obtained from infrequent market transactions then extrapolation and interpolation techniques must be applied. Where no market data are available for a particular instrument then pricing inputs are determined by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions, and making appropriate adjustment to reflect the actual instrument being valued and current market conditions. Where different valuation techniques indicate a range of possible fair values for an instrument then management has to decide what point within the range of estimates appropriately represents the fair value. Further, some valuation adjustments may require the exercise of management judgment to achieve fair value.

Under IFRS, the financial assets and liabilities carried at fair value are required to be disclosed according to the inputs to the valuation method that are used to determine their fair value. Specifically, segmentation is required between those valued using quoted market prices in an active market (level 1), valuation techniques based on observable parameters (level 2) and valuation techniques using significant unobservable parameters (level 3). Management judgment is required in determining the category to which certain instruments should be allocated. This specifically arises when the valuation is determined by a number of parameters, some of which are observable and others are not. Further, the classification of an instrument can change over time to reflect changes in market liquidity and therefore price transparency.

The Group provides a sensitivity analysis of the impact upon the level 3 financial instruments of using a reasonably possible alternative for the unobservable parameter. The determination of reasonably possible alternatives requires significant management judgment.

For financial instruments measured at amortized cost (which includes loans, deposits and short and long term debt issued) the Group discloses the fair value. Generally there is limited or no trading activity in these instruments and therefore the fair value determination requires significant management judgment.

For further discussion of the valuation methods and controls and quantitative disclosures with respect to the determination of fair value, please refer to Note 14 "Financial Instruments carried at Fair Value" and Note 15 "Fair Value of Financial Instruments not carried at Fair Value".

## Recognition of Trade Date Profit

If there are significant unobservable inputs used in the valuation technique, the financial instrument is recognized at the transaction price and any profit implied from the valuation technique at trade date is deferred.

Using systematic methods, the deferred amount is recognized over the period between trade date and the date when the market is expected to become observable, or over the life of the trade (whichever is shorter). Such methodology is used because it reflects the changing economic and risk profile of the instrument as the market develops or as the instrument itself progresses to maturity. Any remaining trade date deferred profit is recognized in the Consolidated Statement of Income when the transaction becomes observable or the Group enters into off-setting transactions that substantially eliminate the instrument's risk. In the rare circumstances that a trade date loss arises, it would be recognized at inception of the transaction to the extent that it is probable that a loss has been incurred and a reliable estimate of the loss amount can be made.

**Critical Accounting Estimates** – Management judgment is required in determining whether there exist significant unobservable inputs in the valuation technique. Once deferred, the decision to subsequently recognize the trade date profit requires a careful assessment of the then current facts and circumstances supporting observability of parameters and/or risk mitigation.

## Derivatives and Hedge Accounting

Derivatives are used to manage exposures to interest rate, foreign currency, credit and other market price risks, including exposures arising from forecast transactions. All freestanding contracts that are considered derivatives for accounting purposes are carried at fair value on the Consolidated Balance Sheet regardless of whether they are held for trading or nontrading purposes.

The changes in fair value on derivatives held for trading are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss.

### Embedded Derivatives

Some hybrid contracts contain both a derivative and a non-derivative component. In such cases, the derivative component is termed an embedded derivative, with the non-derivative component representing the host contract. If the economic characteristics and risks of embedded derivatives are not closely related to those of the host contract and the hybrid contract itself is not carried at fair value through profit or loss, the embedded derivative is bifurcated and reported at fair value, with gains and losses recognized in net gains (losses) on financial assets/liabilities at fair value through profit or loss. The host contract will continue to be accounted for in accordance with the appropriate accounting standard. The carrying amount of an embedded derivative is reported in the same Consolidated Balance Sheet line item as the host contract. Certain hybrid instruments have been designated at fair value through profit or loss using the fair value option.

### Hedge Accounting

For accounting purposes there are three possible types of hedges: (1) hedges of changes in the fair value of assets, liabilities or unrecognized firm commitments (fair value hedges); (2) hedges of the variability of future cash flows from highly probable forecast transactions and floating rate assets and liabilities (cash flow hedges); and (3) hedges of the translation adjustments resulting from translating the functional currency financial statements of foreign operations into the presentation currency of the parent (hedges of net investments in foreign operations).

When hedge accounting is applied, the Group designates and documents the relationship between the hedging instrument and the hedged item as well as its risk management objective and strategy for undertaking the hedging transactions and the nature of the risk being hedged. This documentation includes a description of how the Group will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or

cash flows attributable to the hedged risk. Hedge effectiveness is assessed at inception and throughout the term of each hedging relationship. Hedge effectiveness is always assessed, even when the terms of the derivative and hedged item are matched.

Hedging derivatives are reported as other assets and other liabilities. In the event that a derivative is subsequently de-designated from a hedging relationship, it is transferred to financial assets/liabilities at fair value through profit or loss.

For hedges of changes in fair value, the changes in the fair value of the hedged asset, liability or unrecognized firm commitment, or a portion thereof, attributable to the risk being hedged, are recognized in the Consolidated Statement of Income along with changes in the entire fair value of the derivative. When hedging interest rate risk, any interest accrued or paid on both the derivative and the hedged item is reported in interest income or expense and the unrealized gains and losses from the hedge accounting fair value adjustments are reported in other income. When hedging the foreign exchange risk of an AFS security, the fair value adjustments related to the security's foreign exchange exposures are also recorded in other income. Hedge ineffectiveness is reported in other income and is measured as the net effect of changes in the fair value of the hedging instrument and changes in the fair value of the hedged item arising from changes in the market rate or price related to the risk(s) being hedged.

If a fair value hedge of a debt instrument is discontinued prior to the instrument's maturity because the derivative is terminated or the relationship is de-designated, any remaining interest rate-related fair value adjustments made to the carrying amount of the debt instrument (basis adjustments) are amortized to interest income or expense over the remaining term of the original hedging relationship. For other types of fair value adjustments and whenever a fair value hedged asset or liability is sold or otherwise derecognized, any basis adjustments are included in the calculation of the gain or loss on derecognition.

For hedges of variability in future cash flows, there is no change to the accounting for the hedged item and the derivative is carried at fair value, with changes in value reported initially in other comprehensive income to the extent the hedge is effective. These amounts initially recorded in other comprehensive income are subsequently reclassified into the Consolidated Statement of Income in the same periods during which the forecast transaction affects the Consolidated Statement of Income. Thus, for hedges of interest rate risk, the amounts are amortized into interest income or expense at the same time as the interest is accrued on the hedged transaction.

Hedge ineffectiveness is recorded in other income and is measured as changes in the excess (if any) in the absolute cumulative change in fair value of the actual hedging derivative over the absolute cumulative change in the fair value of the hypothetically perfect hedge.

When hedges of variability in cash flows attributable to interest rate risk are discontinued, amounts remaining in accumulated other comprehensive income are amortized to interest income or expense over the remaining life of the original hedge relationship, unless the hedged transaction is no longer expected to occur in which case the amount will be reclassified into other income immediately. When hedges of variability in cash flows attributable to other risks are discontinued, the related amounts in accumulated other comprehensive income are reclassified into either the same Consolidated Statement of Income caption and period as profit or loss from the forecast transaction, or into other income when the forecast transaction is no longer expected to occur.

For hedges of the translation adjustments resulting from translating the functional currency financial statements of foreign operations (hedges of net investments in foreign operations) into the functional currency of the parent, the portion of the change in fair value of the derivative due to changes in the spot foreign exchange rates is recorded as a foreign currency translation adjustment in other comprehensive income to the extent the hedge is effective; the remainder is recorded as other income in the Consolidated Statement of Income.

Changes in fair value of the hedging instrument relating to the effective portion of the hedge are subsequently recognized in profit or loss on disposal of the foreign operations.



## Impairment of Loans and Provision for Off-Balance Sheet Positions

The Group first assesses whether objective evidence of impairment exists individually for loans that are individually significant. It then assesses collectively for loans that are not individually significant and loans which are significant but for which there is no objective evidence of impairment under the individual assessment.

To allow management to determine whether a loss event has occurred on an individual basis, all significant counterparty relationships are reviewed periodically. This evaluation considers current information and events related to the counterparty, such as the counterparty experiencing significant financial difficulty or a breach of contract, for example, default or delinquency in interest or principal payments.

If there is evidence of impairment leading to an impairment loss for an individual counterparty relationship, then the amount of the loss is determined as the difference between the carrying amount of the loan(s), including accrued interest, and the present value of expected future cash flows discounted at the loan's original effective interest rate or the effective interest rate established upon reclassification to loans, including cash flows that may result from foreclosure less costs for obtaining and selling the collateral. The carrying amount of the loans is reduced by the use of an allowance account and the amount of the loss is recognized in the Consolidated Statement of Income as a component of the provision for credit losses.

The collective assessment of impairment is to establish an allowance amount relating to loans that are either individually significant but for which there is no objective evidence of impairment, or are not individually significant but for which there is, on a portfolio basis, a loss amount that is probable of having occurred and is reasonably estimable. The loss amount has three components. The first component is an amount for transfer and currency convertibility risks for loan exposures in countries where there are serious doubts about the ability of counterparties to comply with the repayment terms due to the economic or political situation prevailing in the respective country of domicile. This amount is calculated using ratings for country risk and transfer risk which are established and regularly reviewed for each country in which the Group does business. The second component is an allowance amount representing the incurred losses on the portfolio of smaller-balance homogeneous loans, which are loans to individuals and small business customers of the private and retail business. The loans are grouped according to similar credit risk characteristics and the allowance for each group is determined using statistical models based on historical experience. The third component represents an estimate of incurred losses inherent in the group of loans that have not yet been individually identified or measured as part of the smaller-balance homogeneous loans. Loans that were found not to be impaired when evaluated on an individual basis are included in the scope of this component of the allowance.

Once a loan is identified as impaired, although the accrual of interest in accordance with the contractual terms of the loan is discontinued, the accretion of the net present value of the written down amount of the loan due to the passage of time is recognized as interest income based on the original effective interest rate of the loan.

At each balance sheet date, all impaired loans are reviewed for changes to the present value of expected future cash flows discounted at the loan's original effective interest rate. Any change to the previously recognized impairment loss is recognized as a change to the allowance account and recorded in the Consolidated Statement of Income as a component of the provision for credit losses.

When it is considered that there is no realistic prospect of recovery and all collateral has been realized or transferred to the Group, the loan and any associated allowance is charged off (the loan and the related allowance are removed from the balance sheet). Individually significant loans where specific loan loss provisions are in place are evaluated at least quarterly on a case-by-case basis. For this category of loans, the number of days past due is an indicator for a charge-off but is not a determining factor. A charge-off will only take place after considering all relevant information, such as the occurrence of a significant change in the borrower's financial position such that the borrower can no longer pay the obligation, or the proceeds from the collateral are insufficient to completely satisfy the current carrying amount of the loan.



For collectively assessed loans, which are primarily mortgages and consumer finance loans, the timing of a charge-off depends on whether there is any underlying collateral and the Group's estimate of the amount collectible and the legal requirements in the jurisdiction in which the loan is originated.

Subsequent recoveries, if any, are credited to the allowance account and are recorded in the Consolidated Statement of Income as a component of the provision for credit losses.

The process to determine the provision for off-balance sheet positions is similar to the methodology used for loans. Any loss amounts are recognized as an allowance in the Consolidated Balance Sheet within provisions and charged to the Consolidated Statement of Income as a component of the provision for credit losses.

If in a subsequent period the amount of a previously recognized impairment loss decreases and the decrease is due to an event occurring after the impairment was recognized, the impairment loss is reversed by reducing the allowance account accordingly. Such reversal is recognized in profit or loss.

**Critical Accounting Estimates** – The accounting estimates and judgments related to the impairment of loans and provision for off-balance sheet positions is a critical accounting estimate because the underlying assumptions used for both the individually and collectively assessed impairment can change from period to period and may significantly affect the Group's results of operations.

In assessing assets for impairments, management judgment is required, particularly in circumstances of economic and financial uncertainty, such as those of the recent financial crisis, when developments and changes to expected cash flows can occur both with greater rapidity and less predictability. The actual amount of the future cash flows and their timing may differ from the estimates used by management and consequently may cause actual losses to differ from reported allowances.

For those loans which are deemed to be individually significant, the determination of the impairment allowance often requires the use of considerable judgment concerning such matters as local economic conditions, the financial performance of the counterparty and the value of any collateral held, for which there may not be a readily accessible market.

The determination of the allowance for portfolios of loans of smaller balance homogenous loans and for those loans which are individually significant but for which no objective evidence of impairment exists is calculated using statistical models. Such statistical models incorporate numerous estimates and judgments. The Group performs a regular review of the models and underlying data and assumptions. The probability of defaults, loss recovery rates and judgments concerning ability of borrowers in foreign countries to transfer the foreign currency necessary to comply with debt repayments, amongst other things, are incorporated into this review.

The quantitative disclosures are provided in Note 20 "Loans" and Note 21 "Allowance for Credit Losses".

## Derecognition of Financial Assets and Liabilities

### Financial Asset Derecognition

A financial asset is considered for derecognition when the contractual rights to the cash flows from the financial asset expire, or the Group has either transferred the contractual right to receive the cash flows from that asset, or has assumed an obligation to pay those cash flows to one or more recipients, subject to certain criteria.

The Group derecognizes a transferred financial asset if it transfers substantially all the risks and rewards of ownership.

The Group enters into transactions in which it transfers previously recognized financial assets but retains substantially all the associated risks and rewards of those assets; for example, a sale to a third party in which the Group enters into a concurrent total return swap with the same counterparty. These types of transactions are accounted for as secured financing transactions.

In transactions in which substantially all the risks and rewards of ownership of a financial asset are neither retained nor transferred, the Group derecognizes the transferred asset if control over that asset is not retained, i.e., if the transferee has the practical ability to sell the transferred asset. The rights and obligations retained in the transfer are recognized separately as assets and liabilities, as appropriate. If control over the asset is retained, the Group continues to recognize the asset to the extent of its continuing involvement, which is determined by the extent to which it remains exposed to changes in the value of the transferred asset.

The derecognition criteria are also applied to the transfer of part of an asset, rather than the asset as a whole, or to a group of similar financial assets in their entirety, when applicable. If transferring a part of an asset, such part must be a specifically identified cash flow, a fully proportionate share of the asset, or a fully proportionate share of a specifically-identified cash flow.

If an existing financial asset is replaced by another asset from the same counterparty on substantially different terms, or if the terms of the financial asset are substantially modified (due to forbearance measures or otherwise), the existing financial asset is derecognized and a new asset is recognized. Any difference between the respective carrying amounts is recognized in the Consolidated Statement of Income.

## Securitization

The Group securitizes various consumer and commercial financial assets, which is achieved via the transfer of these assets to a structured entity, which issues securities to investors to finance the acquisition of the assets. Financial assets awaiting securitization are classified and measured as appropriate under the policies in the “Financial Assets and Liabilities” section. If the structured entity is not consolidated then the transferred assets may qualify for derecognition in full or in part, under the policy on derecognition of financial assets. Synthetic securitization structures typically involve derivative financial instruments for which the policies in the “Derivatives and Hedge Accounting” section would apply. Those transfers that do not qualify for derecognition may be reported as secured financing or result in the recognition of continuing involvement liabilities. The investors and the securitization vehicles generally have no recourse to the Group’s other assets in cases where the issuers of the financial assets fail to perform under the original terms of those assets.

Interests in the securitized financial assets may be retained in the form of senior or subordinated tranches, interest only strips or other residual interests (collectively referred to as “retained interests”). Provided the Group’s retained interests do not result in consolidation of a structured entity, nor in continued recognition of the transferred assets, these interests are typically recorded in financial assets at fair value through profit or loss and carried at fair value. Consistent with the valuation of similar financial instruments, the fair value of retained tranches or the financial assets is initially and subsequently determined using market price quotations where available or internal pricing models that utilize variables such as yield curves, prepayment speeds, default rates, loss severity, interest rate volatilities and spreads. The assumptions used for pricing are based on observable transactions in similar securities and are verified by external pricing sources, where available. Where observable transactions in similar securities and other external pricing sources are not available, management judgment must be used to determine fair value. The Group may also periodically hold interests in securitized financial assets and record them at amortized cost.

In situations where the Group has a present obligation (either legal or constructive) to provide financial support to an unconsolidated securitization entity a provision will be created if the obligation can be reliably measured and it is probable that there will be an outflow of economic resources required to settle it.

When an asset is derecognized a gain or loss equal to the difference between the consideration received and the carrying amount of the transferred asset is recorded. When a part of an asset is derecognized, gains or losses on securitization depend in part on the carrying amount of the transferred financial assets, allocated between the financial assets derecognized and the retained interests based on their relative fair values at the date of the transfer.

## Derecognition of Financial Liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. If an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the Consolidated Statement of Income.

## Repurchase and Reverse Repurchase Agreements

Securities purchased under resale agreements ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralized financings and are recognized initially at fair value, being the amount of cash disbursed and received, respectively. The party disbursing the cash takes possession of the securities serving as collateral for the financing and having a market value equal to, or in excess of, the principal amount loaned. The securities received under reverse repurchase agreements and securities delivered under repurchase agreements are not recognized on, or derecognized from, the balance sheet, because the risks and rewards of ownership are not obtained nor relinquished. Securities delivered under repurchase agreements which are not derecognized from the balance sheet and where the counterparty has the right by contract or custom to sell or repledge the collateral are disclosed in Note 23 "Assets Pledged and Received as Collateral".

The Group has chosen to apply the fair value option to certain repurchase and reverse repurchase portfolios that are managed on a fair value basis.

Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements is reported as interest income and interest expense, respectively.

## Securities Borrowed and Securities Loaned

Securities borrowed transactions generally require the Group to deposit cash with the securities lender. In a securities loaned transaction, the Group generally receives either cash collateral, in an amount equal to or in excess of the market value of securities loaned, or securities. The Group monitors the fair value of securities borrowed and securities loaned and additional collateral is disbursed or obtained, if necessary.

The amount of cash advanced or received is recorded as securities borrowed and securities loaned, respectively, in the Consolidated Balance Sheet.

The securities borrowed are not themselves recognized in the financial statements. If they are sold to third parties, the obligation to return the securities is recorded as a financial liability at fair value through profit or loss and any subsequent gain or loss is included in the Consolidated Statement of Income in net gains (losses) on financial assets/liabilities at fair value through profit or loss. Securities lent to counterparties are also retained on the Consolidated Balance Sheet.

Fees received or paid are reported in interest income and interest expense, respectively. Securities lent to counterparties which are not derecognized from the Consolidated Balance Sheet and where the counterparty has the right by contract or custom to sell or repledge the collateral are disclosed in Note 23 "Assets Pledged and Received as Collateral".

## Goodwill and Other Intangible Assets

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition.

For the purpose of calculating goodwill, fair values of acquired assets, liabilities and contingent liabilities are determined by reference to market values or by discounting expected future cash flows to present value. This discounting is either performed using market rates or by using risk-free rates and risk-adjusted expected future cash flows. Any noncontrolling interests in the acquiree is measured either at fair value or at the noncontrolling interests' proportionate share of the acquiree's identifiable net assets (this is determined for each business combination).

Goodwill on the acquisition of subsidiaries is capitalized and reviewed for impairment annually or more frequently if there are indications that impairment may have occurred. For the purposes of impairment testing, goodwill acquired in a business combination is allocated to cash-generating units ("CGUs"), which are the smallest identifiable groups of assets that generate cash inflows largely independent of the cash inflows from other assets or groups of assets and that are expected to benefit from the synergies of the combination and considering the business level at which goodwill is monitored for internal management purposes. In identifying whether cash inflows from an asset (or a group of assets) are largely independent of the cash inflows from other assets (or groups of assets) various factors are considered, including how management monitors the entity's operations or makes decisions about continuing or disposing of the entity's assets and operations.

If goodwill has been allocated to a CGU and an operation within that unit is disposed of, the attributable goodwill is included in the carrying amount of the operation when determining the gain or loss on its disposal.

Certain non-integrated investments are not allocated to a CGU. Impairment testing is performed individually for each of these assets.

Corporate assets are allocated to a CGU when the allocation can be done on a reasonable and consistent basis. If this is not possible, the individual CGU is tested without the corporate assets. They are then tested on the level of the minimum collection of CGUs to which they can be allocated on a reasonable and consistent basis.

Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. Intangible assets that have a finite useful life are stated at cost less any accumulated amortization and accumulated impairment losses. Customer-related intangible assets that have a finite useful life are amortized over periods of between 1 and 20 years on a straight-line basis based on their expected useful life. These assets are tested for impairment and their useful lives reaffirmed at least annually.

Certain intangible assets have an indefinite useful life and hence are not amortized, but are tested for impairment at least annually or more frequently if events or changes in circumstances indicate that impairment may have occurred.

Costs related to software developed or obtained for internal use are capitalized if it is probable that future economic benefits will flow to the Group and the cost can be measured reliably. Capitalized costs are amortized using the straight-line method over the asset's useful life which is deemed to be either three, five or ten years. Eligible costs include external direct costs for materials and services, as well as payroll and payroll-related costs for employees directly associated with an internal-use software project. Overhead costs, as well as costs incurred during the research phase or after software are ready for use, are expensed as incurred. Capitalized software costs are tested for impairment either annually if still under development or when there is an indication of impairment once the software is in use.

**Critical Accounting Estimates** – The determination of the recoverable amount in the impairment assessment of non-financial assets requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques, or a combination thereof, necessitating management to make subjective judgments and assumptions. Because these estimates and assumptions could result in significant differences to the amounts reported if underlying circumstances were to change, the Group considers these estimates to be critical.

The quantitative disclosures are provided in Note 26 “Goodwill and Other Intangible Assets”.

## Provisions

Provisions are recognized if the Group has a present legal or constructive obligation as a result of past events, if it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation as of the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to be required to settle the obligation, using a pre-tax rate that reflects the current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognized as interest expense.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party (for example, because the obligation is covered by an insurance policy), an asset is recognized if it is virtually certain that reimbursement will be received.

**Critical Accounting Estimates** – The use of estimates is important in determining provisions for potential losses that may arise from litigation, regulatory proceedings and uncertain income tax positions. The Group estimates and provides for potential losses that may arise out of litigation, regulatory proceedings and uncertain income tax positions to the extent that such losses are probable and can be estimated, in accordance with IAS 37, “Provisions, Contingent Liabilities and Contingent Assets” or IAS 12, “Income Taxes”, respectively. Significant judgment is required in making these estimates and the Group’s final liabilities may ultimately be materially different.

Contingencies in respect of legal matters are subject to many uncertainties and the outcome of individual matters is not predictable with assurance. Significant judgment is required in assessing probability and making estimates in respect of contingencies, and the Group’s final liability may ultimately be materially different. The Group’s total liability in respect of litigation, arbitration and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case, the Group’s experience and the experience of others in similar cases, and the opinions and views of legal counsel. Predicting the outcome of the Group’s litigation matters is inherently difficult, particularly in cases in which claimants seek substantial or indeterminate damages. See Note 30 “Provisions” for information on the Group’s judicial, regulatory and arbitration proceedings.

## Income Taxes

The Group recognizes the current and deferred tax consequences of transactions that have been included in the consolidated financial statements using the provisions of the respective jurisdictions’ tax laws. Current and deferred taxes are recognized in profit or loss except to the extent that the tax relates to items that are recognized directly in equity or other comprehensive income in which case the related tax is recognized either directly in equity or other comprehensive income accordingly.

Deferred tax assets and liabilities are recognized for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. Deferred tax assets are recognized only to the extent that it is probable that

sufficient taxable profit will be available against which those unused tax losses, unused tax credits and deductible temporary differences can be utilized.

Deferred tax assets and liabilities are measured based on the tax rates that are expected to apply in the period that the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Current tax assets and liabilities are offset when (1) they arise from the same tax reporting entity or tax group of reporting entities, (2) the legally enforceable right to offset exists and (3) they are intended to be settled net or realized simultaneously.

Deferred tax assets and liabilities are offset when the legally enforceable right to offset current tax assets and liabilities exists and the deferred tax assets and liabilities relate to income taxes levied by the same taxing authority on either the same tax reporting entity or tax group of reporting entities.

Deferred tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, branches and associates and interests in joint ventures except when the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future. Deferred income tax assets are provided on deductible temporary differences arising from such investments only to the extent that it is probable that the differences will reverse in the foreseeable future and sufficient taxable income will be available against which those temporary differences can be utilized.

Deferred tax related to fair value re-measurement of AFS investments, cash flow hedges and other items, which are charged or credited directly to other comprehensive income, is also credited or charged directly to other comprehensive income and subsequently recognized in the consolidated statement of income once the underlying transaction or event to which the deferred tax relates is recognized in the consolidated statement of income.

For share-based payment transactions, the Group may receive a tax deduction related to the compensation paid in shares. The amount deductible for tax purposes may differ from the cumulative compensation expense recorded. At any reporting date, the Group must estimate the expected future tax deduction based on the current share price. The associated current and deferred tax consequences are recognized as income or expense in the consolidated statement of income for the period. If the amount deductible, or expected to be deductible, for tax purposes exceeds the cumulative compensation expense, the excess tax benefit is recognized directly in equity.

The Group's insurance business in the United Kingdom (Abbey Life Assurance Company Limited) was (until its disposal) subject to income tax on its policyholder's investment returns (policyholder tax). This tax was included in the Group's income tax expense/benefit even though it was economically the income tax expense/benefit of the policyholder, which reduced/increased the Group's liability to the policyholder.

**Critical Accounting Estimates** – In determining the amount of deferred tax assets, the Group uses historical tax capacity and profitability information and, if relevant, forecasted operating results based upon approved business plans, including a review of the eligible carry-forward periods, available tax planning opportunities and other relevant considerations. Each quarter, the Group re-evaluates its estimate related to deferred tax assets, including its assumptions about future profitability.

The Group believes that the accounting estimate related to the deferred tax assets is a critical accounting estimate because the underlying assumptions can change from period to period and requires significant management judgment. For example, tax law changes or variances in future projected operating performance could result in a change of the deferred tax asset. If the Group was not able to realize all or part of its net deferred tax assets in the future, an adjustment to its deferred tax assets would be charged to income tax expense or directly to equity in the period such determination was made. If the Group was to recognize previously unrecognized deferred tax assets in the future, an adjustment to its deferred tax asset would be credited to income tax expense or directly to equity in the period such determination was made.

For further information on the Group's deferred taxes (including quantitative disclosures on recognized deferred tax assets) see Note 37 "Income Taxes".

## Business Combinations and Noncontrolling Interests

The Group uses the acquisition method to account for business combinations. At the date the Group obtains control of the subsidiary, the cost of an acquisition is measured at the fair value of the consideration given, including any cash or non cash consideration (equity instruments) transferred, any contingent consideration, any previously held equity interest in the acquiree and liabilities incurred or assumed. The excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the Group's share of the fair value of the identifiable net assets acquired is recorded as goodwill. If the aggregate of the acquisition cost and any noncontrolling interests is below the fair value of the identifiable net assets (negative goodwill), a gain is reported in other income. Acquisition-related costs are recognized as expenses in the period in which they are incurred.

In business combinations achieved in stages ("step acquisitions"), a previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts recognized in prior periods in other comprehensive income associated with the previously held investment would be recognized on the same basis as would be required if the Group had directly disposed of the previously held equity interest.

Noncontrolling interests are shown in the consolidated balance sheet as a separate component of equity, which is distinct from the Group's shareholders' equity. The net income attributable to noncontrolling interests is separately disclosed on the face of the consolidated statement of income. Changes in the ownership interest in subsidiaries which do not result in a change of control are treated as transactions between equity holders and are reported in additional paid-in capital ("APIC").

## Non-Current Assets Held for Sale

Individual non-current non-financial assets (and disposal groups) are classified as held for sale if they are available for immediate sale in their present condition subject only to the customary sales terms of such assets (and disposal groups) and their sale is considered highly probable. For a sale to be highly probable, management must be committed to a sales plan and actively looking for a buyer. Furthermore, the assets (and disposal groups) must be actively marketed at a reasonable sales price in relation to their current fair value and the sale should be expected to be completed within one year. Non-current non-financial assets (and disposal groups) which meet the criteria for held for sale classification are measured at the lower of their carrying amount and fair value less costs to sell and are presented within "Other assets" and "Other liabilities" in the balance sheet. The comparatives are not represented when non-current assets (and disposal groups) are classified as held for sale. If the disposal group contains financial instruments, no adjustment to their carrying amounts is permitted.

## Property and Equipment

Property and equipment includes own-use properties, leasehold improvements, furniture and equipment and software (operating systems only). Own-use properties are carried at cost less accumulated depreciation and accumulated impairment losses. Depreciation is generally recognized using the straight-line method over the estimated useful lives of the assets. The range of estimated useful lives is 25 to 50 years for property and 3 to 10 years for furniture and equipment (including initial improvements to purchased buildings). Leasehold improvements are capitalized and subsequently depreciated on a straight-line basis over the shorter of the term of the lease and the estimated useful life of the improvement, which generally ranges from 3 to 18 years. Depreciation of property and equipment is included in general and administrative expenses. Maintenance and repairs are also charged to general and administrative expenses. Gains and losses on disposals are included in other income.



Property and equipment are assessed for any indication of impairment at each quarterly reporting date. If such indication exists, the recoverable amount, which is the higher of fair value less costs to sell and value in use, must be estimated and an impairment charge is recorded to the extent the recoverable amount is less than its carrying amount. Value in use is the present value of the future cash flows expected to be derived from the asset. After the recognition of impairment of an asset, the depreciation charge is adjusted in future periods to reflect the asset's revised carrying amount. If an impairment is later reversed, the depreciation charge is adjusted prospectively.

Properties leased under a finance lease are capitalized as assets in property and equipment and depreciated over the terms of the leases.

## Financial Guarantees

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

The Group has chosen to apply the fair value option to certain written financial guarantees that are managed on a fair value basis. Financial guarantees that the Group has not designated at fair value are recognized initially in the financial statements at fair value on the date the guarantee is given. Subsequent to initial recognition, the Group's liabilities under such guarantees are measured at the higher of the amount initially recognized, less cumulative amortization, and the best estimate of the expenditure required to settle any financial obligation as of the balance sheet date. These estimates are determined based on experience with similar transactions and history of past losses, and management's determination of the best estimate.

Any increase in the liability relating to guarantees is recorded in the consolidated statement of income in provision for credit losses.

## Leasing Transactions

The Group enters into lease contracts, predominantly for premises, as a lessee. The terms and conditions of these contracts are assessed and the leases are classified as operating leases or finance leases according to their economic substance at inception of the lease.

Assets held under finance leases are initially recognized on the consolidated balance sheet at an amount equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheet as a finance lease obligation. The discount rate used in calculating the present value of the minimum lease payments is either the interest rate implicit in the lease, if it is practicable to determine, or the incremental borrowing rate. Contingent rentals are recognized as an expense in the periods in which they are incurred.

Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences when the lessee controls the physical use of the property. Lease incentives are treated as a reduction of rental expense and are also recognized over the lease term on a straight-line basis. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.



## Employee Benefits

### Pension Benefits

The Group provides a number of pension plans. In addition to defined contribution plans, there are retirement benefit plans accounted for as defined benefit plans. The assets of all the Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of salary and are expensed based on employee services rendered, generally in the year of contribution.

All retirement benefit plans accounted for as defined benefit plans are valued using the projected unit-credit method to determine the present value of the defined benefit obligation and the related service costs. Under this method, the determination is based on actuarial calculations which include assumptions about demographics, salary increases and interest and inflation rates. Actuarial gains and losses are recognized in other comprehensive income and presented in equity in the period in which they occur. The majority of the Group's benefit plans are funded.

### Other Post-Employment Benefits

In addition, the Group maintains unfunded contributory post-employment medical plans for a number of current and retired employees who are mainly located in the United States. These plans pay stated percentages of eligible medical and dental expenses of retirees after a stated deductible has been met. The Group funds these plans on a cash basis as benefits are due. Analogous to retirement benefit plans these plans are valued using the projected unit-credit method. Actuarial gains and losses are recognized in full in the period in which they occur in other comprehensive income and presented in equity.

Refer to Note 36 "Employee Benefits" for further information on the accounting for pension benefits and other post-employment benefits.

### Termination benefits

Termination benefits arise when employment is terminated by the Group before the normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits as a liability and an expense if the Group is demonstrably committed to a detailed formal plan without realistic possibility of withdrawal. In the case of an offer made to encourage voluntary redundancy, termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than twelve months after the end of the reporting period are discounted to their present value. The discount rate is determined by reference to market yields on high-quality corporate bonds.

### Share-Based Compensation

Compensation expense for awards classified as equity instruments is measured at the grant date based on the fair value of the share-based award. For share awards, the fair value is the quoted market price of the share reduced by the present value of the expected dividends that will not be received by the employee and adjusted for the effect, if any, of restrictions beyond the vesting date. In case an award is modified such that its fair value immediately after modification exceeds its fair value immediately prior to modification, a remeasurement takes place and the resulting increase in fair value is recognized as additional compensation expense.

The Group records the offsetting amount to the recognized compensation expense in additional paid-in capital ("APIC"). Compensation expense is recorded on a straight-line basis over the period in which employees perform services to which the awards relate or over the period of the tranches for those awards delivered in tranches. Estimates of expected forfeitures are periodically adjusted in the event of actual forfeitures or for changes in expectations. The timing of expense recognition relating to grants which, due to early retirement provisions, include a nominal but non-substantive service period are accelerated by shortening the amortization period of the expense from the grant date to the date when the employee meets the eligibility criteria for the award, and not the vesting date. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately.

Compensation expense for share-based awards payable in cash is remeasured to fair value at each balance sheet date and recognized over the vesting period in which the related employee services are rendered. The related obligations are included in other liabilities until paid.

## Obligations to Purchase Common Shares

Forward purchases of Deutsche Bank shares, and written put options where Deutsche Bank shares are the underlying, are reported as obligations to purchase common shares if the number of shares is fixed and physical settlement for a fixed amount of cash is required. At inception, the obligation is recorded at the present value of the settlement amount of the forward or option. For forward purchases and written put options of Deutsche Bank shares, a corresponding charge is made to shareholders' equity and reported as equity classified as an obligation to purchase common shares.

The liabilities are accounted for on an accrual basis, and interest costs, which consist of time value of money and dividends, on the liability are reported as interest expense. Upon settlement of such forward purchases and written put options, the liability is extinguished and the charge to equity is reclassified to common shares in treasury.

Deutsche Bank common shares subject to such forward contracts are not considered to be outstanding for purposes of basic earnings per share calculations, but are for dilutive earnings per share calculations to the extent that they are, in fact, dilutive.

Option and forward contracts on Deutsche Bank shares are classified as equity if the number of shares is fixed and physical settlement is required. All other contracts in which Deutsche Bank shares are the underlying are recorded as financial assets or liabilities at fair value through profit or loss.

## Consolidated Statement of Cash Flows

For purposes of the consolidated statement of cash flows, the Group's cash and cash equivalents include highly liquid investments that are readily convertible into cash and which are subject to an insignificant risk of change in value. Such investments include cash and balances at central banks and demand deposits with banks.

The Group's assignment of cash flows to the operating, investing or financing category depends on the business model ("management approach"). For the Group the primary operating activity is to manage financial assets and financial liabilities. Therefore, the issuance and management of long-term borrowings is a core operating activity which is different than for a non-financial company, where borrowing is not a principal revenue producing activity and thus is part of the financing category.

The Group views the issuance of senior long-term debt as an operating activity. Senior long-term debt comprises structured notes and asset-backed securities, which are designed and executed by Global Markets business lines and which are revenue generating activities. The other component is debt issued by Treasury, which is considered interchangeable with other funding sources; all of the funding costs are allocated to business activities to establish their profitability.

Cash flows related to subordinated long-term debt and trust preferred securities are viewed differently than those related to senior-long term debt because they are managed as an integral part of the Group's capital, primarily to meet regulatory capital requirements. As a result they are not interchangeable with other operating liabilities, but can only be interchanged with equity and thus are considered part of the financing category.

The amounts shown in the consolidated statement of cash flows do not precisely match the movements in the consolidated balance sheet from one period to the next as they exclude non-cash items such as movements due to foreign exchange translation and movements due to changes in the group of consolidated companies.

Movements in balances carried at fair value through profit or loss represent all changes affecting the carrying value. This includes the effects of market movements and cash inflows and outflows. The movements in balances carried at fair value are usually presented in operating cash flows.

## Insurance

The Group's insurance business previously issued two types of contracts:

**Insurance Contracts** – These are annuity and universal life contracts under which the Group has accepted significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specific uncertain future event adversely affects the policyholder. Such contracts remain insurance contracts until all rights and obligations are extinguished or expire. As allowed by IFRS, the Group retained the accounting policies for insurance contracts which it applied prior to the adoption of IFRS (U.S. GAAP) as described further below.

**Non-Participating Investment Contracts ("Investment Contracts")** – These contracts do not contain significant insurance risk or discretionary participation features. These are measured and reported consistently with other financial liabilities, which are classified as financial liabilities at fair value through profit or loss.

Financial assets held to back annuity contracts had been classified as AFS. Financial assets held for other insurance and investment contracts had been designated at fair value through profit or loss under the fair value option.

### Insurance Contracts

Premiums for single premium business were recognized as income when received. This was the date from which the policy was effective. For regular premium contracts, receivables were recognized at the date when payments were due. Premiums were shown before deduction of commissions. When policies lapsed due to non-receipt of premiums, all related premium income accrued but not received from the date they were deemed to have lapsed, net of related expense, was offset against premiums.

Claims were recorded as an expense when incurred, and reflected the cost of all claims arising during the year, including policyholder profit participations allocated in anticipation of a participation declaration.

The aggregate policy reserves for universal life insurance contracts were equal to the account balance, which represents premiums received and investment returns credited to the policy, less deductions for mortality costs and expense charges. For other unit-linked insurance contracts the policy reserve represented the fair value of the underlying assets.

For annuity contracts, the liability was calculated by estimating the future cash flows over the duration of the in force contracts discounted back to the valuation date allowing for the probability of occurrence. The assumptions were fixed at the date of acquisition with suitable provisions for adverse deviations ("PADs"). This calculated liability value was tested against a value calculated using best estimate assumptions and interest rates based on the yield on the amortized cost of the underlying assets. Should this test produce a higher value, the liability amount would have been reset.

Aggregate policy reserves included liabilities for certain options attached to the Group's unit-linked pension products. These liabilities were calculated based on contractual obligations using actuarial assumptions.

Liability adequacy tests were performed for the insurance portfolios on the basis of estimated future claims, costs, premiums earned and proportionate investment income. For long duration contracts, if actual experience regarding investment yields, mortality, morbidity, terminations or expenses indicated that existing contract liabilities, along with the present value of future gross premiums, would not be sufficient to cover the present value of future benefits and to recover deferred policy acquisition costs, then a premium deficiency would be recognized.

The costs directly attributable to the acquisition of incremental insurance and investment business were deferred to the extent that they were expected to be recoverable out of future margins in revenues on these contracts. These costs would be amortized systematically over a period no longer than that in which they were expected to be recovered out of these future margins.

## Investment Contracts

All of the Group's investment contracts are unit-linked. These contract liabilities are determined using current unit prices multiplied by the number of units attributed to the contract holders as of the balance sheet date.

As this amount represents fair value, the liabilities have been classified as financial liabilities at fair value through profit or loss. Deposits collected under investment contracts are accounted for as an adjustment to the investment contract liabilities. Investment income attributable to investment contracts is included in the consolidated statement of income. Investment contract claims reflect the excess of amounts paid over the account balance released. Investment contract policyholders are charged fees for policy administration, investment management, surrenders or other contract services.

The financial assets for investment contracts are recorded at fair value with changes in fair value, and offsetting changes in the fair value of the corresponding financial liabilities, recorded in profit or loss.

## Reinsurance

Premiums ceded for reinsurance and reinsurance recoveries on policyholder benefits and claims incurred are reported in income and expense as appropriate. Assets and liabilities related to reinsurance are reported on a gross basis when material. Amounts ceded to reinsurers from reserves for insurance contracts are estimated in a manner consistent with the reinsured risk. Accordingly, revenues and expenses related to reinsurance agreements are recognized in a manner consistent with the underlying risk of the business reinsured.

All new material reinsurance arrangements are subject to local Board approval. Once transacted they are subject to regular credit risk review including an assessment of the full exposure and any lending and collateral provision. Impairment is determined in accordance with the Group's accounting policy "Impairment of Financial Assets".

## 02 – Recently Adopted and New Accounting Pronouncements

### Recently Adopted Accounting Pronouncements

The following are those accounting pronouncements which are relevant to the Group and which have been adopted during 2016 in the preparation of these consolidated financial statements.

#### IAS 1

On January 1, 2016, the Group adopted the amendments to IAS 1 “Presentation of Financial Statements”, which resulted as part of an initiative to improve presentation and disclosure in financial reports. These amendments clarify that the principle of materiality is applicable to the whole of the financial statements, professional judgment should be applied in determining disclosures and that inclusion of immaterial data can reduce the effectiveness of disclosures. The amendments did not have a material impact on the Group’s consolidated financial statements.

#### Improvements to IFRS 2012-2014 Cycle

On January 1, 2016, the Group adopted amendments to multiple IFRS standards, which resulted from the IASB’s annual improvement projects for the 2012-2014 cycle. They comprise amendments that result in accounting changes for presentation, recognition or measurement purposes as well as terminology or editorial amendments related to a variety of individual IFRS standards. The amendments did not have a material impact on the Group’s consolidated financial statements.

### New Accounting Pronouncements

The following accounting pronouncements were not effective as of December 31, 2016 and therefore have not been applied in preparing these financial statements.

#### IFRS 2 Share-based Payments

In June 2016, the IASB issued narrow-scope amendments to IFRS 2, “Share-based Payment” which clarifies the accounting for certain types of share-based payment transactions. The amendments which were developed through the IFRS Interpretations Committee clarify the accounting for cash-settled share-based payment transactions that include a performance condition, the classification of share-based payment transactions with net settlement features and the accounting for modifications of share-based payment transactions from cash-settled to equity-settled. They are effective for annual periods beginning on or after January 1, 2018. The Group is currently assessing the impact of the clarifications to IFRS 2. The amendments have yet to be endorsed by the EU.

#### IFRS 9 Financial Instruments

In July 2014, the IASB issued IFRS 9 “Financial Instruments”, which replaces IAS 39, “Financial Instruments: Recognition and Measurement”. IFRS 9 introduces new requirements for how an entity should classify and measure financial assets, requires changes to the reporting of ‘own credit’ with respect to issued debt liabilities that are designated at fair value, replaces the current rules for impairment of financial assets and amends the requirements for hedge accounting. The standard also requires entities to provide users of financial statements with more informative and relevant disclosures. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The standard has been endorsed by the EU. Based on December 31, 2016 data and the current implementation status of IFRS 9 as described in further detail below, the Group estimates the adoption of IFRS 9 to lead to an overall reduction in the Group’s total shareholders’ equity of approximately € 1 billion before tax. This reduction is predominately driven by the impairment requirements of IFRS 9.

## Implementation program

The Group has a centrally managed IFRS 9 program sponsored by the Group's chief financial officer and includes subject matter experts on methodology, data sourcing and modeling, IT processing and reporting. The Group's work to date has covered performing an assessment of the population of financial instruments impacted by the classification and measurement requirements of IFRS 9 and developing an impairment methodology to support the calculation of the Expected Credit Loss allowance. Specifically, during 2016 the Group developed its approach for assessing significant increase in credit risk, incorporating forward looking information, including macro-economic factors (to be implemented in 2017) and preparing the required IT systems and process architecture. The Group envisages performing parallel runs in 2017 to ensure procedural readiness and further improve the data quality of new data required.

Overall governance of the program's implementation is through the IFRS 9 Steering Committee and includes representation from Finance, Risk and IT. Guidance and training on IFRS 9 across the Group is delivered across businesses and functions as part of the Group's internal control systems. The Group is in the process of enhancing its existing governance framework to ensure that appropriate validations and controls are in place over new key processes and significant areas of judgment. Governance over the Expected Credit Loss calculation process is split across Risk and Finance functions.

## Classification and Measurement of Financial Assets and Liabilities

IFRS 9 requires that an entity's business model and a financial instrument's contractual cash flows will determine its classification and measurement in the financial statements. Upon initial recognition each financial asset will be classified as either fair value through profit or loss ('FVTPL'), amortized cost, or fair value through Other Comprehensive Income ('FVOCI'). As the requirements under IFRS 9 are different than the assessments under the existing IAS 39 rules, some differences to the classification and measurement of financial assets under IAS 39 are expected. The classification and measurement of financial liabilities remain largely unchanged under IFRS 9 from current requirements.

In 2016, the Group made an initial determination of business models and assessed the contractual cash flow characteristics of the financial assets to determine the potential classification and measurement changes as a result of IFRS 9. As a result of the analysis performed thus far, the Group has identified a population of financial assets which are expected to be measured at either amortized cost or fair value through other comprehensive income, which will be subject to the IFRS 9 impairment rules. However, the actual impact that IFRS 9 classification and measurement will have on the Group is mainly dependent on the business models and the inventory of financial assets which exist at the effective date, and as such the Group will roll forward our analysis during 2017 to take into consideration any changes in business strategies and composition of financial assets.

Where issued debt liabilities are designated at fair value, the fair value movements attributable to an entity's own credit risk will be recognized in Other Comprehensive Income rather than in the Statement of Income. The standard also allows the Group the option to elect to apply early the presentation of fair value movements of an entity's credit risk in Other Comprehensive Income prior to adopting IFRS 9 in full. The Group has not early adopted this requirement.

## Impairment of Financial Assets

The impairment requirements of IFRS 9 apply to financial assets that are measured at amortized cost or FVOCI, and off balance sheet lending commitments such as loan commitments and financial guarantees (hereafter collectively referred to in this note as financial assets).

The determination of impairment losses and allowance will move from an incurred credit loss model whereby credit losses are recognized when a defined loss event occurs under IAS 39, to an expected loss model under IFRS 9, where provisions are taken upon initial recognition of the financial asset (or the date that the Group becomes a party to the loan commitment or financial guarantee), based on expectations of potential credit losses at that time under IFRS 9. Currently, the Group first evaluates individually whether objective evidence of impairment exists for loans that are individually significant. It then collectively assesses loans that are not individually significant and loans which are significant but for which there is no objective evidence of impairment available under the individual assessment.

Under IFRS 9 for financial assets originated or purchased, the Group will recognize a loss allowance at an amount equal to 12-month expected credit losses, if the credit risk at the reporting date has not increased significantly since initial recognition (Stage 1). This amount represents the expected credit losses resulting from default events that are possible within the next 12 months. The interest revenue is calculated on the gross carrying amount for financial assets in Stage 1.

IFRS 9 requires the recognition of credit losses over the remaining life of the financial assets ('lifetime expected losses') which are considered to have experienced a significant increase in credit risk (Stage 2) and for financial assets that are credit impaired at the reporting date (Stage 3). The lifetime expected credit losses represent all possible default events over the expected life of a financial instrument. The Group leverages existing risk management indicators (e.g. watch list and forbearance trigger), credit rating changes and taking into consideration reasonable and supportable information which allows the Group to identify whether the credit risk of financial assets has significantly increased. This process includes considering forward-looking information, including macro-economic factors. Furthermore, financial assets will be transferred to Stage 2 if 30 days past due. The interest revenue is calculated on the gross carrying amount for financial assets in Stage 2.

As the primary definition for credit impaired financial assets moving to Stage 3, the Group will apply the default definition as laid out in CRR Article 178. Interest revenues are calculated on the net carrying amount for these financial assets only. Forward-looking information, including macro-economic factors must be taken into account to measure IFRS 9 compliant expected credit losses.

IFRS 9 does not distinguish between individually significant or not individually significant financial instruments. Therefore, the Group decided to measure the allowance for credit losses on an individual transaction basis. Similarly, the assessment for transferring financial assets between Stages 1, 2 and 3 will also be made on an individual transaction basis. For detailed information on the current impairment approach under IAS 39 please refer to Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

The Group uses three main components to measure expected credit losses which are a probability of default ('PD'), a loss given default ('LGD') and the exposure at default ('EAD'). Therefore, the Group will leverage the existing parameters of the regulatory framework and risk management practices as much as possible on transaction level. For the purpose of IFRS 9 the allowance for credit losses is affected by a variety of key characteristics, such as, but not limited to the expected balance at default and the related amortization profile as well as the expected life of the financial asset. As a consequence, the allowance for credit losses for Stage 2 financial assets will increase with the expected lifetime or the expected EAD. Incorporating forecasts of future economic conditions into the measurement of expected credit losses will additionally cause an impact on the allowance for credit losses for each stage. In order to calculate lifetime expected credit losses, the Group's calculation includes deriving the corresponding lifetime PDs from migration matrices that reflect the economic forecasts. To determine whether a financial asset is credit impaired and thus must be classified as Stage 3, one or more events must be identified that have a detrimental impact on the estimated future cash flows.



As a result of IFRS 9, there will be an increase in subjectivity as the allowance for credit losses will be based on reasonable and supportable forward-looking information which take into consideration future macro-economic scenarios as provided by Deutsche Bank Research. These macro-economic scenarios are continuously monitored and in addition to being used for the Group's expected credit loss calculation, this information also forms the basis for performing the Group's capital planning and stress-testing. This information provided by Deutsche Bank Research is used to generate possible future scenarios by utilizing the Group's stress testing infrastructure with appropriate modifications to align with IFRS 9 requirements. The Group is in the process of analyzing synergies with the capital forecasting and stress-testing processes. The transition impact and effects resulting from the continuous application of IFRS 9 are reflected in the Group's capital planning for 2018 and onwards. The general use of forward-looking information, including macro-economic factors as well as adjustments taking into account extraordinary factors will be monitored by a governance framework.

IFRS 9 is estimated to result in an increase in the overall level of allowances for credit losses as noted above. This estimated increase is driven by the requirement to record an allowance equal to 12 months expected credit losses on those instruments whose credit risk has not significantly increased since initial recognition and driven by the larger population of financial assets to which lifetime expected losses must be applied.

## Hedge accounting

IFRS 9 also incorporates new hedge accounting rules that intend to align hedge accounting with risk management practices. Generally, some restrictions under current rules have been removed and a greater variety of hedging instruments and hedged items become available for hedge accounting.

## IFRS 15 Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15, "Revenue from Contracts with Customers", which specifies how and when revenue is recognized, but does not impact income recognition related to financial instruments in scope of IAS 39/IFRS 9. IFRS 15 replaces several other IFRS standards and interpretations that currently govern revenue recognition under IFRS and provides a single, principles-based five-step model to be applied to all contracts with customers. The standard also requires entities to provide users of financial statements with more informative and relevant disclosures. IFRS 15 is effective for annual periods beginning on or after January 1, 2018. IFRS 15 will not have a material impact on the Group's consolidated financial statements. The standard has been endorsed by the EU.

## IFRS 16 Leases

In January 2016, the IASB issued IFRS 16, "Leases", which introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. There will be only minor changes to the current accounting for lessors. The standard also requires entities to provide users of financial statements with more informative and relevant disclosures. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Group is currently assessing the impact of IFRS 16. The standard has yet to be endorsed by the EU.



## 03 – Acquisitions and Dispositions

### Business Combinations completed in 2016, 2015 and 2014

During the years 2016, 2015 and 2014, the Group did not undertake any acquisitions accounted for as business combinations.

### Acquisitions and Dispositions of Noncontrolling Interests while Retaining Control

During 2016 and 2015, the Group did not engage in acquisitions or dispositions of noncontrolling interests while retaining control over the related subsidiaries.

#### Postbank

In concluding the domination agreement with Deutsche Postbank AG ("Postbank") in 2012, Deutsche Bank had derecognized from the Group's total equity the remaining noncontrolling interest of €248 million in Postbank as the minority shareholders ceased to have access to the risks and rewards of ownership of the Postbank shares. Through December 31, 2014, a total of approximately 0.5 million Postbank shares (equal to about 0.22 % of total Postbank shares outstanding) were tendered by minority shareholders to Deutsche Bank under the domination agreement, thereby increasing the Group's direct shareholding to 94.1 % at that time.

On April 22, 2015, Deutsche Bank signed an agreement to purchase an additional 5.9 million (2.7 %) of the Postbank shares, thereby increasing the Group's ownership stake from 94.1 % to 96.8 %. Overall, the transaction resulted in a loss before income tax of approximately €92 million recorded in C&A in the second quarter 2015. On April 27, 2015, Deutsche Bank requested Postbank to prepare a squeeze-out of the minority shareholders pursuant to Section 327a et seq. of the German Stock Corporation Act. In the specified squeeze-out request to Postbank on July 7, 2015, the amount of cash compensation was set at €35.05 per Postbank share. After approval of the squeeze-out at the Postbank annual general meeting held on August 28, 2015, a loss before income tax of €69 million was recorded in the third quarter 2015 in C&A. After a clearance proceeding in front of the Higher Regional Court Cologne, the squeeze-out was entered into the commercial register on December 21, 2015. At settlement on December 30, 2015, Deutsche Bank acquired the remaining 3.2 % shares in Postbank for a total consideration of €245 million and so owns directly and indirectly 100 % of the Postbank shares.

The Postbank shares have been de-listed from all stock exchanges between December 21, 2015 and January 13, 2016.

### Dispositions

During 2016, 2015 and 2014, the Group finalized several dispositions of subsidiaries/businesses. These disposals mainly included businesses the Group had previously classified as held for sale, including those of Abbey Life and Maher Terminals Port Elizabeth which were disposed of in 2016 (for more detail on these two transactions, please refer to Note 27 "Non-Current Assets and Disposal Groups Held for Sale"). The total cash consideration received for these dispositions in 2016, 2015 and 2014 was €2.0 billion, €555 million and €1.9 billion, respectively. The table below shows the assets and liabilities that were included in these disposals.

in €m.	2016	2015	2014
Cash and cash equivalents	0	0	0
All remaining assets	14,858	443	8,346
<b>Total assets disposed</b>	<b>14,858</b>	<b>443</b>	<b>8,346</b>
Total liabilities disposed	12,250	52	6,602

## 04 – Business Segments and Related Information

The Group's segmental information has been prepared in accordance with the "management approach", which requires presentation of the segments on the basis of the internal management reports of the entity which are regularly reviewed by the chief operating decision maker, which is the Deutsche Bank Management Board, in order to allocate resources to a segment and to assess its financial performance.

Starting first quarter 2014, net interest income as a component of net revenue, income (loss) before income taxes and related ratios is presented on a fully taxable-equivalent basis for U.S. tax-exempt securities for Global Markets. This enables management to measure performance of taxable and tax-exempt securities on a comparable basis. This change in presentation resulted in an increase in Global Markets net interest income of €126.4 million for full year 2016 (€122.8 million for full year 2015, €65.4 million for full year 2014). This increase is offset in Group Consolidated figures through a reversal in C&A. The tax rate used in determining the fully taxable-equivalent net interest income in respect of the majority of the US tax-exempt securities is 35 %. US tax-exempt securities held by NCOU are not being presented on a fully taxable-equivalent basis due to differing approaches in the management of core and noncore activities.

### Business Segments

The Group's segment reporting follows the organizational structure as reflected in its internal management reporting systems, which are the basis for assessing the financial performance of the business segments and for allocating resources to the business segments. Generally, restatements due to changes in the organizational structure were implemented in the presentation of prior period comparables if they were considered in the Group's management reporting systems.

From 2016 onwards and in accordance with our targets originally announced in October 2015 our business operations have been organized under the following segments:

- Global Markets ("GM"),
- Corporate & Investment Banking ("CIB"),
- Private, Wealth and Commercial Clients ("PW&CC"),
- Deutsche Asset Management ("Deutsche AM"),
- Postbank ("PB") and
- Non-Core Operations Unit ("NCOU")

The key changes in 2016 are outlined below.

Global Markets ("GM") – Effective from first quarter of 2016, GM included the sales and trading related activities of our former Corporate Banking & Securities ("CB&S") segment. Revenues related to certain financing activities previously included within "Loan Products" in CB&S were included within "Sales & Trading - debt and other products". Mark-to-market gains/losses relating to RWA mitigation on Credit Valuation Adjustment (CVA) RWA, Funding Valuation Adjustment (FVA) and certain CVA calculation methodology refinements previously reported under "Sales & Trading" revenues were included in "Other". Debt Valuation Adjustment (DVA) continued to be reported within "Other". This category also included transfers from and to our segment Corporate & Investment Banking ("CIB") resulting from client coverage and product distribution. Additionally in the second quarter of 2016 the transfer of businesses from Deutsche AM to GM resulted in the re-assignment of goodwill based on relative values in accordance with IFRS. The subsequent impairment review led to an impairment loss of €285 million in Global Markets.

Corporate & Investment Banking ("CIB") – Effective from first quarter of 2016, CIB combined the Corporate Finance business components of our former Corporate Banking and Securities ("CB&S") and Global Transaction Banking ("GTB") businesses. Transfers from and to our segment Global Markets related to client coverage and product distribution were included in "Loan Products & Other".

Private, Wealth and Commercial Clients ("PW&CC") – Within the segment PW&CC, in the first quarter of 2016, we had combined our German and International Private and Commercial Clients ("PCC") businesses formerly included in the Private & Business Clients ("PBC") segment with the Wealth Management ("WM") activities formerly included in Deutsche Asset & Wealth management ("DeAWM"). Revenues from Hua Xia Bank are presented separately within PW&CC to reflect the disposal of this investment as part of our targets originally announced in October 2015.

Deutsche Asset Management ("Deutsche AM") – Since the first quarter of 2016, Deutsche AM contained the Asset Management activities included in our former DeAWM segment and focused on providing investment solutions to institutions and intermediaries that serve individual clients. In the second quarter of 2016 the transfer of businesses to GM resulted in a re-assignment of, goodwill from Deutsche AM to GM based on relative values in accordance with IFRS.

Postbank ("PB") – To reflect the planned deconsolidation as formulated in our targets originally announced in October 2015, effective from first quarter of 2016, PB was presented as a separate segment, which combined both core components and non-core components of Postbank previously recorded in our NCOU segment. The reported numbers in the Postbank segment will deviate from Postbank's stand-alone reporting as a consequence of consolidation effects and the impact of purchase price allocation items.

Non-core Operations Unit ("NCOU") – As a key change compared to our former structure, effective from first quarter 2016, our NCOU segment no longer contains the aforementioned non-core components related to Postbank.

The goodwill impairment losses in our 2015 results related to CB&S and PBC were allocated to the new segments Global Markets/Corporate & Investment Banking and PW&CC/Postbank respectively based on the goodwill balances related to these business units prior to the third quarter of 2015 impairment.

Certain Liquidity Management activities previously included within our business segments are centrally managed by Treasury and therefore have been transferred to Consolidation & Adjustments, since first quarter of 2016, and are reflected in our business segments on an allocated basis. In the second quarter of 2016, the Liquidity Portfolio business of Asia excluding Japan has been transferred from Global Markets to Treasury.

## Measurement of Segment Profit or Loss

Segment reporting requires a presentation of the segment results based on management reporting methods, including a reconciliation between the results of the business segments and the consolidated financial statements, which is presented in the "Management Report: Operating and Financial Review: Deutsche Bank Group: Corporate Divisions: Consolidation & Adjustments". The information provided about each segment is based on internal management reporting about segment profit or loss, assets and other information which is regularly reviewed by the chief operating decision maker. Segment assets are presented in the Group's internal management reporting based on a consolidated view, i.e., the amounts do not include intersegment balances.

Non-IFRS compliant accounting methods are rarely used in the Group's management reporting and represent either valuation or classification differences. The largest valuation differences relate to measurement at fair value in management reporting versus measurement at amortized cost under IFRS (for example, for certain financial instruments in the Group's treasury books in GM and PW&CC) and to the recognition of trading results from own shares in revenues

in management reporting (mainly in GM) and in equity under IFRS. The major classification difference relates to noncontrolling interest, which represents the net share of minority shareholders in revenues, provision for credit losses, noninterest expenses and income tax expenses. Noncontrolling interest is reported as a component of pre-tax income for the businesses in management reporting (with a reversal in C&A) and a component of net income appropriation under IFRS.

Since the Group's business activities are diverse in nature and its operations are integrated, certain estimates and judgments have been made to apportion revenue and expense items among the business segments.

The management reporting systems allocate the Group's external net interest income according to the value of funding consumed or provided by each segment's activities, with transfer pricing referencing the Group's access to financing in the wholesale markets. Furthermore, to retain comparability with those competitors that have their own equity funding, the Group allocates a net notional interest credit on its consolidated capital, in line with each segment's proportion of average shareholders' equity.

Management uses certain measures for equity and related ratios as part of its internal reporting system because it believes that these measures provide it with a useful indication of the financial performance of the business segments. The Group discloses such measures to provide investors and analysts with further insight into how management operates the Group's businesses and to enable them to better understand the Group's results. These measures include:

**Average Shareholders' Equity** – The average shareholders' equity is calculated as average of total shareholders' equity according to IFRS, at the beginning of the period and at the end of the period. The total amount of average shareholders' equity allocated is determined based on the higher of the Group's overall economic risk exposure and the regulatory capital demand. Starting 2016, the Group refined its capital allocation and moved to allocating average shareholders' equity instead of average active equity to the business segments. Under the new methodology, capital held against goodwill and other intangibles is now more comprehensively allocated, allowing the determination of allocated tangible shareholders' equity to reflect the communicated profitability target. The Group's overall economic risk exposure requirement is driven by our internal capital adequacy thresholds for status "normal" as defined in DB Group's risk appetite framework. Since January 2016, the regulatory capital demand is based on our externally communicated target ratios, i.e. a Common Equity Tier 1 target ratio of 12.5 % (10 % in early 2015 and 11 % from June 2015 onwards) and on a Leverage target ratio of 4.5 % (3.5 % in early 2015 and 5 % from June 2015 onwards) both at a Group level and assuming full implementation of CRR/CRD 4 rules. If the Group exceeds the Common Equity Tier 1 target ratio and the Leverage target ratio, excess average shareholders' equity is assigned to C&A. The allocation of average shareholders' equity to business segments reflects the contribution to both aforementioned targets. Segment average shareholders' equity in December 2014 represents the spot values for the period. The difference between the spot values of the segments and the average group amount is captured in C&A.

## Segmental Results of Operations

For the results of the business segments, including the reconciliation to the consolidated results of operations under IFRS please see "Management Report: Operating and Financial Review: Results of Operations: Segment Results of Operations".

## Entity-Wide Disclosures

The Group's Entity-Wide Disclosures include net revenues from internal and external counterparties. Excluding revenues from internal counterparties would require disproportionate IT investment and is not in line with the Bank's management approach. For detail on our Net Revenue Components please see "Management Report: Operating and Financial Review: Results of Operations: Corporate Divisions".

The following table presents total net revenues (before provisions for credit losses) by geographic area for the years ended December 31, 2016, 2015 and 2014, respectively. The information presented for GM, CIB, PW&CC, AM, PB and NCOU has been classified based primarily on the location of the Group's office in which the revenues are recorded. The information for C&A is presented on a global level only, as management responsibility for C&A is held centrally.

in € m.	2016	2015	2014
Germany:			
Global Markets	533	444	538
Corporate & Investment Banking	1,391	1,498	1,595
Private, Wealth & Commercial Clients	4,198	4,162	4,513
Deutsche Asset Management	888	963	906
Postbank	3,366	3,113	3,259
Non-Core Operations Unit	221	105	132
<b>Total Germany</b>	<b>10,597</b>	<b>10,284</b>	<b>10,942</b>
UK:			
Global Markets	3,411	4,114	2,739
Corporate & Investment Banking	888	1,192	998
Private, Wealth & Commercial Clients	83	77	76
Deutsche Asset Management	836	748	679
Postbank	0	(0)	(0)
Non-Core Operations Unit	(322)	(73)	8
<b>Total UK</b>	<b>4,896</b>	<b>6,059</b>	<b>4,498</b>
Rest of Europe, Middle East and Africa:			
Global Markets	261	305	550
Corporate & Investment Banking	1,278	1,337	1,275
Private, Wealth & Commercial Clients	2,360	2,110	2,317
Deutsche Asset Management	502	407	351
Postbank	0	0	0
Non-Core Operations Unit	23	9	2
<b>Total Rest of Europe, Middle East and Africa</b>	<b>4,425</b>	<b>4,167</b>	<b>4,494</b>
Americas (primarily United States):			
Global Markets	3,140	3,526	4,176
Corporate & Investment Banking	2,803	2,696	2,565
Private, Wealth & Commercial Clients	624	691	588
Deutsche Asset Management	578	727	538
Postbank	0	0	(21)
Non-Core Operations Unit	(305)	754	345
<b>Total Americas</b>	<b>6,840</b>	<b>8,394</b>	<b>8,192</b>
Asia/Pacific:			
Global Markets	1,945	2,469	2,067
Corporate & Investment Banking	1,122	1,323	1,234
Private, Wealth & Commercial Clients	451	469	375
Deutsche Asset Management	216	176	169
Postbank	0	(0)	0
Non-Core Operations Unit	1	(0)	2
<b>Total Asia/Pacific</b>	<b>3,736</b>	<b>4,436</b>	<b>3,847</b>
<b>Consolidation &amp; Adjustments</b>	<b>(479)</b>	<b>184</b>	<b>(26)</b>
<b>Consolidated net revenues<sup>1</sup></b>	<b>30,014</b>	<b>33,525</b>	<b>31,949</b>

<sup>1</sup> Consolidated net revenues comprise interest and similar income, interest expenses and total noninterest income (including net commission and fee income). Revenues are attributed to countries based on the location in which the Group's booking office is located. The location of a transaction on the Group's books is sometimes different from the location of the headquarters or other offices of a customer and different from the location of the Group's personnel who entered into or facilitated the transaction. Where the Group records a transaction involving its staff and customers and other third parties in different locations frequently depends on other considerations, such as the nature of the transaction, regulatory considerations and transaction processing considerations.

## Notes to the Consolidated Income Statement

### 05 –

### Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

#### Net Interest Income

in € m.	2016	2015	2014
<b>Interest and similar income:</b>			
Interest-earning deposits with banks	684	499	683
Central bank funds sold and securities purchased under resale agreements	359	377	408
Interest income on financial assets available for sale	1,313	1,292	1,341
Dividend income on financial assets available for sale	205	300	97
Loans	12,311	12,219	11,820
Interest income on securities held to maturity	67	0	0
Other	1,417	783	848
<b>Total Interest and similar income not at fair value through profit or loss</b>	<b>16,357</b>	<b>15,470</b>	<b>15,196</b>
Financial assets at fair value through profit or loss	9,279	10,496	9,805
<b>Total interest and similar income</b>	<b>25,636</b>	<b>25,967</b>	<b>25,001</b>
<b>Interest expense:</b>			
Interest-bearing deposits	2,583	2,764	3,210
Central bank funds purchased and securities sold under repurchase agreements	255	153	160
Other short-term borrowings	179	229	214
Long-term debt	1,759	1,480	1,882
Trust preferred securities	437	568	785
Other	1,083	357	214
<b>Total Interest expense not at fair value through profit or loss</b>	<b>6,295</b>	<b>5,552</b>	<b>6,465</b>
Financial liabilities at fair value through profit or loss	4,634	4,534	4,264
<b>Total interest expense</b>	<b>10,929</b>	<b>10,086</b>	<b>10,729</b>
<b>Net interest income</b>	<b>14,707</b>	<b>15,881</b>	<b>14,272</b>

Interest income recorded on impaired financial assets was €63 million, €67 million and €94 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss**

in € m.	2016	2015	2014
<b>Trading income:</b>			
Sales & Trading (equity)	608	542	2,125
Sales & Trading (debt and other products)	3,462	4,108	3,203
Total Sales & Trading	4,071	4,649	5,329
Other trading income	(3,524)	(775)	(922)
<b>Total trading income</b>	<b>547</b>	<b>3,874</b>	<b>4,407</b>
<b>Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss:</b>			
Breakdown by financial asset/liability category:			
Securities purchased/sold under resale/repurchase agreements	(3)	3	(15)
Securities borrowed/loaned	1	0	0
Loans and loan commitments	(109)	(453)	(20)
Deposits	(28)	0	(1)
Long-term debt <sup>1</sup>	303	761	(538)
Other financial assets/liabilities designated at fair value through profit or loss	691	(344)	467
<b>Total net gains (losses) on financial assets/liabilities designated at fair value through profit or loss</b>	<b>854</b>	<b>(32)</b>	<b>(108)</b>
<b>Total net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>1,401</b>	<b>3,842</b>	<b>4,299</b>

<sup>1</sup> Includes €0 million, €(0.5) million and €48 million from securitization structures for the years ended December 31, 2016, 2015 and 2014, respectively. Fair value movements on related instruments of €0 million, €0.8 million and €(315) million for December 31, 2016, 2015 and 2014, respectively, are reported within trading income. The total of these gains and losses represents the Group's share of the losses in these consolidated securitization structures.

**Combined Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss**

in € m.	2016	2015	2014
<b>Net interest income</b>	<b>14,707</b>	<b>15,881</b>	<b>14,272</b>
Trading income <sup>1</sup>	547	3,874	4,407
<b>Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss</b>	<b>854</b>	<b>(32)</b>	<b>(108)</b>
<b>Total net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>1,401</b>	<b>3,842</b>	<b>4,299</b>
<b>Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>16,108</b>	<b>19,723</b>	<b>18,570</b>
Sales & Trading (equity)	1,979	2,887	2,639
Sales & Trading (debt and other products)	7,452	8,215	7,328
Total Sales & Trading	9,431	11,102	9,967
Other	(204)	(360)	(785)
Global Markets	9,227	10,742	9,182
Corporate & Investment Banking	2,090	2,215	1,969
Private, Wealth & Commercial Clients	3,877	3,862	3,973
Deutsche Asset Management	364	255	398
Postbank	2,175	2,316	2,165
Non-Core Operations Unit	(1,261)	(353)	(310)
Consolidation & Adjustments	(363)	685	1,193
<b>Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss</b>	<b>16,108</b>	<b>19,723</b>	<b>18,570</b>

<sup>1</sup> Trading income includes gains and losses from derivatives not qualifying for hedge accounting.

The Group's trading and risk management businesses include significant activities in interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments designated at fair value through profit or loss (i.e., coupon and dividend income), and the costs of funding net trading positions, are part of net interest income. The Group's trading activities can periodically drive income to either net interest income or to net gains (losses) of financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies. The above table combines net interest income and net gains (losses) of financial assets/liabilities at fair value through profit or loss by business division and by product within Global Markets.

## 06 – Commissions and Fee Income

in € m.	2016	2015	2014
<b>Commission and fee income and expense:</b>			
Commission and fee income	14,999	16,412	15,746
Commission and fee expense	3,255	3,647	3,337
<b>Net commissions and fee income</b>	<b>11,744</b>	<b>12,765</b>	<b>12,409</b>

in € m.	2016	2015	2014
<b>Net commissions and fee income:</b>			
Net commissions and fees from fiduciary activities	4,287	4,480	3,745
Net commissions, brokers' fees, mark-ups on securities underwriting and other securities activities	3,305	4,134	4,033
Net fees for other customer services	4,152	4,151	4,632
<b>Net commissions and fee income</b>	<b>11,744</b>	<b>12,765</b>	<b>12,409</b>

## 07 – Net Gains (Losses) on Financial Assets Available for Sale

in € m.	2016	2015	2014
<b>Net gains (losses) on financial assets available for sale:</b>			
Net gains (losses) on debt securities:	229	48	153
Net gains (losses) from disposal	230	58	144
Impairments	(1)	(10)	9
Net gains (losses) on equity securities:	79	104	109
Net gains (losses) from disposal/remeasurement	96	156	121
Impairments	(17)	(52)	(12)
Net gains (losses) on loans:	6	52	(9)
Net gains (losses) from disposal	21	83	16
Impairments	(15)	(31)	(25)
Reversal of impairments	0	0	0
Net gains (losses) on other equity interests:	339	1	(12)
Net gains (losses) from disposal	348	14	9
Impairments	(9)	(13)	(21)
<b>Total net gains (losses) on financial assets available for sale</b>	<b>653</b>	<b>203</b>	<b>242</b>

Please also refer to Note 16 "Financial Assets Available for Sale" of this report.



## 08 – Other Income

in € m.	2016	2015	2014
<b>Other income:</b>			
Net income from investment properties	31	40	57
Net gains (losses) on disposal of investment properties	(45)	(18)	5
Net gains (losses) on disposal of consolidated subsidiaries	(3)	(24)	18
Net gains (losses) on disposal of loans	(128)	237	(2)
Insurance premiums <sup>1</sup>	89	108	141
Net income (loss) from hedge relationships qualifying for hedge accounting	(370)	(910)	(1,349)
Consolidated investments	362	470	949
Remaining other income <sup>2</sup>	1,118	763	290
<b>Total other income (loss)</b>	<b>1,053</b>	<b>669</b>	<b>108</b>

<sup>1</sup> Net of reinsurance premiums paid. The development is primarily driven by Abbey Life Assurance Company Limited.

<sup>2</sup> Includes net gains of € 744 million, € 237 million and € 111 million for the years ended December 31, 2016, 2015 and 2014, respectively, that are related to non-current assets and disposal groups held for sale.

## 09 – General and Administrative Expenses

in € m.	2016	2015	2014
<b>General and administrative expenses:</b>			
IT costs	3,872	3,664	3,333
Occupancy, furniture and equipment expenses	1,972	1,944	1,978
Professional service fees	2,305	2,283	2,029
Communication and data services	761	807	725
Travel and representation expenses	450	505	521
Banking and transaction charges	664	598	660
Marketing expenses	285	294	293
Consolidated investments	334	406	811
Other expenses <sup>1</sup>	4,812	8,129	4,305
<b>Total general and administrative expenses</b>	<b>15,454</b>	<b>18,632</b>	<b>14,654</b>

<sup>1</sup> Includes litigation related expenses of € 2.4 billion in 2016, € 5.2 billion in 2015 and € 1.6 billion in 2014. See Note 30 "Provisions", for more detail on litigation.

## 10 – Restructuring

Restructuring forms part of the Group's targets originally announced in October 2015. It contains initiatives to reposition Investment Banking, reshape the retail business, rationalize the geographic footprint and transform the operating model – with the aim of achieving net savings of € 1.0 to 1.5 billion by 2018.

Restructuring expense is comprised of termination benefits, additional expenses covering the acceleration of deferred compensation awards not yet amortized due to the discontinuation of employment and contract termination costs related to real estate.

in € m.	2016	2015	2014
Global Markets	(127)	(89)	(92)
Corporate & Investment Banking	(165)	(39)	(29)
Private, Wealth & Commercial Clients	(141)	(585)	(9)
Deutsche Asset Management	(47)	2	3
Non-Core Operations Unit	(4)	1	(4)
Consolidation & Adjustments	0	0	(1)
<b>Total Net Restructuring Charges</b>	<b>(484)</b>	<b>(710)</b>	<b>(133)</b>

The majority of the net restructuring expense 2016 relates to Infrastructure functions which are allocated to the business divisions whereas Infrastructure staff affected by the restructuring programs are shown separately in the table below.

in € m.	2016	2015	2014
Restructuring – Staff related	(491)	(663)	(124)
thereof:			
Termination Benefits	(432)	(602)	(94)
Retention Acceleration	(54)	(61)	(29)
Social Security	(5)	(0)	(1)
Restructuring – Non Staff related	7	(46)	(9)
<b>Total Net Restructuring Charges</b>	<b>(484)</b>	<b>(710)</b>	<b>(133)</b>

Provisions for restructuring amounted to €741 million and €651 million as of December 31, 2016 and December 31, 2015, respectively. The majority of the current provisions for restructuring are expected to be utilized in the next two years.

During 2016, 1,451 full-time equivalent staff was reduced through restructuring (2015: 662).

Full-time equivalent staff	2016	2015
Global Markets	162	134
Corporate & Investment Banking	194	103
Private, Wealth & Commercial Clients	453	141
Deutsche Asset Management	101	22
Non-Core Operations Unit	0	1
Infrastructure/Regional Management	541	261
<b>Total full-time equivalent staff</b>	<b>1,451</b>	<b>662</b>

## 11 – Earnings per Share

Basic earnings per share amounts are computed by dividing net income (loss) attributable to Deutsche Bank shareholders by the average number of common shares outstanding during the year. The average number of common shares outstanding is defined as the average number of common shares issued, reduced by the average number of shares in treasury and by the average number of shares that will be acquired under physically-settled forward purchase contracts, and increased by undistributed vested shares awarded under deferred share plans.

Diluted earnings per share assumes the conversion into common shares of outstanding securities or other contracts to issue common stock, such as share options, convertible debt, unvested deferred share awards and forward contracts. The aforementioned instruments are only included in the calculation of diluted earnings per share if they are dilutive in the respective reporting period.

### Computation of basic and diluted earnings per share

in € m.	2016	2015	2014
Net income (loss) attributable to Deutsche Bank shareholders – numerator for basic earnings per share <sup>1</sup>	(1,678)	(7,022)	1,663
Effect of dilutive securities:			
Forwards and options	0	0	0
Convertible debt	0	0	0
Net income (loss) attributable to Deutsche Bank shareholders after assumed conversions – numerator for diluted earnings per share <sup>1</sup>	(1,678)	(7,022)	1,663
Number of shares in million			
Weighted-average shares outstanding – denominator for basic earnings per share	1,388.1	1,387.9	1,241.9
Effect of dilutive securities:			
Forwards	0.0	0.0	0.0
Employee stock compensation options	0.0	0.0	0.0
Deferred shares	0.0	0.0	27.6
Other (including trading options)	0.0	0.0	0.0
Dilutive potential common shares	0.0	0.0	27.6
Adjusted weighted-average shares after assumed conversions – denominator for diluted earnings per share	1,388.1	1,387.9	1,269.5

<sup>1</sup> Earnings were adjusted by €276 and €228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2016 and April 2015.

### Earnings per share

in €	2016	2015	2014
Basic earnings per share	(1.21)	(5.06)	1.34
Diluted earnings per share	(1.21)	(5.06)	1.31

On June 25, 2014, Deutsche Bank AG completed a capital increase with subscription rights. As the subscription price of the new shares was lower than the market price of the existing shares, the capital increase included a bonus element. According to IAS 33, the bonus element is the result of an implicit change in the number of shares outstanding for all periods prior to the capital increase without a fully proportionate change in resources. As a consequence, the weighted average number of shares outstanding has been adjusted retrospectively.

Due to the net loss situation for 2016 and 2015 potentially dilutive shares are generally not considered for the earnings per share calculation, because to do so would have been anti-dilutive and hence decreased the net loss per share.

### Instruments outstanding and not included in the calculation of diluted earnings per share<sup>1</sup>

Number of shares in m.	2016	2015	2014
Call options sold	0.0	0.0	0.0
Employee stock compensation options	0.0	0.0	0.1
Deferred shares	69.6	52.5	0.0

<sup>1</sup> Not included in the calculation of diluted earnings per share, because to do so would have been anti-dilutive.

## Notes to the Consolidated Balance Sheet

### 12 – Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Financial assets classified as held for trading:</b>		
Trading assets:		
Trading securities	156,926	179,256
Other trading assets <sup>1</sup>	14,117	16,779
Total trading assets	171,044	196,035
Positive market values from derivative financial instruments	485,150	515,594
<b>Total financial assets classified as held for trading</b>	<b>656,194</b>	<b>711,630</b>
<b>Financial assets designated at fair value through profit or loss:</b>		
Securities purchased under resale agreements	47,404	51,073
Securities borrowed	21,136	21,489
Loans	7,505	12,451
Other financial assets designated at fair value through profit or loss	11,541	24,240
<b>Total financial assets designated at fair value through profit or loss</b>	<b>87,587</b>	<b>109,253</b>
<b>Total financial assets at fair value through profit or loss</b>	<b>743,781</b>	<b>820,883</b>

<sup>1</sup> Includes traded loans of € 13.2 billion and € 15.5 billion at December 31, 2016 and 2015 respectively.

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Financial liabilities classified as held for trading:</b>		
Trading liabilities:		
Trading securities	56,592	51,326
Other trading liabilities	437	977
Total trading liabilities	57,029	52,303
Negative market values from derivative financial instruments	463,858	494,076
<b>Total financial liabilities classified as held for trading:</b>	<b>520,887</b>	<b>546,380</b>
<b>Financial liabilities designated at fair value through profit or loss:</b>		
Securities sold under repurchase agreements	50,397	31,637
Loan commitments	40	79
Long-term debt	6,473	8,710
Other financial liabilities designated at fair value through profit or loss	3,582	4,425
<b>Total financial liabilities designated at fair value through profit or loss</b>	<b>60,492</b>	<b>44,852</b>
Investment contract liabilities <sup>1</sup>	592	8,522
<b>Total financial liabilities at fair value through profit or loss</b>	<b>581,971</b>	<b>599,754</b>

<sup>1</sup> These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 "Insurance and Investment Contracts", for more detail on these contracts.

### Financial Assets & Liabilities designated at Fair Value through Profit or Loss

The Group has designated various lending relationships at fair value through profit or loss. Lending facilities consist of drawn loan assets and undrawn irrevocable loan commitments. The maximum exposure to credit risk on a drawn loan is its fair value. The Group's maximum exposure to credit risk on drawn loans, including securities purchased under resale agreements and securities borrowed, was €76 billion and €85 billion as of December 31, 2016, and 2015, respectively. Exposure to credit risk also exists for undrawn irrevocable loan commitments and is predominantly counterparty credit risk.

The credit risk on the securities purchased under resale agreements and securities borrowed designated under the fair value option is mitigated by the holding of collateral. The valuation of these instruments takes into account the credit enhancement in the form of the collateral received. As such there is no material movement during the year or cumulatively due to movements in counterparty credit risk on these instruments.

Changes in fair value of loans<sup>1</sup> and loan commitments attributable to movements in counterparty credit risk<sup>2</sup>

in € m.	Dec 31, 2016		Dec 31, 2015	
	Loans	Loan commitments	Loans	Loan commitments
Notional value of loans and loan commitments exposed to credit risk	3,604	3,357	4,455	8,604
Annual change in the fair value reflected in the Statement of Income	9	45	(0)	(46)
Cumulative change in the fair value <sup>3</sup>	9	37	9	29
Notional of credit derivatives used to mitigate credit risk	358	4,997	257	4,203
Annual change in the fair value reflected in the Statement of Income	(1)	(3)	(2)	1
Cumulative change in the fair value <sup>3</sup>	(2)	(6)	(4)	(154)

<sup>1</sup> Where the loans are over-collateralized there is no material movement in valuation during the year or cumulatively due to movements in counterparty credit risk.

<sup>2</sup> Determined using valuation models that exclude the fair value impact associated with market risk.

<sup>3</sup> Changes are attributable to loans and loan commitments held at reporting date, which may differ from those held in prior periods. No adjustments are made to prior year to reflect differences in the underlying population.

Changes in fair value of financial liabilities attributable to movements in the Group's credit risk<sup>1</sup>

in € m.	Dec 31, 2016	Dec 31, 2015 <sup>2</sup>
Annual change in the fair value reflected in the Statement of Income	(73)	(78)
Cumulative change in the fair value	11	71

<sup>1</sup> The fair value of a financial liability incorporates the credit risk of that financial liability. Changes in the fair value of financial liabilities issued by consolidated structured entities have been excluded as this is not related to the Group's credit risk but to that of the legally isolated structured entity, which is dependent on the collateral it holds.

The excess of the contractual amount repayable at maturity over the carrying value of financial liabilities<sup>1</sup>

in € m.	Dec 31, 2016	Dec 31, 2015
Including undrawn loan commitments <sup>2</sup>	8,396	10,513
Excluding undrawn loan commitments	2,779	2,203

<sup>1</sup> Assuming the liability is extinguished at the earliest contractual maturity that the Group can be required to repay. When the amount payable is not fixed, it is determined by reference to conditions existing at the reporting date.

<sup>2</sup> The contractual cash flows at maturity for undrawn loan commitments assume full drawdown of the facility.

## 13 – Amendments to IAS 39 and IFRS 7, “Reclassification of Financial Assets”

Under the amendments to IAS 39 and IFRS 7, issued in October 2008, certain financial assets were reclassified in the second half of 2008 and the first quarter 2009 from the financial assets at fair value through profit or loss and the available for sale classifications into the loans classification. No reclassifications have been made since the first quarter 2009.

The Group identified assets, eligible under the amendments, for which at the reclassification date it had a clear change of intent and ability to hold for the foreseeable future rather than to exit or trade in the short term. The reclassifications were made at the fair value of the assets at the reclassification date.

## Reclassified Financial Assets

in € bn. (unless stated otherwise)	Trading assets reclassified to loans	Financial assets available for sale reclassified to loans
Carrying value at reclassification date	26.6	11.4
Unrealized fair value losses in accumulated other comprehensive income	0.0	(1.1)
Effective interest rates at reclassification date:		
upper range	13.1 %	9.9 %
lower range	2.8 %	3.9 %
Expected recoverable cash flows at reclassification date	39.6	17.6

**Carrying values and fair values by asset type of assets reclassified in 2008 and 2009**

in € m.	Dec 31, 2016		Dec 31, 2015	
	Carrying value	Fair value	Carrying value	Fair Value
Trading assets reclassified to loans:				
Securitization assets	340	260	1,382	1,346
Debt securities	0	0	396	405
Loans	174	154	916	857
<b>Total trading assets reclassified to loans</b>	<b>514</b>	<b>414</b>	<b>2,695</b>	<b>2,608</b>
Financial assets available for sale reclassified to loans:				
Securitization assets	105	105	1,540	1,470
Debt securities	0	0	168	179
<b>Total financial assets available for sale reclassified to loans</b>	<b>105</b>	<b>105</b>	<b>1,708</b>	<b>1,648</b>
<b>Total financial assets reclassified to loans</b>	<b>619<sup>1</sup></b>	<b>519</b>	<b>4,403</b>	<b>4,256</b>

<sup>1</sup> There is an associated effect on the carrying value from effective fair value hedge accounting for interest rate risk to the carrying value of the reclassified assets shown in the table above. This effect increases carrying value by €0 million and decreases by €3 million as at December 31, 2016 and December 31, 2015 respectively.

Through December 31, 2016, all reclassified assets were managed by the NCOU and disposal decisions across this portfolio are made by the NCOU in accordance with its remit to take the de-risking decisions. For the year ended December 31, 2016, the Group sold reclassified assets with a carrying value of €3.4 billion, resulting in a net loss of €154 million on positions sold.

In addition to sales, the decrease in the carrying value of assets previously classified as trading reduced due to redemptions of €29 million. The reduction in the carrying value of assets previously classified as available for sale includes redemptions of €428 million.

**Unrealized fair value gains (losses) that would have been recognized in profit or loss and net gains (losses) that would have been recognized in other comprehensive income if the reclassifications had not been made**

in € m.	2016	2015	2014
Unrealized fair value gains (losses) on the reclassified trading assets, gross of provisions for credit losses	0	141	342
Impairment (losses)/Reversal on the reclassified financial assets available for sale which were impaired	0	12	(6)
Net gains (losses) recognized in other comprehensive income representing additional unrealized fair value gains (losses) on the reclassified financial assets available for sale which were not impaired	1	(32)	137

**Pre-tax contribution of all reclassified assets to the income statement**

in € m.	2016	2015	2014
Interest income	45	127	161
Provision for credit losses	(74)	28	(40)
Other income <sup>1</sup>	(4)	199	5
<b>Income before income taxes on reclassified trading assets</b>	<b>(33)</b>	<b>353</b>	<b>126</b>
Interest income	7	54	97
Provision for credit losses	34	16	(13)
Other income <sup>1</sup>	(150)	72	0
<b>Income before income taxes on reclassified financial assets available for sale</b>	<b>(110)</b>	<b>142</b>	<b>84</b>

<sup>1</sup> Relates to gains and losses from the sale of reclassified assets.

## Reclassified Financial Assets: Carrying values and fair values by asset class

All IAS 39 reclassified assets were transferred into the NCOU upon creation of the new division in the fourth quarter of 2012. The NCOU has been tasked to accelerate de-risking to reduce total capital demand and IFRS assets. A number of factors are considered in determining whether and when to sell assets including the income statement, regulatory capital and leverage impacts. The movements in carrying value and fair value are illustrated in the following table:

### Carrying values and fair values by asset class reclassified in 2008 and 2009

in € m.	Dec 31, 2016			Dec 31, 2015		
	Carrying value (CV)	Fair value (FV)	Unrealized gains/(losses)	Carrying value (CV)	Fair value (FV)	Unrealized gains/(losses)
Securitization assets and debt securities reclassified:						
US municipal bonds	0	0	0	405	423	19
Student loans ABS	0	0	0	1,456	1,478	22
CDO/CLO	143	126	(17)	534	498	(36)
Covered bond	298	235	(63)	298	234	(64)
Commercial mortgages securities	3	3	0	175	176	1
Residential mortgages ABS	0	0	0	92	93	1
Other <sup>1</sup>	0	0	0	529	498	(31)
<b>Total securitization assets and debt securities reclassified</b>	<b>445</b>	<b>364</b>	<b>(81)</b>	<b>3,487</b>	<b>3,400</b>	<b>(88)</b>
Loans reclassified:						
Commercial mortgages	0	0	0	56	54	(1)
Residential mortgages	174	154	(20)	810	753	(57)
Other	0	0	0	50	49	(1)
<b>Total loans reclassified</b>	<b>174</b>	<b>154</b>	<b>(20)</b>	<b>916</b>	<b>857</b>	<b>(59)</b>
<b>Total financial assets reclassified to loans</b>	<b>619</b>	<b>519</b>	<b>(100)</b>	<b>4,403</b>	<b>4,256</b>	<b>(147)</b>

<sup>1</sup> Includes asset backed securities related to the aviation industry and a mixture of other securitization assets and debt securities.

## Securitized Assets and Debt Securities

**CDO/CLO** – This comprises a diverse portfolio with a variety of underlying assets and tranching levels in the capital structure. The main movement in the carrying value is due to sales in the period.

**Covered Bonds** – The remaining exposure in the portfolio is to Spanish government issuers.

## Loans

**Residential Mortgages** – This category includes residential mortgages in the Italy, Spain and Germany. The carrying value reduced in the period mainly due to sale of residential mortgages in the UK.

## 14 – Financial Instruments carried at Fair Value

### Valuation Methods and Control

The Group has an established valuation control framework which governs internal control standards, methodologies, and procedures over the valuation process.

**Prices Quoted in Active Markets** – The fair value of instruments that are quoted in active markets are determined using the quoted prices where they represent prices at which regularly and recently occurring transactions take place.

**Valuation Techniques** – The Group uses valuation techniques to establish the fair value of instruments where prices, quoted in active markets, are not available. Valuation techniques used for financial instruments include modeling techniques, the use of indicative quotes for proxy instruments, quotes from recent and less regular transactions and broker quotes.

For some financial instruments a rate or other parameter, rather than a price, is quoted. Where this is the case then the market rate or parameter is used as an input to a valuation model to determine fair value. For some instruments, modeling techniques follow industry standard models, for example, discounted cash flow analysis and standard option pricing models. These models are dependent upon estimated future cash flows, discount factors and volatility levels. For more complex or unique instruments, more sophisticated modeling techniques are required, and may rely upon assumptions or more complex parameters such as correlations, prepayment speeds, default rates and loss severity.

Frequently, valuation models require multiple parameter inputs. Where possible, parameter inputs are based on observable data or are derived from the prices of relevant instruments traded in active markets. Where observable data is not available for parameter inputs, then other market information is considered. For example, indicative broker quotes and consensus pricing information are used to support parameter inputs where they are available. Where no observable information is available to support parameter inputs then they are based on other relevant sources of information such as prices for similar transactions, historic data, economic fundamentals, and research information, with appropriate adjustment to reflect the terms of the actual instrument being valued and current market conditions.

**Valuation Adjustments** – Valuation adjustments are an integral part of the valuation process. In making appropriate valuation adjustments, the Group follows methodologies that consider factors such as bid-offer spreads, liquidity, counterparty/own credit and funding risk. Bid-offer spread valuation adjustments are required to adjust mid market valuations to the appropriate bid or offer valuation. The bid or offer valuation is the best representation of the fair value for an instrument, and therefore its fair value. The carrying value of a long position is adjusted from mid to bid, and the carrying value of a short position is adjusted from mid to offer. Bid-offer valuation adjustments are determined from bid-offer prices observed in relevant trading activity and in quotes from other broker-dealers or other knowledgeable counterparties. Where the quoted price for the instrument is already a bid-offer price then no additional bid-offer valuation adjustment is necessary. Where the fair value of financial instruments is derived from a modeling technique, then the parameter inputs into that model are normally at a mid-market level. Such instruments are generally managed on a portfolio basis and, when specified criteria are met, valuation adjustments are taken to reflect the cost of closing out the net exposure the Bank has to individual market or counterparty risks. These adjustments are determined from bid-offer prices observed in relevant trading activity and quotes from other broker-dealers.

Where complex valuation models are used, or where less-liquid positions are being valued, then bid-offer levels for those positions may not be available directly from the market, and therefore for the close-out cost of these positions, models and parameters must be estimated. When these adjustments are designed, the Group closely examines the valuation risks associated with the model as well as the positions themselves, and the resulting adjustments are closely monitored on an ongoing basis.



Counterparty Credit Valuation Adjustments (CVAs) are required to cover expected credit losses to the extent that the valuation technique does not already include an expected credit loss factor relating to the non-performance risk of the counterparty. The CVA amount is applied to all relevant over-the-counter (OTC) derivatives, and is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the probability of default, based on available market information, including Credit Default Swap (CDS) spreads. Where counterparty CDS spreads are not available, relevant proxies are used.

The fair value of the Group's financial liabilities at fair value through profit or loss (i.e., OTC derivative liabilities and structured note liabilities designated at fair value through profit or loss) incorporates Debt Valuation Adjustments (DVA) to measure the change in the Group's own credit risk of the financial liability. For derivative liabilities the Group considers its own creditworthiness by assessing all counterparties' potential future exposure to the Group, taking into account any collateral posted by the Group, the effect of relevant netting arrangements, expected loss given default and the probability of default of the Group, based on the Group's market CDS level. The change in the Group's own credit risk for structured note liabilities is calculated by discounting the contractual cash flows of the instrument using the rate at which similar instruments would be issued at the measurement date as this reflects the value from the perspective of a market participant who holds the identical item as an asset.

When determining CVA and DVA, additional adjustments are made where appropriate to achieve fair value, due to the expected loss estimate of a particular arrangement, or where the credit risk being assessed differs in nature to that described by the available CDS instrument.

Funding Valuation Adjustments (FVA) are required to incorporate the market implied funding costs into the fair value of derivative positions. The FVA reflects a discounting spread applied to uncollateralized and partially collateralized derivatives and is determined by assessing the market-implied funding costs on both assets and liabilities.

Where there is uncertainty in the assumptions used within a modeling technique, an additional adjustment is taken to calibrate the model price to the expected market price of the financial instrument. Typically, such transactions have bid-offer levels which are less observable, and these adjustments aim to estimate the bid-offer by computing the liquidity-premium associated with the transaction. Where a financial instrument is of sufficient complexity that the cost of closing it out would be higher than the cost of closing out its component risks, then an additional adjustment is taken to reflect this.

We anticipate a change in fair value estimate for DVA on uncollateralized derivative liabilities during the first quarter 2017 to reflect the change of German legislation on the creditor hierarchy in bank insolvency introduced by the German Resolution Mechanism Act (Abwicklungsmechanismusgesetz), effective January 1, 2017. Under the respective provisions of the German Banking Act, as amended by the German Resolution Mechanism Act, obligations of banks resulting from certain senior unsecured debt instruments rank junior to their other senior unsecured obligations in the event of insolvency or resolution. As a result, various creditors, such as derivative counterparties, receive greater protection due to an additional buffer of senior unsecured debt instruments ranking below. The effect on unsecured derivative liabilities is to raise them from senior unsecured liabilities to the preferred class of senior unsecured liabilities in the capital waterfall. We therefore expect this to have an effect on the fair value of the portfolio of these derivatives in respect of own non-performance risk due to their higher expected recovery rate for our counterparty in the event of insolvency or resolution. This will result in a reduction in DVA and therefore cause a loss, estimated to be in the range of € 100 million to € 200 million.

**Validation and Control** – The Group has an independent specialized valuation control group within the Finance function which governs and develops the valuation control framework and manages the valuation control processes. The mandate of this specialist function includes the performance of the independent valuation control process for all businesses, the continued development of valuation control methodologies and techniques, as well as devising and governing the formal valuation control policy framework. Special attention of this independent valuation control group is directed to areas where management judgment forms part of the valuation process.

Results of the valuation control process are collected and analyzed as part of a standard monthly reporting cycle. Variances of differences outside of preset and approved tolerance levels are escalated both within the Finance function and with Senior Business Management for review, resolution and, if required, adjustment.

For instruments where fair value is determined from valuation models, the assumptions and techniques used within the models are independently validated by an independent specialist model validation group that is part of the Group's Risk Management function.

Quotes for transactions and parameter inputs are obtained from a number of third party sources including exchanges, pricing service providers, firm broker quotes and consensus pricing services. Price sources are examined and assessed to determine the quality of fair value information they represent, with greater emphasis given to those possessing greater valuation certainty and relevance. The results are compared against actual transactions in the market to ensure the model valuations are calibrated to market prices.

Price and parameter inputs to models, assumptions and valuation adjustments are verified against independent sources. Where they cannot be verified to independent sources due to lack of observable information, the estimate of fair value is subject to procedures to assess its reasonableness. Such procedures include performing revaluation using independently generated models (including where existing models are independently recalibrated), assessing the valuations against appropriate proxy instruments and other benchmarks, and performing extrapolation techniques. Assessment is made as to whether the valuation techniques produce fair value estimates that are reflective of market levels by calibrating the results of the valuation models against market transactions where possible.

## Fair Value Hierarchy

The financial instruments carried at fair value have been categorized under the three levels of the IFRS fair value hierarchy as follows:

**Level 1 – Instruments valued using quoted prices in active markets** are instruments where the fair value can be determined directly from prices which are quoted in active, liquid markets and where the instrument observed in the market is representative of that being priced in the Group's inventory.

These include: government bonds, exchange-traded derivatives and equity securities traded on active, liquid exchanges.

**Level 2 – Instruments valued with valuation techniques using observable market data** are instruments where the fair value can be determined by reference to similar instruments trading in active markets, or where a technique is used to derive the valuation but where all inputs to that technique are observable.

These include: many OTC derivatives; many investment-grade listed credit bonds; some CDS; many collateralized debt obligations (CDO); and many less-liquid equities.

**Level 3 – Instruments valued using valuation techniques using market data which is not directly observable** are instruments where the fair value cannot be determined directly by reference to market-observable information, and some other pricing technique must be employed. Instruments classified in this category have an element which is unobservable and which has a significant impact on the fair value.

These include: more-complex OTC derivatives; distressed debt; highly-structured bonds; illiquid asset-backed securities (ABS); illiquid CDO's (cash and synthetic); monoline exposures; some private equity placements; many commercial real estate (CRE) loans; illiquid loans; and some municipal bonds.

Carrying value of the financial instruments held at fair value<sup>1</sup>

in € m.	Dec 31, 2016			Dec 31, 2015		
	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
<b>Financial assets held at fair value:</b>						
Trading assets	89,943	70,415	10,686	90,031	93,253	12,751
Trading securities	89,694	62,220	5,012	89,718	82,869	6,669
Other trading assets	248	8,195	5,674	313	10,384	6,082
Positive market values from derivative financial instruments	13,773	461,579	9,798	5,629	500,520	9,445
Financial assets designated at fair value through profit or loss	10,118	75,867	1,601	18,024	86,751	4,478
Financial assets available for sale	28,695	23,380	4,153	43,260	25,449	4,874
Other financial assets at fair value	28	3,618 <sup>2</sup>	33	0	3,136 <sup>2</sup>	0
<b>Total financial assets held at fair value</b>	<b>142,558</b>	<b>634,860</b>	<b>26,271</b>	<b>156,943</b>	<b>709,109</b>	<b>31,549</b>
<b>Financial liabilities held at fair value:</b>						
Trading liabilities	41,664	15,311	52	40,185	12,102	18
Trading securities	41,664	14,874	52	40,154	11,155	18
Other trading liabilities	0	437	0	30	947	0
Negative market values from derivative financial instruments	13,616	441,386	8,857	5,528	480,668	7,879
Financial liabilities designated at fair value through profit or loss	4	58,259	2,229	2	41,797	3,053
Investment contract liabilities <sup>3</sup>	0	592	0	0	8,522	0
Other financial liabilities at fair value	0	4,647 <sup>2</sup>	(848) <sup>4</sup>	0	6,492 <sup>2</sup>	(1,146) <sup>4</sup>
<b>Total financial liabilities held at fair value</b>	<b>55,283</b>	<b>520,195</b>	<b>10,290</b>	<b>45,715</b>	<b>549,581</b>	<b>9,805</b>

<sup>1</sup> Amounts in this table are generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments, as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

<sup>2</sup> Predominantly relates to derivatives qualifying for hedge accounting.

<sup>3</sup> These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 "Insurance and Investment Contracts" for more detail on these contracts.

<sup>4</sup> Relates to derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated. The separated embedded derivatives may have a positive or a negative fair value but have been presented in this table to be consistent with the classification of the host contract. The separated embedded derivatives are held at fair value on a recurring basis and have been split between the fair value hierarchy classifications.

In 2016, there were transfers from Level 2 to Level 1 on trading securities (€5 billion of assets) based on liquidity testing procedures.

## Valuation Techniques

The following is an explanation of the valuation techniques used in establishing the fair value of the different types of financial instruments that the Group trades.

**Sovereign, Quasi-sovereign and Corporate Debt and Equity Securities** – Where there are no recent transactions then fair value may be determined from the last market price adjusted for all changes in risks and information since that date. Where a close proxy instrument is quoted in an active market then fair value is determined by adjusting the proxy value for differences in the risk profile of the instruments. Where close proxies are not available then fair value is estimated using more complex modeling techniques. These techniques include discounted cash flow models using current market rates for credit, interest, liquidity and other risks. For equity securities modeling techniques may also include those based on earnings multiples.

**Mortgage- and Other Asset-Backed Securities (MBS/ABS)** include residential and commercial MBS and other ABS including CDOs. ABS have specific characteristics as they have different underlying assets and the issuing entities have different capital structures. The complexity increases further where the underlying assets are themselves ABS, as is the case with many of the CDO instruments.

Where no reliable external pricing is available, ABS are valued, where applicable, using either relative value analysis which is performed based on similar transactions observable in the market, or industry-standard valuation models incorporating available observable inputs. The industry standard external models calculate principal and interest payments for a given deal based on assumptions that can be independently price tested. The inputs include prepayment speeds, loss assumptions (timing and severity) and a discount rate (spread, yield or discount margin). These inputs/assumptions are derived from actual transactions, external market research and market indices where appropriate.

**Loans** – For certain loans fair value may be determined from the market price on a recently occurring transaction adjusted for all changes in risks and information since that transaction date. Where there are no recent market transactions then broker quotes, consensus pricing, proxy instruments or discounted cash flow models are used to determine fair value. Discounted cash flow models incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan or CDS markets, where available and appropriate.

Leveraged loans can have transaction-specific characteristics which can limit the relevance of market-observed transactions. Where similar transactions exist for which observable quotes are available from external pricing services then this information is used with appropriate adjustments to reflect the transaction differences. When no similar transactions exist, a discounted cash flow valuation technique is used with credit spreads derived from the appropriate leveraged loan index, incorporating the industry classification, subordination of the loan, and any other relevant information on the loan and loan counterparty.

**Over-The-Counter Derivative Financial Instruments** – Market standard transactions in liquid trading markets, such as interest rate swaps, foreign exchange forward and option contracts in G7 currencies, and equity swap and option contracts on listed securities or indices are valued using market standard models and quoted parameter inputs. Parameter inputs are obtained from pricing services, consensus pricing services and recently occurring transactions in active markets wherever possible.

More complex instruments are modeled using more sophisticated modeling techniques specific for the instrument and are calibrated to available market prices. Where the model output value does not calibrate to a relevant market reference then valuation adjustments are made to the model output value to adjust for any difference. In less active markets, data is obtained from less frequent market transactions, broker quotes and through extrapolation and interpolation techniques. Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions.

**Financial Liabilities Designated at Fair Value through Profit or Loss under the Fair Value Option** – The fair value of financial liabilities designated at fair value through profit or loss under the fair value option incorporates all market risk factors including a measure of the Group's credit risk relevant for that financial liability. The financial liabilities include structured note issuances, structured deposits, and other structured securities issued by consolidated vehicles, which may not be quoted in an active market. The fair value of these financial liabilities is determined by discounting the contractual cash flows using the relevant credit-adjusted yield curve. The market risk parameters are valued consistently to similar instruments held as assets, for example, any derivatives embedded within the structured notes are valued using the same methodology discussed in the "Over-The-Counter Derivative Financial Instruments" section above.

Where the financial liabilities designated at fair value through profit or loss under the fair value option are collateralized, such as securities loaned and securities sold under repurchase agreements, the credit enhancement is factored into the fair valuation of the liability.

**Investment Contract Liabilities** – Assets which are linked to the investment contract liabilities are owned by the Group. The investment contract obliges the Group to use these assets to settle these liabilities. Therefore, the fair value of investment contract liabilities is determined by the fair value of the underlying assets (i.e., amount payable on surrender of the policies).

## Analysis of Financial Instruments with Fair Value Derived from Valuation Techniques Containing Significant Unobservable Parameters (Level 3)

Some of the instruments in Level 3 of the fair value hierarchy have identical or similar offsetting exposures to the unobservable input. However, according to IFRS they are required to be presented as gross assets and liabilities.

**Trading Securities** – Certain illiquid emerging market corporate bonds and illiquid highly structured corporate bonds are included in this level of the hierarchy. In addition, some of the holdings of notes issued by securitization entities, commercial and residential MBS, collateralized debt obligation securities and other ABS are reported here. The decrease in the year is mainly due to a combination of sales and settlements offset by purchases and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

**Positive and Negative Market Values from Derivative Instruments** categorized in this level of the fair value hierarchy are valued based on one or more significant unobservable parameters. The unobservable parameters may include certain correlations, certain longer-term volatilities, certain prepayment rates, credit spreads and other transaction-specific parameters.

Level 3 derivatives includes certain options where the volatility is unobservable; certain basket options in which the correlations between the referenced underlying assets are unobservable; longer-term interest rate option derivatives; multi-currency foreign exchange derivatives; and certain credit default swaps for which the credit spread is not observable.

During the fourth quarter of 2016, various enhancements to the fair value hierarchy leveling process were implemented in our Rates business including both the use of additional sensitivity tests and the factoring in of traded data more directly when assessing observability. Previously consensus and broker quote data was primarily used in the leveling decision, which was in turn back-tested periodically to traded data. In implementing these changes a new observability matrix was established based on product, parameter, currency and tenor. The approach to consider the observability for Fair Value Hierarchy purposes of counterparty credit spreads on certain uncollateralized derivative transactions was also enhanced. These enhancements enable all unobservable parameters to be considered in aggregate in the sensitivity test and the instrument is designated as Level 3 if the aggregate impact of those unobservable inputs is material to the instrument valuation. The impact of these changes was the transfer into Level 3 from Level 2 of approximately € 2.4 billion and € 1.6 billion of Financial Liabilities; this is reflected in the Transfers into Level 3 column of the Reconciliation of financial instruments classified in Level 3 of this disclosure.

The marginal increase in assets was due to transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments offset by settlements. The increase in liabilities was due to transfers between Level 2 and Level 3 offset by settlements.

**Other Trading Instruments** classified in Level 3 of the fair value hierarchy mainly consist of traded loans valued using valuation models based on one or more significant unobservable parameters. Level 3 loans comprise illiquid leveraged loans and illiquid residential and commercial mortgage loans. The balance decreased in the year due to Sales and Settlements offset by purchases, issuances and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

**Financial Assets/Liabilities designated at Fair Value through Profit or Loss** – Certain corporate loans and structured liabilities which were designated at fair value through profit or loss under the fair value option are categorized in this level of the fair value hierarchy. The corporate loans are valued using valuation techniques which incorporate observable credit spreads, recovery rates and unobservable utilization parameters. Revolving loan facilities are reported in the third level of the hierarchy because the utilization in the event of the default parameter is significant and unobservable.

In addition, certain hybrid debt issuances designated at fair value through profit or loss containing embedded derivatives are valued based on significant unobservable parameters. These unobservable parameters include single stock volatility correlations. Assets decreased during the year due to sales, settlements, transfers between Level 2 and Lev-

el 3 and due to deconsolidation of entities. Liabilities decreased in the year due to settlements and transfers between Level 2 and Level 3 offset by issuances.

**Financial Assets Available for Sale** include non-performing loan portfolios where there is no trading intent and unlisted equity instruments where there is no close proxy and the market is very illiquid. The decrease in assets in the year is due to sales and settlements offset by purchases.

## Reconciliation of financial instruments classified in Level 3

### Reconciliation of financial instruments classified in Level 3

Dec 31, 2016

in € m.	Balance, beginning of year	Changes in the group of consoli- dated com- panies	Total gains/ losses <sup>1</sup>	Purchases	Sales	Issu- ances <sup>2</sup>	Settle- ments <sup>3</sup>	Transfers into Level 3 <sup>4</sup>	Transfers out of Level 3 <sup>4</sup>	Balance, end of year
<b>Financial assets held at fair value:</b>										
Trading securities	6,669	(0)	143	1,736	(3,605)	0	(990)	1,589	(528)	5,012
Positive market values from derivative financial instruments	9,445	(60)	(88)	0	0	0	(1,290)	4,158	(2,367)	9,798
Other trading assets	6,082	66	56	2,196	(3,606)	735	(1,527)	2,616	(944)	5,674
Financial assets designated at fair value through profit or loss	4,478	(509)	40	2	(273)	131	(1,073)	86	(1,282)	1,601
Financial assets available for sale	4,874	(1)	255 <sup>5</sup>	920	(630)	0	(1,377)	187	(74)	4,153
Other financial assets at fair value	0	0	0	0	0	0	0	33	0	33
<b>Total financial assets held at fair value</b>	<b>31,549</b>	<b>(504)</b>	<b>405<sup>6,7</sup></b>	<b>4,853</b>	<b>(8,114)</b>	<b>866</b>	<b>(6,257)</b>	<b>8,669</b>	<b>(5,195)</b>	<b>26,271</b>
<b>Financial liabilities held at fair value:</b>										
Trading securities	18	0	0	0	0	0	34	0	(0)	52
Negative market values from derivative financial instruments	7,879	(317)	620	0	0	0	(508)	3,316	(2,134)	8,857
Other trading liabilities	0	0	0	0	0	0	0	0	0	0
Financial liabilities designated at fair value through profit or loss	3,053	0	(75)	0	0	587	(729)	245	(851)	2,229
Other financial liabilities at fair value	(1,146)	0	135	0	0	0	3	(26)	187	(848)
<b>Total financial liabilities held at fair value</b>	<b>9,805</b>	<b>(317)</b>	<b>680<sup>6,7</sup></b>	<b>0</b>	<b>0</b>	<b>587</b>	<b>(1,200)</b>	<b>3,534</b>	<b>(2,799)</b>	<b>10,290</b>

<sup>1</sup> Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets available for sale reported in the consolidated statement of income and unrealized net gains (losses) on financial assets available for sale and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in Level 1 or Level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within Level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.

<sup>2</sup> Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.

<sup>3</sup> Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.

<sup>4</sup> Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year.

<sup>5</sup> Total gains and losses on available for sale include a loss of €94 million recognized in other comprehensive income, net of tax, and a gain of €187 million recognized in the income statement presented in net gains (losses) on financial assets available for sale.

<sup>6</sup> This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a gain of €4 million and for total financial liabilities held at fair value this is a gain of €50 million. The effect of exchange rate changes is reported in other comprehensive income, net of tax.

<sup>7</sup> For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains.



Dec 31, 2015										
in € m.	Balance, beginning of year	Changes in the group of consolidated companies	Total gains/losses <sup>1</sup>	Purchases	Sales	Issuances <sup>2</sup>	Settlements <sup>3</sup>	Transfers into Level 3 <sup>4</sup>	Transfers out of Level 3 <sup>4</sup>	Balance, end of year
<b>Financial assets held at fair value:</b>										
Trading securities	8,957	0	512	1,844	(2,432)	0	(1,007)	766	(1,971)	6,669
Positive market values from derivative financial instruments	9,559	(0)	539	0	0	0	(1,363)	1,683	(973)	9,445
Other trading assets	4,198	0	413	2,527	(1,507)	1,264	(1,461)	970	(321)	6,082
Financial assets designated at fair value through profit or loss	4,152	0	234	467	(36)	1,172	(1,227)	239	(523)	4,478
Financial assets available for sale	4,427	(0)	439 <sup>5</sup>	1,058	(254)	0	(1,183)	469	(82)	4,874
Other financial assets at fair value <sup>6</sup>	0	0	0	0	0	0	0	0	0	0
<b>Total financial assets held at fair value</b>	<b>31,294</b>	<b>(0)</b>	<b>2,136<sup>6,7</sup></b>	<b>5,896</b>	<b>(4,230)</b>	<b>2,436</b>	<b>(6,240)</b>	<b>4,126</b>	<b>(3,869)</b>	<b>31,549</b>
<b>Financial liabilities held at fair value:</b>										
Trading securities	43	0	5	0	0	0	9	0	(39)	18
Negative market values from derivative financial instruments	6,553	0	716	0	0	0	(487)	1,904	(807)	7,879
Other trading liabilities	0	0	0	0	0	0	0	0	0	0
Financial liabilities designated at fair value through profit or loss	2,366	0	196	0	0	1,249	(692)	155	(221)	3,053
Other financial liabilities at fair value	(552)	0	(352)	0	0	0	(65)	(177)	0	(1,146)
<b>Total financial liabilities held at fair value</b>	<b>8,410</b>	<b>0</b>	<b>564<sup>6,7</sup></b>	<b>0</b>	<b>0</b>	<b>1,249</b>	<b>(1,234)</b>	<b>1,882</b>	<b>(1,067)</b>	<b>9,805</b>

<sup>1</sup> Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets available for sale reported in the consolidated statement of income and unrealized net gains (losses) on financial assets available for sale and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in Level 1 or Level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within Level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.

<sup>2</sup> Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.

<sup>3</sup> Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.

<sup>4</sup> Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year.

<sup>5</sup> Total gains and losses on available for sale include a gain of € 92 million recognized in other comprehensive income, net of tax, and a loss of € 13 million recognized in the income statement presented in net gains (losses) on financial assets available for sale.

<sup>6</sup> This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a gain of € 524 million and for total financial liabilities held at fair value this is a loss of € 161 million. The effect of exchange rate changes is reported in other comprehensive income, net of tax.

<sup>7</sup> For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains.

## Sensitivity Analysis of Unobservable Parameters

Where the value of financial instruments is dependent on unobservable parameter inputs, the precise level for these parameters at the balance sheet date might be drawn from a range of reasonably possible alternatives. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence and in line with the Group's approach to valuation control detailed above. Were the Group to have marked the financial instruments concerned using parameter values drawn from the extremes of the ranges of reasonably possible alternatives then as of December 31, 2016 it could have increased fair value by as much as € 1.8 billion or decreased fair value by as much as € 1.0 billion. As of December 31, 2015 it could have increased fair value by as much as € 2.1 billion or decreased fair value by as much as € 1.5 billion.

The changes in sensitive amounts from December 31, 2015 to December 31, 2016 show material reductions to both the positive fair value movement and to the negative fair value movement from using reasonable possible alternatives.

Both these moves are driven by the overall reduction in the Level 3 population in the same period (e.g. Group Level 3 assets down from €31.6 billion in December 31, 2015 to €26.3 billion in December 31, 2016), with this largely the result of de-risking, particularly in the Non-Core Operations Unit (Level 3 assets down from €5 billion in December 31, 2015 to €1 billion in December 31, 2016).

Our sensitivity calculation of unobservable parameters for Level 3 aligns to the approach used to assess valuation uncertainty for Prudent Valuation<sup>1</sup> purposes. This utilizes exit price analysis performed for the relevant assets and liabilities in the Prudent Valuation assessment. The downside sensitivity may be limited in some cases where the fair value is already demonstrably prudent.

This disclosure is intended to illustrate the potential impact of the relative uncertainty in the fair value of financial instruments for which valuation is dependent on unobservable input parameters. However, it is unlikely in practice that all unobservable parameters would be simultaneously at the extremes of their ranges of reasonably possible alternatives. Hence, the estimates disclosed above are likely to be greater than the true uncertainty in fair value at the balance sheet date. Furthermore, the disclosure is neither predictive nor indicative of future movements in fair value.

For many of the financial instruments considered here, in particular derivatives, unobservable input parameters represent only a subset of the parameters required to price the financial instrument, the remainder being observable. Hence for these instruments the overall impact of moving the unobservable input parameters to the extremes of their ranges might be relatively small compared with the total fair value of the financial instrument. For other instruments, fair value is determined based on the price of the entire instrument, for example, by adjusting the fair value of a reasonable proxy instrument. In addition, all financial instruments are already carried at fair values which are inclusive of valuation adjustments for the cost to close out that instrument and hence already factor in uncertainty as it reflects itself in market pricing. Any negative impact of uncertainty calculated within this disclosure, then, will be over and above that already included in the fair value contained in the financial statements.

<sup>1</sup> Prudent Valuation is a capital requirement for assets held at fair value. It provides a mechanism for quantifying and capitalizing valuation uncertainty in accordance with the European Commission Delegated Regulation (EU) 2016/101, which supplements Article 34 of Regulation (EU) No. 575/2013 (CRR), requiring institutions to apply a deduction from CET1 the amount of any additional value adjustments on all assets measured at fair value calculated in accordance with Article 105(14).

#### Breakdown of the sensitivity analysis by type of instrument<sup>1</sup>

in € m.	Dec 31, 2016		Dec 31, 2015	
	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives
<b>Securities:</b>				
Debt securities	213	137	212	158
Commercial mortgage-backed securities	13	12	12	11
Mortgage and other asset-backed securities	46	40	38	31
Corporate, sovereign and other debt securities	154	85	161	116
Equity securities	116	68	179	105
<b>Derivatives:</b>				
Credit	238	158	489	627
Equity	209	150	183	131
Interest related	429	187	364	147
Foreign Exchange	32	21	17	13
Other	143	92	161	100
<b>Loans:</b>				
Loans	377	227	539	261
Loan commitments	0	0	0	0
<b>Other</b>	0	0	0	0
<b>Total</b>	<b>1,758</b>	<b>1,040</b>	<b>2,144</b>	<b>1,542</b>

<sup>1</sup> Where the exposure to an unobservable parameter is offset across different instruments then only the net impact is disclosed in the table.



## Quantitative Information about the Sensitivity of Significant Unobservable Inputs

The behavior of the unobservable parameters on Level 3 fair value measurement is not necessarily independent, and dynamic relationships often exist between the other unobservable parameters and the observable parameters. Such relationships, where material to the fair value of a given instrument, are explicitly captured via correlation parameters, or are otherwise controlled via pricing models or valuation techniques. Frequently, where a valuation technique utilizes more than one input, the choice of a certain input will bound the range of possible values for other inputs. In addition, broader market factors (such as interest rates, equity, credit or commodity indices or foreign exchange rates) can also have effects.

The range of values shown below represents the highest and lowest inputs used to value the significant exposures within Level 3. The diversity of financial instruments that make up the disclosure is significant and therefore the ranges of certain parameters can be large. For example, the range of credit spreads on mortgage backed securities represents performing, more liquid positions with lower spreads than the less liquid, non-performing positions which will have higher credit spreads. As Level 3 contains the less liquid fair value instruments, the wide ranges of parameters seen is to be expected, as there is a high degree of pricing differentiation within each exposure type to capture the relevant market dynamics. There follows a brief description of each of the principal parameter types, along with a commentary on significant interrelationships between them.

Credit Parameters are used to assess the creditworthiness of an exposure, by enabling the probability of default and resulting losses of a default to be represented. The credit spread is the primary reflection of creditworthiness, and represents the premium or yield return above the benchmark reference instrument (typically LIBOR, or relevant Treasury Instrument, depending upon the asset being assessed), that a bond holder would require to allow for the credit quality difference between that entity and the reference benchmark. Higher credit spreads will indicate lower credit quality, and lead to a lower value for a given bond, or other loan-asset that is to be repaid to the Bank by the borrower. Recovery Rates represent an estimate of the amount a lender would receive in the case of a default of a loan, or a bond holder would receive in the case of default of the bond. Higher recovery rates will give a higher valuation for a given bond position, if other parameters are held constant. Constant Default Rate (CDR) and Constant Prepayment Rate (CPR) allow more complex loan and debt assets to be assessed, as these parameters estimate the ongoing defaults arising on scheduled repayments and coupons, or whether the borrower is making additional (usually voluntary) prepayments. These parameters are particularly relevant when forming a fair value opinion for mortgage or other types of lending, where repayments are delivered by the borrower through time, or where the borrower may pre-pay the loan (seen for example in some residential mortgages). Higher CDR will lead to lower valuation of a given loan or mortgage as the lender will ultimately receive less cash.

Interest rates, credit spreads, inflation rates, foreign exchange rates and equity prices are referenced in some option instruments, or other complex derivatives, where the payoff a holder of the derivative will receive is dependent upon the behavior of these underlying references through time. Volatility parameters describe key attributes of option behavior by enabling the variability of returns of the underlying instrument to be assessed. This volatility is a measure of probability, with higher volatilities denoting higher probabilities of a particular outcome occurring. The underlying references (interest rates, credit spreads etc.) have an effect on the valuation of options, by describing the size of the return that can be expected from the option. Therefore the value of a given option is dependent upon the value of the underlying instrument, and the volatility of that instrument, representing the size of the payoff, and the probability of that payoff occurring. Where volatilities are high, the option holder will see a higher option value as there is greater probability of positive returns. A higher option value will also occur where the payoff described by the option is significant.

Correlations are used to describe influential relationships between underlying references where a derivative or other instrument has more than one underlying reference. Behind some of these relationships, for example commodity correlation and interest rate-foreign exchange correlations, typically lie macroeconomic factors such as the impact of global demand on groups of commodities, or the pricing parity effect of interest rates on foreign exchange rates. More specific relationships can exist between credit references or equity stocks in the case of credit derivatives and equity basket derivatives, for example. Credit correlations are used to estimate the relationship between the credit performance of a

range of credit names, and stock correlations are used to estimate the relationship between the returns of a range of equities. A derivative with a correlation exposure will be either long- or short-correlation. A high correlation suggests a strong relationship between the underlying references is in force, and this will lead to an increase in value of a long-correlation derivative. Negative correlations suggest that the relationship between underlying references is opposing, i.e., an increase in price of one underlying reference will lead to a reduction in the price of the other.

An EBITDA ('earnings before interest, tax, depreciation and amortization') multiple approach can be used in the valuation of less liquid securities. Under this approach the enterprise value ('EV') of an entity can be estimated via identifying the ratio of the EV to EBITDA of a comparable observable entity and applying this ratio to the EBITDA of the entity for which a valuation is being estimated. Under this approach a liquidity adjustment is often applied due to the difference in liquidity between the generally listed comparable used and the company under valuation. A higher EV/EBITDA multiple will result in a higher fair value.

### Financial instruments classified in Level 3 and quantitative information about unobservable inputs

Dec 31, 2016

in € m. (unless stated otherwise)	Fair value		Valuation technique(s) <sup>1</sup>	Significant unobservable input(s) (Level 3)	Range	
	Assets	Liabilities				
<b>Financial instruments held at fair value – held for trading, designated at fair value and available-for-sale:</b>						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	294	0	Price based Discounted cash flow	Price Credit spread (bps)	0 % 119	103 % 2,000
Mortgage- and other asset-backed securities	1,071	0	Price based Discounted cash flow	Price Credit spread (bps) Recovery rate Constant default rate Constant prepayment rate	0 % 105 0 % 0 % 0 %	110 % 2,000 100 % 18 % 29 %
<b>Total mortgage- and other asset-backed securities</b>	<b>1,365</b>	<b>0</b>				
Debt securities and other debt obligations	3,626	1,757	Price based	Price	0 %	169 %
Held for trading	3,373	52	Discounted cash flow	Credit spread (bps)	26	882
Corporate, sovereign and other debt securities	3,373					
Available-for-sale	253					
Designated at fair value	0	1,705				
Equity securities	937	0	Market approach	Price per net asset value Enterprise value/EBITDA (multiple)	60 % 1	100 % 12
Held for trading	274	0				
Available-for-sale	633		Discounted cash flow	Weighted average cost capital	8 %	22 %
Designated at fair value	30					
Loans	7,571	0	Price based	Price	0 %	180 %
Held for trading	4,105	0	Discounted cash flow	Credit spread (bps)	180	4,612
Designated at fair value	980			Constant default rate	0 %	24 %
Available-for-sale	2,486			Recovery rate	25 %	80 %
Loan commitments	0	40	Discounted cash flow	Credit spread (bps)	0	481
				Recovery rate	30 %	99 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	2,974 <sup>2</sup>	485 <sup>3</sup>	Discounted cash flow	IRR Repo rate (bps)	3 % 178	24 % 214
<b>Total non-derivative financial instruments held at fair value</b>	<b>16,474</b>	<b>2,282</b>				

<sup>1</sup> Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.

<sup>2</sup> Other financial assets include € 1.6 billion of other trading assets, € 592 million of other financial assets designated at fair value and € 780 million other financial assets available for sale.

<sup>3</sup> Other financial liabilities include € 444 million of securities sold under repurchase agreements designated at fair value and € 41 million of other financial liabilities designated at fair value.

	Fair value			Dec 31, 2016		
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range	
<b>Financial instruments held at fair value:</b>						
Market values from derivative financial instruments:						
Interest rate derivatives	5,587	3,446	Discounted cash flow	Swap rate (bps)	(0)	2,309
				Inflation swap rate	(1) %	16 %
				Constant default rate	0 %	15 %
				Constant prepayment rate	0 %	19 %
			Option pricing model	Inflation volatility	0 %	5 %
				Interest rate volatility	0 %	123 %
				IR - IR correlation	(12) %	99 %
				Hybrid correlation	(50) %	93 %
Credit derivatives	829	1,126	Discounted cash flow	Credit spread (bps)	0	8,427
				Recovery rate	0 %	100 %
			Correlation pricing model	Credit correlation	13 %	85 %
Equity derivatives	1,142	2,098	Option pricing model	Stock volatility	10 %	67 %
				Index volatility	10 %	44 %
				Index - index correlation	73 %	88 %
				Stock - stock correlation	8 %	88 %
				Stock Forwards	0 %	8 %
				Index Forwards	0 %	20 %
FX derivatives	1,654	1,780	Option pricing model	Volatility	(8) %	39 %
Other derivatives	586	(441) <sup>1</sup>	Discounted cash flow	Credit spread (bps)	–	–
			Option pricing model	Index volatility	5 %	110 %
				Commodity correlation	(21) %	85 %
<b>Total market values from derivative financial instruments</b>						
	9,798	8,008				

<sup>1</sup> Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

	Fair value				Dec 31, 2015	
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s) <sup>1</sup>	Significant unobservable input(s) (Level 3)	Range	
<b>Financial instruments held at fair value – held for trading, designated at fair value and available-for-sale:</b>						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	224	0	Price based Discounted cash flow	Price Credit spread (bps)	0 % 370	105 % 1,500
Mortgage- and other asset-backed securities	1,891	0	Price based Discounted cash flow	Price Credit spread (bps) Recovery rate Constant default rate Constant prepayment rate	0 % 32 0 % 0 % 0 %	111 % 2,000 100 % 24 % 51 %
<b>Total mortgage- and other asset-backed securities</b>	<b>2,115</b>	<b>0</b>				
Debt securities and other debt obligations	4,721	1,654	Price based	Price	0 %	230 %
Held for trading	4,229	18	Discounted cash flow	Credit spread (bps)	9	984
Corporate, sovereign and other debt securities	4,229					
Available-for-sale	330					
Designated at fair value	163	1,636				
Equity securities	1,248	0	Market approach	Price per net asset value Enterprise value/EBITDA (multiple)	70 % 1	100 % 18
Held for trading	325	0				
Available-for-sale	901		Discounted cash flow	Weighted average cost capital	8 %	12 %
Designated at fair value	21					
Loans	12,626	0	Price based	Price	0 %	146 %
Held for trading	6,076	0	Discounted cash flow	Credit spread (bps)	103	2,787
Designated at fair value	3,672			Constant default rate	0 %	24 %
Available-for-sale	2,879			Recovery rate	10 %	82 %
Loan commitments	0	84	Discounted cash flow	Credit spread (bps)	5	1,257
				Recovery rate	20 %	75 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	1,394 <sup>2</sup>	1,333 <sup>3</sup>	Discounted cash flow	IRR	4 %	24 %
				Repo rate (bps)	125	277
<b>Total non-derivative financial instruments held at fair value</b>	<b>22,104</b>	<b>3,071</b>				

<sup>1</sup> Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.

<sup>2</sup> Other financial assets include € 6 million of other trading assets, € 623 million of other financial assets designated at fair value and € 765 million other financial assets available for sale.

<sup>3</sup> Other financial liabilities include € 1.2 billion of securities sold under repurchase agreements designated at fair value and € 84 million of other financial liabilities designated at fair value.

	Dec 31, 2015				
	Fair value				
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range
Financial instruments held at fair value:					
Market values from derivative financial instruments:					
Interest rate derivatives	3,775	2,337	Discounted cash flow	Swap rate (bps)	(20) 915
				Inflation swap rate	0 % 8 %
				Constant default rate	0 % 6 %
				Constant prepayment rate	2 % 19 %
			Option pricing model	Inflation volatility	0 % 8 %
				Interest rate volatility	9 % 176 %
				IR - IR correlation	(25) % 100 %
				Hybrid correlation	(70) % 99 %
Credit derivatives	2,626	1,771	Discounted cash flow	Credit spread (bps)	3 8,526
				Recovery rate	0 % 100 %
			Correlation pricing model	Credit correlation	13 % 89 %
Equity derivatives	695	1,402	Option pricing model	Stock volatility	9 % 89 %
				Index volatility	12 % 85 %
				Index - index correlation	45 % 93 %
				Stock - stock correlation	5 % 93 %
FX derivatives	1,613	1,604	Option pricing model	Volatility	2 % 24 %
Other derivatives	736	(380) <sup>1</sup>	Discounted cash flow	Credit spread (bps)	0 0
			Option pricing model	Index volatility	7 % 36 %
				Commodity correlation	(21) % 90 %
Total market values from derivative financial instruments	9,445	6,733			

<sup>1</sup> Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

## Unrealized Gains or Losses on Level 3 Instruments held or in Issue at the Reporting Date

The unrealized gains or losses on Level 3 Instruments are not due solely to unobservable parameters. Many of the parameter inputs to the valuation of instruments in this level of the hierarchy are observable and the gain or loss is partly due to movements in these observable parameters over the period. Many of the positions in this level of the hierarchy are economically hedged by instruments which are categorized in other levels of the fair value hierarchy. The offsetting gains and losses that have been recorded on all such hedges are not included in the table below, which only shows the gains and losses related to the Level 3 classified instruments themselves held at the reporting date in accordance with IFRS 13. The unrealized gains and losses on Level 3 instruments are included in both net interest income and net gains on financial assets/liabilities at fair value through profit or loss in the consolidated income statement.

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Financial assets held at fair value:</b>		
Trading securities	28	378
Positive market values from derivative financial instruments	1,597	658
Other trading assets	(80)	42
Financial assets designated at fair value through profit or loss	(1)	156
Financial assets available for sale	90	47
Other financial assets at fair value	(6)	0
<b>Total financial assets held at fair value</b>	<b>1,628</b>	<b>1,282</b>
<b>Financial liabilities held at fair value:</b>		
Trading securities	(2)	(0)
Negative market values from derivative financial instruments	(1,001)	(967)
Other trading liabilities	(0)	0
Financial liabilities designated at fair value through profit or loss	59	(134)
Other financial liabilities at fair value	(139)	384
<b>Total financial liabilities held at fair value</b>	<b>(1,082)</b>	<b>(717)</b>
<b>Total</b>	<b>547</b>	<b>565</b>

## Recognition of Trade Date Profit

If there are significant unobservable inputs used in a valuation technique, the financial instrument is recognized at the transaction price and any trade date profit is deferred. The table below presents the year-to-year movement of the trade date profits deferred due to significant unobservable parameters for financial instruments classified at fair value through profit or loss. The balance is predominantly related to derivative instruments.

in € m.	2016	2015
<b>Balance, beginning of year</b>	<b>955</b>	<b>973</b>
New trades during the period	454	493
Amortization	(297)	(365)
Matured trades	(158)	(137)
Subsequent move to observability	(39)	(14)
Exchange rate changes	0	5
<b>Balance, end of year</b>	<b>916</b>	<b>955</b>

## 15 – Fair Value of Financial Instruments not carried at Fair Value

The valuation techniques used to establish fair value for the Group's financial instruments which are not carried at fair value in the balance sheet and their respective IFRS fair value hierarchy categorization are consistent with those outlined in Note 14 "Financial Instruments carried at Fair Value".

As described in Note 13 "Amendments to IAS 39 and IFRS 7, 'Reclassification of Financial Assets'", the Group reclassified certain eligible assets from the trading and available for sale classifications to loans. The Group continues to apply the relevant valuation techniques set out in Note 14 "Financial Instruments carried at Fair Value", to the reclassified assets.

Other financial instruments not carried at fair value are not managed on a fair value basis, for example, retail loans and deposits and credit facilities extended to corporate clients. For these instruments fair values are calculated for disclosure purposes only and do not impact the balance sheet or income statement. Additionally, since the instruments generally do not trade there is significant management judgment required to determine these fair values.

**Short-term financial instruments** – The carrying value represents a reasonable estimate of fair value for the following financial instruments which are predominantly short-term:

Assets	Liabilities
Cash and central bank balances	Deposits
Interbank balances (w/o central banks)	Central bank funds purchased and securities sold under repurchase agreements
Central bank funds sold and securities purchased under resale agreements	Securities loaned
Securities borrowed	Other short-term borrowings
Other assets	Other liabilities

For longer-term financial instruments within these categories, fair value is determined by discounting contractual cash flows using rates which could be earned for assets with similar remaining maturities and credit risks and, in the case of liabilities, rates at which the liabilities with similar remaining maturities could be issued, at the balance sheet date.

**Loans** – Fair value is determined using discounted cash flow models that incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan agreement or credit default swap markets, where available and appropriate.

For retail lending portfolios with a large number of homogenous loans (i.e. German residential mortgages), the fair value is calculated on a portfolio basis by discounting the portfolio's contractual cash flows using own new interest rates on this type of loan. For similar retail lending portfolios outside Germany, the fair value is calculated on a portfolio basis by discounting the portfolio's contractual cash flows using risk-free interest rates. This present value calculation is then adjusted for credit risk by discounting at the margins which could be earned on similar loans if issued at the balance sheet date. For other portfolios the present value calculation is adjusted for credit risk by calculating the expected loss over the estimated life of the loan based on various parameters including probability of default and loss given default and level of collateralization. The fair value of corporate lending portfolios is estimated by discounting a projected margin over expected maturities using parameters derived from the current market values of collateralized loan obligation ("CLO") transactions collateralized with loan portfolios that are similar to the Group's corporate lending portfolio.

**Securities purchased under resale agreements, securities borrowed, securities sold under repurchase agreements and securities loaned** – Fair value is derived from valuation techniques by discounting future cash flows using the appropriate credit risk-adjusted discount rate. The credit risk-adjusted discount rate includes consideration of the collateral received or pledged in the transaction. These products are typically short-term and highly collateralized, therefore the fair value is not significantly different to the carrying value.

**Long-term debt and trust preferred securities** – Fair value is determined from quoted market prices, where available. Where quoted market prices are not available, fair value is estimated using a valuation technique that discounts the remaining contractual cash at a rate at which an instrument with similar characteristics could be issued at the balance sheet date.

#### Estimated fair value of financial instruments not carried at fair value on the balance sheet<sup>1</sup>

in € m.	Dec 31, 2016				
	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
<b>Financial assets:</b>					
Cash and central bank balances	181,364	181,364	181,364	0	0
Interbank balances (w/o central banks)	11,606	11,606	58	11,548	0
Central bank funds sold and securities purchased under resale agreements	16,287	16,287	0	16,287	0
Securities borrowed	20,081	20,081	0	20,081	0
Loans	408,909	407,834	0	28,703	379,132
Securities held to maturity	3,206	3,305	3,305	0	0
Other financial assets	112,479	112,468	0	112,468	0
<b>Financial liabilities:</b>					
Deposits	550,204	550,402	2,232	548,170	0
Central bank funds purchased and securities sold under repurchase agreements	25,740	25,739	0	25,739	0
Securities loaned	3,598	3,598	0	3,598	0
Other short-term borrowings	17,295	17,289	0	17,268	21
Other financial liabilities	135,273	135,273	1,282	133,991	0
Long-term debt	172,316	171,178	0	161,976	9,201
Trust preferred securities	6,373	6,519	0	6,263	257



in € m.	Dec 31, 2015				
	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
<b>Financial assets:</b>					
Cash and central bank balances	96,940	96,940	96,940	0	0
Interbank balances (w/o central banks)	12,842	12,842	1,540	11,302	0
Central bank funds sold and securities purchased under resale agreements	22,456	22,456	0	22,456	0
Securities borrowed	33,557	33,557	0	33,557	0
Loans	427,749	426,365	0	30,040	396,325
Securities held to maturity	0	0	0	0	0
Other financial assets	101,901	101,868	0	101,868	0
<b>Financial liabilities:</b>					
Deposits	566,974	566,652	3,638	563,014	0
Central bank funds purchased and securities sold under repurchase agreements	9,803	9,803	0	9,803	0
Securities loaned	3,270	3,270	0	3,270	0
Other short-term borrowings	28,010	28,003	0	28,000	3
Other financial liabilities	149,994	149,994	1,106	148,888	0
Long-term debt	160,016	160,065	0	152,297	7,768
Trust preferred securities	7,020	7,516	0	7,087	430

<sup>1</sup> Amounts generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

**Loans** – The difference between fair value and carrying value arose predominantly due to an increase in expected default rates and reduction in liquidity as implied from market pricing since initial recognition. These reductions in fair value are offset by an increase in fair value due to interest rate movements on fixed rate instruments.

**Long-term debt and trust preferred securities** – The difference between fair value and carrying value is due to the effect of changes in the rates at which the Group could issue debt with similar maturity and subordination at the balance sheet date compared to when the instrument was issued.

## 16 – Financial Assets Available for Sale

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Debt securities:</b>		
German government	9,405	18,042
U.S. Treasury and U.S. government agencies	7,652	2,890
U.S. local (municipal) governments	3,261	3,103
Other foreign governments	23,779	34,123
Corporates	6,849	8,922
Other asset-backed securities	84	588
Mortgage-backed securities, including obligations of U.S. federal agencies	17	28
Other debt securities	470	570
<b>Total debt securities</b>	<b>51,516</b>	<b>68,266</b>
<b>Equity securities:</b>		
Equity shares	1,027	1,166
Investment certificates and mutual funds	122	75
<b>Total equity securities</b>	<b>1,149</b>	<b>1,241</b>
<b>Other equity interests</b>	<b>804</b>	<b>974</b>
<b>Loans</b>	<b>2,759</b>	<b>3,102</b>
<b>Total financial assets available for sale</b>	<b>56,228</b>	<b>73,583</b>

Please also refer to Note 7 "Net Gains (Losses) on Financial Assets Available for Sale" of this report.

## 17 – Financial Instruments Held to Maturity

In the first quarter of 2016, the Group has begun to use the Held to Maturity category to more appropriately present income and capital volatility in the firm's banking book. In addition to managing the firm's existing banking book exposure to interest rates, the new accounting classification will support certain of the Group's asset liability management objectives, e.g. maturity transformation.

The Group reclassified €3.2 billion of securities held Available for Sale to Held to Maturity investments effective January 4, 2016. All reclassified assets are high quality Government, supranational and agency bonds and are managed by Group Treasury as part of the Group's Strategic Liquidity Reserve.

### Carrying values and fair values of financial assets reclassified from Available for Sale to Held to Maturity

in € m.	Jan 04, 2016	Dec 31, 2016	
	Carrying value (CV)	Carrying value (CV)	Fair Value (FV)
Debt securities reclassified:			
G7 Government bonds	432	428	446
Other Government, supranational and agency bonds	2,809	2,778	2,859
<b>Total financial assets reclassified to Held-to-Maturity</b>	<b>3,241</b>	<b>3,206</b>	<b>3,305</b>

## 18 – Equity Method Investments

Investments in associates and jointly controlled entities are accounted for using the equity method of accounting.

The Group holds interests in 92 (2015: 91) associates and 14 (2015: 15) jointly controlled entities. Following the sale of investment in Hua Xia Bank Company, no other individual investments are material to the Group.

### Aggregated financial information on the Group's share in associates and joint ventures that are individually immaterial

in € m.	Dec 31, 2016	Dec 31, 2015
Carrying amount of all associates that are individually immaterial to the Group	<b>1,027</b>	1,013
Aggregated amount of the Group's share of profit (loss) from continuing operations	183	177
Aggregated amount of the Group's share of post-tax profit (loss) from discontinued operations	0	0
Aggregated amount of the Group's share of other comprehensive income	11	4
<b>Aggregated amount of the Group's share of total comprehensive income</b>	<b>194</b>	181

## 19 – Offsetting Financial Assets and Financial Liabilities

The Group is eligible to present certain financial assets and financial liabilities on a net basis on the balance sheet pursuant to criteria described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments”.

The following tables provide information on the impact of offsetting on the consolidated balance sheet, as well as the financial impact of netting for instruments subject to an enforceable master netting arrangement or similar agreement as well as available cash and financial instrument collateral.

### Assets

in € m.	Dec 31, 2016						
	Amounts not set off on the balance sheet						Net amount
	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral <sup>1</sup>	
Central bank funds sold and securities purchased under resale agreements (enforceable)	17,755	(4,020)	13,735	0	0	(13,719)	16
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	2,552	0	2,552	0	0	(2,225)	327
Securities borrowed (enforceable)	18,470	0	18,470	0	0	(17,637)	832
Securities borrowed (non-enforceable)	1,611	0	1,611	0	0	(1,555)	56
Financial assets at fair value through profit or loss							
Trading assets	171,520	(477)	171,044	0	(101)	(884)	170,059
Positive market values from derivative financial instruments (enforceable)	592,048	(126,523)	465,525	(386,727)	(51,790)	(9,349)	17,658
Positive market values from derivative financial instruments (non-enforceable)	19,625	0	19,625	0	(2,055)	(1,244)	16,327
Financial assets designated at fair value through profit or loss (enforceable)	95,802	(40,998)	54,804	(2,748)	(928)	(46,670)	4,457
Financial assets designated at fair value through profit or loss (non-enforceable)	32,783	0	32,783	0	0	(21,074)	11,709
Total financial assets at fair value through profit or loss	911,778	(167,998)	743,781	(389,475)	(54,874)	(79,221)	220,211
Loans	408,909	0	408,909	0	(13,039)	(47,703)	348,167
Other assets	153,732	(27,686)	126,045	(39,567)	(589)	(104)	85,786
thereof: Positive market values from derivatives qualifying for hedge accounting (enforceable)	8,830	(5,314)	3,516	(2,719)	(589)	(104)	104
Remaining assets not subject to netting	275,442	0	275,442	0	(423)	(307)	274,712
<b>Total assets</b>	<b>1,790,249</b>	<b>(199,704)</b>	<b>1,590,546</b>	<b>(429,042)</b>	<b>(68,925)</b>	<b>(162,473)</b>	<b>930,106</b>

<sup>1</sup> Excludes real estate and other non-financial instrument collateral.

## Liabilities

Dec 31, 2016							
in € m.	Amounts not set off on the balance sheet						
	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral	Net amount
Deposits	550,204	0	550,204	0	0	0	550,204
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	21,209	(4,020)	17,189	0	0	(17,189)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	8,551	0	8,551	0	0	(8,403)	149
Securities loaned (enforceable)	3,524	0	3,524	0	0	(3,524)	0
Securities loaned (non-enforceable)	75	0	75	0	0	(50)	25
Financial liabilities at fair value through profit or loss							
Trading liabilities	57,902	(873)	57,029	0	0	0	57,029
Negative market values from derivative financial instruments (enforceable)	569,064	(124,325)	444,739	(386,612)	(35,124)	(9,325)	13,678
Negative market values from derivative financial instruments (non-enforceable)	19,119	0	19,119	0	(1,721)	(897)	16,501
Financial liabilities designated at fair value through profit or loss (enforceable)	82,421	(39,031)	43,390	(2,748)	0	(40,642)	0
Financial liabilities designated at fair value through profit or loss (non-enforceable)	17,694	0	17,694	0	(7,910)	(7,664)	2,120
Total financial liabilities at fair value through profit or loss	746,200	(164,228)	581,971	(389,360)	(44,755)	(58,528)	89,328
Other liabilities	186,896	(31,456)	155,440	(56,679)	(1,298)	0	97,463
thereof: Negative market values from derivatives qualifying for hedge accounting (enforceable)	5,793	(1,200)	4,593	(2,834)	(1,297)	0	463
Remaining liabilities not subject to netting	208,773	0	208,773	0	0	0	208,773
<b>Total liabilities</b>	<b>1,725,431</b>	<b>(199,704)</b>	<b>1,525,727</b>	<b>(446,039)</b>	<b>(46,053)</b>	<b>(87,693)</b>	<b>945,942</b>

## Assets

Dec 31, 2015							
in € m.	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Amounts not set off on the balance sheet			Net amount
				Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral <sup>1</sup>	
Central bank funds sold and securities purchased under resale agreements (enforceable)	21,309	(5,174)	16,135	0	0	(16,127)	8
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	6,321	0	6,321	0	0	(5,910)	411
Securities borrowed (enforceable)	13,956	0	13,956	0	0	(13,448)	508
Securities borrowed (non-enforceable)	19,601	0	19,601	0	0	(18,583)	1,018
Financial assets at fair value through profit or loss							
Trading assets	196,478	(442)	196,035	0	(12)	(592)	195,431
Positive market values from derivative financial instruments (enforceable)	612,412	(113,977)	498,435	(407,171)	(55,896)	(13,218)	22,150
Positive market values from derivative financial instruments (non-enforceable)	17,159	0	17,159	0	0	0	17,159
Financial assets designated at fair value through profit or loss (enforceable)	86,596	(30,801)	55,796	(2,146)	(1,167)	(44,437)	8,045
Financial assets designated at fair value through profit or loss (non-enforceable)	53,457	0	53,457	0	0	(28,793)	24,664
Total financial assets at fair value through profit or loss	966,102	(145,219)	820,883	(409,317)	(57,075)	(87,041)	267,449
Loans	427,768	(19)	427,749	0	(14,296)	(49,117)	364,335
Other assets	134,742	(16,605)	118,137	(58,478)	(7)	0	59,652
thereof: Positive market values from derivatives qualifying for hedge accounting (enforceable)	8,272	(5,137)	3,136	(2,461)	0	0	674
Remaining assets not subject to netting	206,348	0	206,348	0	(555)	(549)	205,245
<b>Total assets</b>	<b>1,796,146</b>	<b>(167,016)</b>	<b>1,629,130</b>	<b>(467,795)</b>	<b>(71,933)</b>	<b>(190,775)</b>	<b>898,627</b>

<sup>1</sup> Excludes real estate and other non-financial instrument collateral.

## Liabilities

Dec 31, 2015							
in € m.	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Amounts not set off on the balance sheet			Net amount
				Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral	
Deposits	566,993	(19)	566,974	0	0	0	566,974
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	9,089	(5,135)	3,954	0	0	(3,954)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	5,849	0	5,849	0	0	(5,130)	719
Securities loaned (enforceable)	1,795	0	1,795	0	0	(1,795)	0
Securities loaned (non-enforceable)	1,475	0	1,475	0	0	(951)	524
Financial liabilities at fair value through profit or loss							
Trading liabilities	53,215	(910)	52,304	0	0	0	52,304
Negative market values from derivative financial instruments (enforceable)	588,281	(117,306)	470,975	(403,267)	(53,149)	(14,559)	0
Negative market values from derivative financial instruments (non-enforceable)	23,101	0	23,101	0	0	(2,867)	20,234
Financial liabilities designated at fair value through profit or loss (enforceable)	50,690	(29,929)	20,761	(2,105)	0	(18,657)	0
Financial liabilities designated at fair value through profit or loss (non-enforceable)	32,612	0	32,612	0	0	(11,077)	21,535
Total financial liabilities at fair value through profit or loss	747,899	(148,145)	599,754	(405,372)	(53,149)	(47,160)	94,073
Other liabilities	188,723	(13,718)	175,005	(68,626)	0	0	106,379
thereof: Negative market values from derivatives qualifying for hedge accounting (enforceable)	8,615	(2,250)	6,365	(6,365)	0	0	0
Remaining liabilities not subject to netting	206,699	0	206,699	0	0	0	206,699
<b>Total liabilities</b>	<b>1,728,522</b>	<b>(167,016)</b>	<b>1,561,506</b>	<b>(473,998)</b>	<b>(53,149)</b>	<b>(58,990)</b>	<b>975,368</b>

The column 'Gross amounts set off on the balance sheet' discloses the amounts offset in accordance with all the criteria described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments".

The column 'Impact of Master Netting Agreements' discloses the amounts that are subject to master netting agreements but were not offset because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only. The amounts presented for other assets and other liabilities include cash margin receivables and payables respectively.

The columns 'Cash collateral' and 'Financial instrument collateral' disclose the cash and financial instrument collateral amounts received or pledged in relation to the total amounts of assets and liabilities, including those that were not offset.

Non-enforceable master netting agreements or similar agreements refer to contracts executed in jurisdictions where the rights of set off may not be upheld under the local bankruptcy laws.

The cash collateral received against the positive market values of derivatives and the cash collateral pledged towards the negative mark-to-market values of derivatives are booked within the 'Other liabilities' and 'Other assets' balances respectively.

The Cash and Financial instrument collateral amounts disclosed reflect their fair values. The rights of set off relating to the cash and financial instrument collateral are conditional upon the default of the counterparty.

## 20 – Loans

### Loans by industry classification

in € m.	Dec 31, 2016	Dec 31, 2015 <sup>1</sup>
Financial intermediation	49,618	61,739
Manufacturing	29,290	28,131
thereof:		
Basic metals and fabricated metal products	4,027	4,276
Electrical and optical equipment	4,680	3,334
Transport equipment	3,655	3,869
Chemicals and chemical products	3,906	4,077
Machinery and equipment	2,461	2,907
Food products	3,214	2,501
Households (excluding mortgages)	37,093	45,317
Households – mortgages	150,776	154,689
Public sector	15,740	17,244
Wholesale and retail trade	16,744	18,327
Commercial real estate activities	27,369	22,879
Lease financing	561	561
Fund management activities	26,129	26,091
Other	60,223	58,572
thereof:		
Renting of machinery and other business activities	22,298	20,235
Transport, storage and communication	12,005	12,237
Mining and quarrying of energy-producing materials	3,365	4,772
Electricity, gas and water supply	4,369	4,328
<b>Gross loans</b>	<b>413,544</b>	<b>433,549</b>
(Deferred expense)/unearned income	88	772
<b>Loans less (deferred expense)/unearned income</b>	<b>413,455</b>	<b>432,777</b>
Less: Allowance for loan losses	4,546	5,028
<b>Total loans</b>	<b>408,909</b>	<b>427,749</b>

<sup>1</sup> Comparatives have been restated to reflect changes in industry sectors.

## 21 – Allowance for Credit Losses

The allowance for credit losses consists of an allowance for loan losses and an allowance for off-balance sheet positions.

### Breakdown of the movements in the Group's allowance for loan losses

in € m.	2016			2015			2014		
	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
<b>Allowance, beginning of year</b>	<b>2,252</b>	<b>2,776</b>	<b>5,028</b>	<b>2,364</b>	<b>2,849</b>	<b>5,212</b>	<b>2,857</b>	<b>2,732</b>	<b>5,589</b>
Provision for loan losses	743	604	1,347	334	548	882	499	631	1,129
Net charge-offs:	(894)	(870)	(1,764)	(482)	(612)	(1,094)	(997)	(512)	(1,509)
Charge-offs	(979)	(972)	(1,951)	(538)	(717)	(1,255)	(1,037)	(613)	(1,650)
Recoveries	85	101	187	56	105	161	40	101	141
Other Changes	(30)	(35)	(65)	36	(8)	28	5	(2)	3
<b>Allowance, end of year</b>	<b>2,071</b>	<b>2,475</b>	<b>4,546</b>	<b>2,252</b>	<b>2,776</b>	<b>5,028</b>	<b>2,364</b>	<b>2,849</b>	<b>5,212</b>

## Activity in the Group's allowance for off-balance sheet positions (contingent liabilities and lending commitments)

in € m.	2016			2015			2014		
	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
Allowance, beginning of year	144	168	312	85	141	226	102	114	216
Provision for off-balance sheet positions	24	12	36	58	16	74	(13)	18	4
Usage	0	0	0	0	0	0	0	0	0
Other changes	(5)	3	(2)	1	10	11	(4)	10	6
Allowance, end of year	162	183	346	144	168	312	85	141	226

## 22 – Transfers of Financial Assets

The Group enters into transactions in which it transfers financial assets held on the balance sheet and as a result may either be eligible to derecognize the transferred asset in its entirety or must continue to recognize the transferred asset to the extent of any continuing involvement, depending on certain criteria. These criteria are discussed in Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

Where financial assets are not eligible to be derecognized, the transfers are viewed as secured financing transactions, with any consideration received resulting in a corresponding liability. The Group is not entitled to use these financial assets for any other purposes. The most common transactions of this nature entered into by the Group are repurchase agreements, securities lending agreements and total return swaps, in which the Group retains substantially all of the associated credit, equity price, interest rate and foreign exchange risks and rewards associated with the assets as well as the associated income streams.

## Information on asset types and associated transactions that did not qualify for derecognition

in € m.	Dec 31, 2016	Dec 31, 2015
Carrying amount of transferred assets		
Trading securities not derecognized due to the following transactions:		
Repurchase agreements	30,089	26,752
Securities lending agreements	40,405	51,300
Total return swaps	2,083	2,648
Other	426	642
<b>Total trading securities</b>	<b>73,003</b>	<b>81,342</b>
Other trading assets	85	12
Financial assets designated at fair value through profit or loss	0	0
Financial assets available for sale	241	2,192
Loans	68	536
<b>Total</b>	<b>73,398</b>	<b>84,082</b>
Carrying amount of associated liabilities	51,264	52,717

Information on assets transferred that did not qualify for derecognition where associated liability is recourse only to the transferred assets<sup>1</sup>

in € m.	Dec 31, 2016		Dec 31, 2015	
	Carrying value	Fair value	Carrying value	Fair value
Trading securities	0	0	300	300
Other trading assets	0	0	0	0
Financial assets available for sale	0	0	1,372 <sup>2</sup>	1,372
Loans	0	0	18	19
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,690</b>	<b>1,691</b>
Associated liability	0	0	1,460	1,460
Net position	0	0	230	231

<sup>1</sup> Associated liabilities are notes issued by Consolidated Group Sponsored Securitizations.

<sup>2</sup> The Muni Tender Option Bond Trusts program was suspended and the related bonds of € 1.4 billion were sold to a new DB entity DB Munico Ltd.



**Carrying value of assets transferred in which the Group still accounts for the asset to the extent of its continuing involvement**

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Carrying amount of the original assets transferred:</b>		
Trading securities	0	21
Financial assets available for sale	332	0
Loans	40	96
<b>Carrying amount of the assets continued to be recognized:</b>		
Trading securities	0	21
Financial assets available for sale	263	0
Loans	16	33
<b>Carrying amount of associated liabilities</b>	<b>58</b>	<b>37</b>

The Group could retain some exposure to the future performance of a transferred asset either through new or existing contractual rights and obligations and still be eligible to derecognize the asset. This on-going involvement will be recognized as a new instrument which may be different from the original financial asset that was transferred. Typical transactions include retaining senior notes of non-consolidated securitizations to which originated loans have been transferred; financing arrangements with structured entities to which the Group has sold a portfolio of assets; or sales of assets with credit-contingent swaps. The Group's exposure to such transactions is not considered to be significant as any substantial retention of risks associated with the transferred asset will commonly result in an initial failure to derecognize. Transactions not considered to result in an on-going involvement include normal warranties on fraudulent activities that could invalidate a transfer in the event of legal action, qualifying pass-through arrangements and standard trustee or administrative fees that are not linked to performance.

**The impact on the Group's Balance Sheet of on-going involvement associated with transferred assets derecognized in full:**

in € m.	Dec 31, 2016			Dec 31, 2015		
	Carrying value	Fair value	Maximum Exposure to Loss <sup>1</sup>	Carrying value	Fair value	Maximum Exposure to Loss <sup>1</sup>
<b>Loans:</b>						
Securitization notes	3	3	57	56	56	132
Other	12	12	12	12	12	12
<b>Total Loans</b>	<b>15</b>	<b>15</b>	<b>69</b>	<b>68</b>	<b>68</b>	<b>144</b>
<b>Financial assets held at Fair Value through the P&amp;L:</b>						
Securitization notes	0	0	0	134	134	134
Non-standard Interest Rate, cross-currency or inflation-linked swap	32	32	32	11	11	11
<b>Total Financial assets held at Fair Value through the P&amp;L</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>145</b>	<b>145</b>	<b>145</b>
<b>Financial assets available for sale:</b>						
Securitization notes	0	0	0	0	0	0
<b>Total Financial assets available for sale</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total financial assets representing on-going involvement</b>	<b>47</b>	<b>47</b>	<b>101</b>	<b>214</b>	<b>214</b>	<b>289</b>
<b>Financial liabilities held at Fair Value through the P&amp;L:</b>						
Non-standard Interest Rate, cross-currency or inflation-linked swap	64	64	0	57	57	0
<b>Total financial liabilities representing on-going involvement</b>	<b>64</b>	<b>64</b>	<b>0</b>	<b>57</b>	<b>57</b>	<b>0</b>

<sup>1</sup> The maximum exposure to loss is defined as the carrying value plus the notional value of any undrawn loan commitments not recognized as liabilities.

**The impact on the Group's Statement of Income of on-going involvement associated with transferred assets derecognized in full:**

in € m.	Dec 31, 2016			Dec 31, 2015		
	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal
Securitization notes	0	6	0	86	97	0 <sup>1</sup>
Non-standard Interest Rate, cross-currency or inflation-linked swap	163	385	0	119	716	0
<b>Net gains/(losses) recognized from on-going involvement in derecognized assets</b>	<b>163</b>	<b>392</b>	<b>0</b>	<b>205</b>	<b>813</b>	<b>0</b>

<sup>1</sup> Typically, sales of assets into securitization vehicles were of assets that were classified as Fair Value through P&L, therefore any gain or loss on disposal is immaterial.

## 23 – Assets Pledged and Received as Collateral

The Group pledges assets primarily as collateral against secured funding and for repurchase agreements, securities borrowing agreements as well as other borrowing arrangements and for margining purposes on OTC derivative liabilities. Pledges are generally conducted under terms that are usual and customary for standard securitized borrowing contracts and other transactions described.

### Carrying value of the Group's assets pledged as collateral for liabilities or contingent liabilities<sup>1</sup>

in € m.	Dec 31, 2016	Dec 31, 2015
Financial assets at fair value through profit or loss	49,045	51,904
Financial assets available for sale	16,081	3,554
Loans	73,649	45,776
Other	376	302
<b>Total</b>	<b>139,150</b>	<b>101,535</b>

<sup>1</sup> Excludes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities.

### Total assets pledged to creditors available for sale or repledge<sup>1</sup>

in € m.	Dec 31, 2016	Dec 31, 2015
Financial assets at fair value through profit or loss	76,335	80,480
Financial assets available for sale	13,814	819
Loans	0	347
<b>Total</b>	<b>90,149</b>	<b>81,646</b>

<sup>1</sup> Includes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities.

The Group receives collateral primarily in reverse repurchase agreements, securities lending agreements, derivatives transactions, customer margin loans and other transactions. These transactions are generally conducted under terms that are usual and customary for standard secured lending activities and the other transactions described. The Group, as the secured party, has the right to sell or re-pledge such collateral, subject to the Group returning equivalent securities upon completion of the transaction. This right is used primarily to cover short sales, securities loaned and securities sold under repurchase agreements.

### Fair Value of collateral received

in € m.	Dec 31, 2016	Dec 31, 2015
Securities and other financial assets accepted as collateral	260,065	286,032
thereof:		
collateral sold or repledged	217,419	238,236

## 24 – Property and Equipment

in € m.	Owner occupied properties	Furniture and equipment	Leasehold improvements	Construction- in-progress	Total
<b>Cost of acquisition:</b>					
<b>Balance as of January 1, 2015</b>	<b>1,560</b>	<b>2,947</b>	<b>2,379</b>	<b>141</b>	<b>7,027</b>
Changes in the group of consolidated companies	8	(37)	(72)	0	(101)
Additions	4	153	162	114	432
Transfers	(2)	76	181	(129)	126
Reclassifications (to)/from "held for sale"	(5)	82	1	(2)	77
Disposals	132	267	61	0	461
Exchange rate changes	(1)	107	72	6	184
<b>Balance as of December 31, 2015</b>	<b>1,432</b>	<b>3,060</b>	<b>2,662</b>	<b>130</b>	<b>7,284</b>
Changes in the group of consolidated companies	(0)	24	(1)	0	23
Additions	134	199	111	281	725
Transfers	35	(4)	144	(171)	4
Reclassifications (to)/from "held for sale"	(17)	0	0	(0)	(17)
Disposals	67	908	117	(0)	1,092
Exchange rate changes	(1)	34	21	1	55
<b>Balance as of December 31, 2016</b>	<b>1,516</b>	<b>2,406</b>	<b>2,820</b>	<b>240</b>	<b>6,982</b>
<b>Accumulated depreciation and impairment:</b>					
<b>Balance as of January 1, 2015</b>	<b>498</b>	<b>2,121</b>	<b>1,500</b>	<b>0</b>	<b>4,118</b>
Changes in the group of consolidated companies	(1)	(31)	(64)	0	(96)
Depreciation	35	234	170	0	439
Impairment losses	6	16	3	1	27
Reversals of impairment losses	0	9	0	0	9
Transfers	(3)	21	93	(1)	109
Reclassifications (to)/from "held for sale"	(0)	58	7	0	65
Disposals	73	239	38	0	349
Exchange rate changes	2	86	46	(0)	134
<b>Balance as of December 31, 2015</b>	<b>464</b>	<b>2,257</b>	<b>1,716</b>	<b>0</b>	<b>4,438</b>
Changes in the group of consolidated companies	(0)	19	(6)	0	12
Depreciation	28	226	191	0	445
Impairment losses	87 <sup>1</sup>	6	0	0	93
Reversals of impairment losses	0	(0)	0	0	0
Transfers	39	(14)	6	(0)	30
Reclassifications (to)/from "held for sale"	(0)	(1)	(1)	0	(2)
Disposals	46	803	42	0	891
Exchange rate changes	(2)	31	23	0	52
<b>Balance as of December 31, 2016</b>	<b>572</b>	<b>1,720</b>	<b>1,886</b>	<b>0</b>	<b>4,178</b>
<b>Carrying amount:</b>					
<b>Balance as of December 31, 2015</b>	<b>967</b>	<b>802</b>	<b>946</b>	<b>130</b>	<b>2,846</b>
<b>Balance as of December 31, 2016</b>	<b>944</b>	<b>685</b>	<b>934</b>	<b>240</b>	<b>2,804</b>

<sup>1</sup> Of which €86 million were included reflecting an impairment of a single property as a result of impairment testing under IAS 36.102.

Impairment losses on property and equipment are recorded within general and administrative expenses for the income statement.

The carrying value of items of property and equipment on which there is a restriction on sale was €46 million as of December 31, 2016.

Commitments for the acquisition of property and equipment were €139 million at year-end 2016.

## 25 – Leases

The Group is lessee under lease arrangements covering property and equipment.

### Finance Lease Commitments

Most of the Group's finance lease arrangements are made under usual terms and conditions.

#### Net Carrying Value of Leasing Assets Held under finance leases

in € m.	Dec 31, 2016	Dec 31, 2015
Land and buildings	12	14
Furniture and equipment	2	2
Other	0	0
<b>Net carrying value</b>	<b>14</b>	<b>15</b>

#### Future Minimum Lease Payments Required under the Group's Finance Leases

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Future minimum lease payments:</b>		
Not later than one year	6	6
Later than one year and not later than five years	18	20
Later than five years	67	70
<b>Total future minimum lease payments</b>	<b>91</b>	<b>97</b>
Less: Future interest charges	63	66
<b>Present value of finance lease commitments</b>	<b>28</b>	<b>30</b>
<b>Future minimum lease payments to be received</b>	<b>3</b>	<b>4</b>
<b>Contingent rent recognized in the income statement<sup>1</sup></b>	<b>0</b>	<b>0</b>

<sup>1</sup> The contingent rent is based on market interest rates, such as three months EURIBOR; below a certain rate the Group receives a rebate.

### Operating Lease Commitments

The Group leases the majority of its offices and branches under long-term agreements. Most of the lease contracts are made under usual terms and conditions, which means they include options to extend the lease by a defined amount of time, price adjustment clauses and escalation clauses in line with general office rental market conditions. However, the lease agreements do not include any clauses that impose any restriction on the Group's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements. The Group has one significant lease contract which contains five options to extend the lease each for a period of five years and there is no purchase option in this specific lease.

#### Future Minimum Lease Payments Required under the Group's Operating Leases

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Future minimum rental payments:</b>		
Not later than one year	707	773
Later than one year and not later than five years	2,092	2,398
Later than five years	1,093	1,999
<b>Total future minimum rental payments</b>	<b>3,893</b>	<b>5,170</b>
Less: Future minimum rentals to be received	89	91
<b>Net future minimum rental payments</b>	<b>3,804</b>	<b>5,079</b>

The reduction in total future minimum rental payments at year-end 2016 compared to the prior year number also reflect the absence of future lease obligations due to the sale of Maher Terminals Port Elizabeth in the fourth quarter 2016.

As of December 31, 2016, the total future minimum rental payments included € 323 million for the Group headquarters in Frankfurt am Main that was sold and leased back on December 1, 2011. The Group entered into a 181 months leaseback arrangement for the entire facility in connection with the transaction.

In 2016, the rental payments for lease and sublease agreements amounted to €832 million. This included charges of €844 million for minimum lease payments and €6 million for contingent rents as well as €18 million related to sub-lease rentals received.

## 26 – Goodwill and Other Intangible Assets

### Goodwill

#### Changes in Goodwill

The changes in the carrying amount of goodwill, as well as gross amounts and accumulated impairment losses of goodwill, for the years ended December 31, 2016, and 2015, are shown below by cash-generating units ("CGU"). As of January 1, 2016, the structure of the primary CGUs has been changed, following the reorganization of business operations under a new segment structure. Please refer to Note 4, "Business Segments and Related Information" for more information regarding changes in the presentation of segment disclosures.

#### Goodwill allocated to cash-generating units

in € m.	Global Markets	Corporate & Investment Banking	Private & Commercial Clients	Wealth Management	Deutsche Asset Management	Postbank	Non-Core Operations, Unit <sup>1</sup>	Others	Total
<b>Balance as of January 1, 2015</b>	<b>1,459</b>	<b>1,032</b>	<b>999</b>	<b>506</b>	<b>3,625</b>	<b>1,764</b>	<b>0</b>	<b>134</b>	<b>9,518</b>
Goodwill acquired during the year	0	0	0	0	0	0	0	0	0
Purchase accounting adjustments	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Reclassification from (to) "held for sale"	0	0	0	0	(47)	(1)	0	(138)	(186)
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	(1)	0	0	0	0	(1)
Impairment losses <sup>2</sup>	(1,568)	(600)	(1,002)	0	0	(1,763)	0	0	(4,933)
Exchange rate changes/other	109	87	3	26	262	0	0	5	492
<b>Balance as of December 31, 2015</b>	<b>0</b>	<b>519</b>	<b>0</b>	<b>530</b>	<b>3,839</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4,890</b>
<b>Gross amount of goodwill</b>	<b>2,597</b>	<b>1,513</b>	<b>963</b>	<b>530</b>	<b>3,839</b>	<b>1,763</b>	<b>667</b>	<b>607</b>	<b>12,479</b>
<b>Accumulated impairment losses</b>	<b>(2,597)</b>	<b>(994)</b>	<b>(963)</b>	<b>0</b>	<b>0</b>	<b>(1,763)</b>	<b>(667)</b>	<b>(606)</b>	<b>(7,589)</b>
<b>Balance as of January 1, 2016</b>	<b>0</b>	<b>519</b>	<b>0</b>	<b>530</b>	<b>3,839</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4,890</b>
Goodwill acquired during the year	0	0	0	0	0	0	0	0	0
Purchase accounting adjustments	0	0	0	0	0	0	0	0	0
Transfers	285	0	0	0	(285)	0	0	0	0
Reclassification from (to) "held for sale"	0	0	0	0	(12)	0	0	0	(12)
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	0	0	0	0	0	0
Impairment losses <sup>2</sup>	(285)	0	0	0	(500)	0	0	0	(785)
Exchange rate changes/other	0	13	0	33	(37)	0	0	0	10
<b>Balance as of December 31, 2016</b>	<b>0</b>	<b>532</b>	<b>0</b>	<b>564</b>	<b>3,006</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4,103</b>
<b>Gross amount of goodwill</b>	<b>2,953</b>	<b>1,553</b>	<b>998</b>	<b>564</b>	<b>3,506</b>	<b>1,763</b>	<b>669</b>	<b>1</b>	<b>12,007</b>
<b>Accumulated impairment losses</b>	<b>(2,953)</b>	<b>(1,021)</b>	<b>(998)</b>	<b>0</b>	<b>(500)</b>	<b>(1,763)</b>	<b>(669)</b>	<b>0</b>	<b>(7,904)</b>

<sup>1</sup> Includes primary CGUs NCOU Wholesale Assets and NCOU Operating Assets.

<sup>2</sup> Impairment losses of goodwill are recorded as impairment of goodwill and other intangible assets in the income statement.

In addition to the primary CGUs, the segments GM and NCOU carry goodwill resulting from the acquisition of nonintegrated investments which are not allocated to the respective segments' primary CGUs. Such goodwill is summarized as "Others" in the table above. The nonintegrated investments in the NCOU consisted of Maher Terminals LLC and Maher Terminals of Canada Corp. These legacy investments have been disposed of during the fourth quarter 2016 and the third quarter 2015, respectively.

In 2016, changes in goodwill mainly included impairments of €785 million in GM (€285 million) and Deutsche AM (€500 million). The impairment in GM was the result of a transfer of certain businesses from Deutsche AM to GM in the second quarter 2016. The transfer resulted in the reassignment of €285 million of goodwill from Deutsche AM based on relative values in accordance with IFRS. The subsequent impairment review of GM led to an impairment loss of €285 million of the reassigned goodwill. The goodwill impairment in Deutsche AM was recorded in the fourth quarter 2016 in relation to the sale of the Abbey Life business and the formation of a disposal group held for sale. Immediately before its initial classification as a disposal group, the carrying amounts of all assets and liabilities included in the Abbey Life disposal group were measured and recognized in accordance with applicable IFRS. With the sale of Abbey Life to close for an amount lower than its carrying amount, the proportion of Deutsche AM CGU goodwill attributable to the Abbey Life business was not expected to be recovered upon sale of the disposal group. Accordingly, the allocated goodwill amount of €500 million as well as other intangible assets (value of business acquired, VOBA) of €515 million included in the disposal group were considered impaired and written-off through Impairment of goodwill and other intangible assets. For more information on the impact from the disposal of the Abbey Life business, please refer to section 'Amortizing Intangible Assets' in this Note as well to Note 27 "Non-Current Assets and Disposal Groups Held for Sale".

In 2015, changes in goodwill (other than those related to exchange rate changes) mainly included impairments of €4,933 million recorded in the third quarter 2015. These were reported in the former CGUs CB&S (€2,168 million) and PBC (€2,765 million). Following the re-segmentation of the Group in the first quarter 2016, the impairment amounts were restated to the new segments/CGUs GM/CIB and PW&CC/Postbank, based on the goodwill balances related to these business units prior to the third quarter 2015 impairment. Accordingly, of the impairment amount of €4,933 million, €1,568 million were allocated to GM, €600 million to CIB, €1,002 million to PCC and €1,763 million to Postbank. These charges had been the result of the goodwill impairment test conducted in the third quarter 2015. The test was triggered by the further substantiation of our strategy in the third quarter 2015, largely driven by the impact of the then expected higher regulatory capital requirements for both former segments CB&S and PBC as well as the disposal expectations in PBC. In connection with the sale of the Canadian port operations of Maher Terminals, goodwill of €138 million was allocated to the disposal group classified as held for sale in the first quarter 2015.

In 2014, changes in goodwill included the impairment of €49 million recorded in the NCOU upon write-off of goodwill related to the nonintegrated investment in Maher Terminals LLC (previously included in the column 'Others' of the above table). The carrying amount of Maher Terminals LLC exceeded its recoverable amount, resulting in an overall impairment loss of €194 million, which was recorded as impairment of goodwill and other intangible assets. Of that impairment amount, €49 million was allocated to fully write-off related goodwill and another €145 million was allocated to other intangible assets included in the CGU (see 'Other Amortizing Intangible Assets' in this Note).

## Goodwill Impairment Test

For the purposes of impairment testing, goodwill acquired in a business combination is allocated to CGUs. On the basis as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates", the Group's primary CGUs are as outlined above. "Other" goodwill is tested individually for impairment on the level of each of the nonintegrated investments. Goodwill is tested for impairment annually in the fourth quarter by comparing the recoverable amount of each goodwill-carrying CGU with its carrying amount. In addition, in accordance with IAS 36, the Group tests goodwill whenever a triggering event is identified. The recoverable amount is the higher of a CGU's fair value less costs of disposal and its value in use.

The annual goodwill impairment test conducted in 2016 did not result in an impairment loss on the Group's primary goodwill-carrying CGUs as the recoverable amounts of these CGUs were higher than the respective carrying amounts.

The Group's further updating of its strategy constituted a trigger event leading to an impairment test in the third quarter 2015. The goodwill impairment test resulted in goodwill impairments totaling €4,933 million, consisting of €2,168 million and €2,765 million in the former CGUs CB&S and PBC, respectively. The impairment in CB&S was mainly driven by changes to the business mix in light of expected higher regulatory capital requirements, leading to a recoverable amount of approximately €26.1 billion. The impairment in PBC was, in addition to the changed capital requirements, mainly driven by the disposal expectations regarding Hua Xia Bank Co. Ltd. and Postbank, which resulted in a recoverable amount of approximately €12.3 billion for the CGU.

The recoverable amounts of all remaining primary CGUs, except for those in the NCOU, were substantially in excess of their respective carrying amounts. A triggering event review as of December 31, 2015 confirmed that there was no indication that the remaining goodwill in the primary CGUs was impaired.

A review of the Group's strategy or certain political or global risks for the banking industry such as a return of the European sovereign debt crisis, uncertainties regarding the implementation of already adopted regulation and the introduction of legislation that is already under discussion as well as a slowdown of GDP growth may negatively impact the performance forecasts of certain of the Group's CGUs and, thus, could result in an impairment of goodwill in the future.

## Carrying Amount

The carrying amount of a primary CGU is derived using a capital allocation model. The allocation uses the Group's total equity at the date of valuation, including Additional Tier 1 Notes ("AT1 Notes"), which constitute unsecured and subordinated notes of Deutsche Bank and which are classified as Additional equity components in accordance with IFRS. Total equity is adjusted for specific effects related to nonintegrated investments, which are tested separately for impairment as outlined above, and for an add-on adjustment for goodwill attributable to noncontrolling interests.

Within the capital allocation, the shareholder's equity (adjusted for nonintegrated investments) is allocated to the primary CGUs in a two-step process, which is aligned with both the determination of the recoverable amount and the current equity allocation framework of Deutsche Bank. The two step approach works as follows: Allocation of shareholders' equity using a solvency-based key first, until the target CET 1 ratio (CRR/CRD 4 on a fully loaded basis) is met, and then, if applicable, incremental capital allocation to consider the leverage ratio requirements. The solvency-based allocation contains the assignment of intangible assets in line with its regulatory treatment. Further, it comprises equity allocations based on the CGU's relative share of risk-weighted assets, on capital deduction items as well as on regulatory reconciliation items. In the second step, if applicable, the CGUs receive equity allocations based on their pro-rata leverage ratio exposure measure relative to the Group. Additionally, noncontrolling interests (plus the add-on adjustment for goodwill attributable to noncontrolling interests) are considered in the carrying amounts of the respective primary CGUs. The AT1 Notes are allocated to the primary CGUs in proportion to their specific leverage ratio shortfall, with leverage ratio shortfall being a function of the Group's target leverage ratio, the CGU's leverage ratio exposure measure and the allocated CET 1 capital.

The carrying amount for nonintegrated investments is determined on the basis of their respective equity.

## Recoverable Amount

The Group determines the recoverable amounts of its primary CGUs on the basis of fair value less costs of disposal (Level 3 of the fair value hierarchy) and employs a discounted cash flow (DCF) model, which reflects the specifics of the banking business and its regulatory environment. The model calculates the present value of the estimated future earnings that are distributable to shareholders after fulfilling the respective regulatory capital requirements. The recoverable amounts also include the fair value of the AT1 Notes, allocated to the primary CGUs consistent to their treatment in the carrying amount.

The DCF model uses earnings projections and respective capitalization assumptions (with capital ratios increasing from current levels to a Common Equity Tier 1 capital ratio being comfortably above 13 % and a leverage ratio of 4.5 % in the medium term, both under fully loaded definitions) based on five-year financial plans, which are discounted to their present value. Estimating future earnings and capital requirements involves judgment and the consideration of past and current performances as well as expected developments in the respective markets, and in the overall macroeconomic and regulatory environments. Earnings projections beyond the initial five-year period are, where applicable, adjusted to derive a sustainable level. In case of a going concern, the cash flow to equity is assumed to increase by or converge towards a constant long-term growth rate of up to 2.8 % (2015: 3.2 %). This is based on projected revenue forecasts of the CGUs as well as expectations for the development of gross domestic product and inflation, and is captured in the terminal value.

## Key Assumptions and Sensitivities

**Key Assumptions:** The DCF value of a CGU is sensitive to the earnings projections, to the discount rate (cost of equity) applied and, to a much lesser extent, to the long-term growth rate. The discount rates applied have been determined based on the capital asset pricing model and comprise a risk-free interest rate, a market risk premium and a factor covering the systematic market risk (beta factor). The values for the risk-free interest rate, the market risk premium and the beta factors are determined using external sources of information. CGU-specific beta factors are determined based on a respective group of peer companies. Variations in all of these components might impact the discount rates.

### Primary goodwill-carrying cash-generating units

	Discount rate (post-tax)	
	2016	2015 <sup>1</sup>
Corporate & Investment Banking	8.8 %	–
Wealth Management	8.4 %	–
Deutsche Asset Management	9.9 %	–

<sup>1</sup> Comparatives not meaningful as the CGU structure changed in 2016.

Management determined the values for the key assumptions in the following table based on a combination of internal and external analysis. Estimates for efficiency and the cost reduction program are based on progress made to date and scheduled future projects and initiatives.



Primary goodwill-carrying cash-generating unit	Description of key assumptions	Uncertainty associated with key assumptions and potential events/circumstances that could have a negative effect
Wealth Management	<ul style="list-style-type: none"> <li>- Strategy continuously informed by market trends and developments, including global wealth creation and concentration, digitalization, aging population and transfer to next generation</li> <li>- Expanding business with high net worth and ultra high net worth clients with strong coverage in selected developed and emerging markets</li> <li>- Building out of global discretionary portfolio management and investment advisory solutions</li> <li>- Optimize benefit from home market leadership in Germany, combined with strong organic growth strategy in Asia/Pacific and Americas</li> <li>- Maintained or increased market share in the fragmented competitive landscape</li> <li>- Cost savings in light of operating platform optimization</li> <li>- Targeted investment in platform enhancements, investment solutions and digital capabilities</li> </ul>	<ul style="list-style-type: none"> <li>- Major industry threats, i.e., market and exchange rate volatility, sovereign debt burden, increasing costs from compliance of upcoming regulations</li> <li>- Continued low interest rate environment</li> <li>- Investors continue to hold assets out of the markets, retreat to cash or simpler, lower fee products, and reduce trading activity</li> <li>- Business/execution risks, i.e., under achievement of net new money targets from market uncertainty, franchise instability, DB reputation, loss of high quality relationship managers</li> <li>- Difficulties in executing organic growth strategies through certain restrictions, e.g., unable to hire relationship managers, longer product development cycle</li> <li>- Cost savings following efficiency gains and expected IT/process improvements are not realized to the extent planned</li> </ul>
	<ul style="list-style-type: none"> <li>- Deliver strong investment product performance</li> <li>- Expand product suite in growth areas (e.g., alternatives, multi-asset, passive, ESG investment schemes) while rationalizing non-core strategies</li> <li>- Consistent net new money growth leveraging market share leadership in Germany and the rest of Europe through DWS and continued growth in Asia/Pacific and Americas</li> <li>- Diversification of intermediary coverage toward high growth channels, further deepening of core institutional / insurance relationships and deployment of digital solutions to serve new channels</li> <li>- Further efficiency through improved core operating processes, platform optimization and product rationalization</li> <li>- Anticipated margin compression from regulation (MIFID II)</li> </ul>	<ul style="list-style-type: none"> <li>- Challenging market environment and volatility unfavorable to our investment strategies</li> <li>- Unfavorable margin development and adverse competition levels in key markets and products beyond expected levels</li> <li>- Business/execution risks, e.g., under achievement of net new money targets from market uncertainty, loss of high quality client facing employees, lower than expected efficiency gains</li> <li>- Uncertainty around regulation and its potential implications not yet anticipated</li> <li>- Impact of reputational risks from legacy DB litigations</li> </ul>
Corporate & Investment Banking	<ul style="list-style-type: none"> <li>- Optimization of clients perimeter through strategic exits and targeted improvement of returns</li> <li>- Maximizing client driven franchise offering a wide suite of investment banking products in Debt and Equity Origination as well as Advisory combined with Trade, Cash and Security Services in transaction banking</li> <li>- Modest economic recovery in Europe while Americas growth expected to benefit from fiscal stimulus and further rate increases</li> <li>- Debt and Equity Origination business expected to continue to build on the positive momentum from the second half of 2016</li> <li>- Mitigate regulatory driven Capital increases through portfolio management and re-investing to enhance returns</li> <li>- Cost efficiencies driven by ongoing cost and headcount management</li> </ul>	<ul style="list-style-type: none"> <li>- Market environment remains challenging, particularly in Europe</li> <li>- Increase in political risk from upcoming national elections in Europe and the exit process of the U.K. from the European Union</li> <li>- Strategic portfolio optimization and business perimeter decisions may not generate expected revenue growths and client optimization may have more than expected impact on revenues</li> <li>- Further potential margin compression</li> <li>- Decline in costs expected from strategic activities does not materialize in the planned time frame</li> <li>- Slower than anticipated recovery of the world economy and its impact on trade volumes, interest rates and foreign exchange rates</li> </ul>

**Sensitivities:** In order to test the resilience of the recoverable amount, key assumptions used in the DCF model (for example, the discount rate and the earnings projections) are sensitized. Management believes that reasonable possible changes in key assumptions could cause impairment losses in CIB, WM and DeAM, for which the recoverable amounts exceeded the respective carrying amounts by 12 % or € 1.5 billion (CIB), 49 % or € 1.3 billion (WM) and 32 % or € 1.8 billion (DeAM).

#### [Change in certain key assumptions to cause the recoverable to equal the carrying amount](#)

Change in Key Assumptions	CIB	DeAM	WM
Discount rate (post tax) increase from/to	8.8 %/9.5 %	9.9 %/11.3 %	8.4 %/11.0 %
Projected future earnings in each period	(9) %	(34) %	(21) %
Long term growth rates	N/M	N/M	N/M

N/M – Not meaningful, as a rate of 0 % would still lead to a recoverable amount in excess of the carrying amount.

## Other Intangible Assets

### Changes of other intangible assets by asset classes for the years ended December 31, 2016, and 2015

in € m.			Purchased intangible assets					Internally generated intangible assets	Total other intangible assets
	Unamortized		Amortized					Amortized	
	Retail investment management agreements	Other	Total unamortized purchased intangible assets	Customer-related intangible assets	Value of business acquired	Contract-based intangible assets	Software and other	Total amortized purchased intangible assets	
Cost of acquisition/manufacture:									
Balance as of January 1, 2015	951	441	1,392	1,529	888	720	1,025	4,162	9,269
Additions	0	0	0	26	0	0	21	47	1,265
Changes in the group of consolidated companies	0	(3)	(3)	0	0	0	(1)	(1)	(7)
Disposals	0	0	0	0	0	0	0	0	193
Reclassifications from (to) "held for sale"	0	0	0	(42)	0	0	(13)	(55)	0
Transfers	0	0	0	0	0	0	42	42	(11)
Exchange rate changes	110	2	112	45	53	75	39	212	121
Balance as of December 31, 2015	1,061	440	1,501	1,559	941	795	1,112	4,407	10,755
Additions	0	0	0	27	0	0	49	76	1,499
Changes in the group of consolidated companies	0	0	0	(155)	(806)	0	(13)	(974)	0
Disposals	0	0	0	1	0	0	148	149	123
Reclassifications from (to) "held for sale"	0	0	0	0	0	(747)	(203)	(950)	0
Transfers	0	0	0	0	0	0	65	65	(29)
Exchange rate changes	33	0	33	1	(135)	22	9	(103)	42
Balance as of December 31, 2016	1,094	440	1,534	1,431	0	70	871	2,372	6,235
Accumulated amortization and impairment:									
Balance as of January 1, 2015	240	3	243	976	243	343	781	2,343	1,249
Amortization for the year	0	0	0	87	44	36	45	212	499
Changes in the group of consolidated companies	0	(3)	(3)	0	0	0	(1)	(1)	(3)
Disposals	0	0	0	0	0	0	(1)	(1)	190
Reclassifications from (to) "held for sale"	0	0	0	(25)	0	0	(4)	(29)	0
Impairment losses	0	416	416	397	0	14	16	427	191
Reversals of impairment losses	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	(1)	0	28	27	(24)
Exchange rate changes	28	2	30	41	14	35	29	119	61
Balance as of December 31, 2015	268	418	686	1,476	300	429	893	3,098	1,782
Amortization for the year	0	0	0	39	37	24	36	136	679
Changes in the group of consolidated companies	0	0	0	(155)	(808)	0	(15)	(978)	(10)
Disposals	0	0	0	1	0	0	146	147	99
Reclassifications from (to) "held for sale"	0	0	0	0	0	(359)	(94)	(453)	0
Impairment losses	0	6	6	0	515	0	0	515	60
Reversals of impairment losses	0	0	0	0	0	39	10	49	0
Transfers	0	0	0	3	0	0	45	48	(20)
Exchange rate changes	8	0	8	1	(43)	10	6	(26)	26
Balance as of December 31, 2016	276	424	700	1,363	0	65	715	2,143	2,418
Carrying amount:									
As of December 31, 2015	793	22	815	83	641	367	218	1,309	3,064
As of December 31, 2016	818	15	833	68	0	5	156	229	3,817

<sup>1</sup> The €710 million were included in general and administrative expenses.

<sup>2</sup> Of which €843 million were included in impairment of goodwill and other intangible assets, consisting of impairments of unamortized trademark intangible assets (€416 million) as well as amortized customer-related (€397 million), contract-based (€14 million) and trademark (€16 million) intangible assets.. Furthermore, €191 million of impairments related to self-developed software, which were recorded in general and administrative expenses.

<sup>3</sup> The €815 million were included in general and administrative expenses.

<sup>4</sup> Of which €521 million were included in impairment of goodwill and other intangible assets, consisting of impairments of an unamortized trademark intangible asset (€6 million) as well as the write-off of the Value of business acquired (VOBA; €515 million). Furthermore, €60 million of impairments related to self-developed software, which were recorded in general and administrative expenses.

<sup>5</sup> €49 million were recorded as reversal of a prior year's impairment related to the sale of Maher Terminals LLC (NCOU) and are included under impairment of goodwill and other intangible assets.

## Amortizing Intangible Assets

In 2016, amortizing other intangible assets decreased by a net €327 million. Main components of this development included increases due to additions to internally generated intangible assets of €1.5 billion, which represent the capitalization of expenses incurred in conjunction with the Group's development of own-used software. These were offset by amortization expenses of €815 million, mostly related to the scheduled asset consumption of self-developed software (€679 million), and impairment charges of €580 million, mainly reflecting the write-off of the value of business acquired (VOBA; €515 million) as a consequence of the Abbey Life disposal (Deutsche AM). Furthermore, the reassessment of current platform software as well as software under construction, led to the write-down of self-developed software (€60 million). In advance of the sale of the NCOU legacy investment in Maher Terminals' Port Elizabeth operation in the fourth quarter 2016, its reclassification to the held-for-sale category in the third quarter 2016 had led to a net reduction of €497 million in contract-based and trade name other intangible assets.

During 2015, the main changes in amortizing other intangible assets included additions to internally generated intangible assets of €1.2 billion, which represent the capitalization of expenses incurred in conjunction with the Group's activities related to the development of own-used software. On the other hand and as a result of the reassessment of current platform software as well as software under construction, the Group recorded impairments of self-developed software of €191 million. On April 27, 2015, Deutsche Bank announced its new strategic roadmap, in which the sale of Postbank is an integral part. The Group's further updating of its new strategy constituted a triggering event upon which goodwill and all other non-financial assets included in the former CGU PBC had to be tested for impairment. The valuation performed in the third quarter 2015 on the new strategic plan resulted in an impairment of the former CGU PBC. After allocation of the impairment to fully write-off the former PBC goodwill (€2.8 billion; see section 'Changes in Goodwill' above for its restatement to CGUs under the new segment structure in 2016), an impairment loss of €837 million related to other intangible assets within the former CGU PBC was recognized (of which €834 million related to the Postbank CGU), reflecting the change in strategic intent and the expected deconsolidation of Postbank. The impairment was based on a fair value less costs of disposal model (Level 3 of the fair value hierarchy). Of that impairment amount, €427 million related to amortizing intangible assets, mainly comprising write-offs of customer-related intangible assets (€397 million), BHW trademark intangibles (€16 million) and contract-based intangible assets (€14 million). The remainder was allocated to write-off the unamortizing Postbank trademark intangible asset (€410 million; see below).

In 2014, impairments of €146 million recorded on purchased other intangible assets were largely attributable to Maher Terminals LLC (NCOU; thereof €116 million on lease rights ('contract-based') and €29 million on trade mark ('software and others')), following the continued negative outlook for container and business volumes. The impairment of self-developed software of €48 million was largely a result of the reassessment of current platform software under the OpEx Program.

Other intangible assets with finite useful lives are generally amortized over their useful lives based on the straight-line method.

### Useful lives of other amortized intangible assets by asset class

	Useful lives in years
Internally generated intangible assets:	
Software	up to 10
Purchased intangible assets:	
Customer-related intangible assets	up to 20
Contract-based intangible assets	up to 8
Other	up to 80

## Unamortized Intangible Assets

Within this asset class, the Group recognizes certain contract-based and marketing-related intangible assets, which are deemed to have an indefinite useful life.

In particular, the asset class comprises the below detailed investment management agreements related to retail mutual funds and certain trademarks. Due to the specific nature of these intangible assets, market prices are ordinarily not observable and, therefore, the Group values such assets based on the income approach, using a post-tax DCF-methodology.

**Retail investment management agreements:** These assets, amounting to €818 million, relate to the Group's U.S. retail mutual fund business and are allocated to the Deutsche AM CGU. Retail investment management agreements are contracts that give DWS Investments the exclusive right to manage a variety of mutual funds for a specified period. Since these contracts are easily renewable, the cost of renewal is minimal, and they have a long history of renewal, these agreements are not expected to have a foreseeable limit on the contract period. Therefore, the rights to manage the associated assets under management are expected to generate cash flows for an indefinite period of time. This intangible asset was recorded at fair value based upon a valuation provided by a third party at the date of the Group's acquisition of Zurich Scudder Investments, Inc. in 2002.

The recoverable amount of the asset of €818 million was calculated as fair value less costs of disposal using the multi-period excess earnings method and the fair value measurement was categorized as Level 3 in the fair value hierarchy. The key assumptions in determining the fair value less costs of disposal include the asset mix, the flows forecast and the effective fee rate. The discount rates (cost of equity) applied in the calculation were 10.7 % in 2016 and 11.0 % in 2015. The reviews of the valuation for the years 2016 and 2015 neither resulted in any impairment nor a reversal of prior impairments. In 2014, a reversal of impairment of €84 million was recognized and recorded in impairment of goodwill and other intangible assets in the income statement, mainly due to a positive flows forecast on the back of a strengthening franchise, a favorable asset mix and a decrease in the discount rate.

**Trademarks:** The other unamortized intangible assets included the Postbank (allocated to CGU Postbank) and the Sal. Oppenheim (allocated to CGU Deutsche AM) trademarks, which were both acquired in 2010. The Postbank trademark was initially recognized in 2010 at €382 million. In finalizing the purchase price allocation in 2011, the fair value of the Postbank trademark increased to €410 million. The Sal. Oppenheim trademark was recognized at €27 million. Since both trademarks were expected to generate cash flows for an indefinite period of time, they were classified as unamortized intangible assets. Both trademarks were recorded at fair value at the acquisition date, based on third party valuations. The recoverable amounts were calculated as the fair value less costs of disposal of the trademarks based on the income approach using the relief-from-royalty method. Reflecting the change in strategic intent and the expected de-consolidation of Postbank, the Postbank trademark (€410 million) was fully written off in the third quarter 2015. Following a review of the valuation model for the Sal. Oppenheim trademark, a write-down of €6 million was recorded in the fourth quarter 2015. The discontinuation of its use outside the German market led to a further write-down of €6 million recorded in the fourth quarter 2016.

## 27 – Non-Current Assets and Disposal Groups Held for Sale

Within the balance sheet, non-current assets and disposal groups held for sale are included in other assets and other liabilities.

in € m.	Dec 31, 2016	Dec 31, 2015
Cash, due and deposits with banks, Central bank funds sold and securities purchased under resale agreements	243	0
Trading assets, Derivatives, Financial assets designated at fair value through P&L	30	0
Financial assets available for sale	29	0
Loans	46	28
Property and equipment	174	43
Other assets	42	3,420
<b>Total assets classified as held for sale</b>	<b>563</b>	<b>3,491</b>
Deposits, Central bank funds purchased and securities sold under resale agreements	570	0
Trading liabilities, Derivatives, Financial liabilities designated at fair value through P&L	29	0
Long-term debt	0	0
Other liabilities	102	37
<b>Total liabilities classified as held for sale</b>	<b>701</b>	<b>37</b>

As of December 31, 2016 and December 31, 2015, unrealized net gains of €0 million and €662 million, respectively, relating to non-current assets classified as held for sale were recognized directly in accumulated other comprehensive income (loss) (net of tax).

### Mahe Terminals, Port Elizabeth

On April 15, 2016, the Group announced that it had reached an agreement with Macquarie Infrastructure Partners III ("MIP III"), a fund managed by Macquarie Infrastructure and Real Assets ("MIRA"), to sell Mahe Terminals USA, LLC ("Mahe Terminals"), a multi-user container terminal in Port Elizabeth, New Jersey. Under the transaction, MIP III agreed to acquire 100 % of Mahe Terminals, subject to regulatory approvals. Following on from further progress made in the third quarter 2016, as of September 30, 2016, Mahe Terminals had been classified as a disposal group held for sale. The reclassification did not result in an impairment loss. Prior to its reclassification, Mahe Terminals had been accounted for as a consolidated legacy investment held within the NCOU. The sale was successfully completed on November 16, 2016.

### Abbey Life

On September 28, 2016, Deutsche Bank announced that it had reached an agreement with Phoenix Life Holdings Limited ("Phoenix Life"), a subsidiary of Phoenix Group Holdings ("Phoenix Group"), to sell its Abbey Life business (Abbey Life Assurance Company Limited, Abbey Life Trustee Services Limited and Abbey Life Trust Securities Limited) which were held within Deutsche AM. Under the terms of the transaction, Phoenix Life agreed to acquire 100 % of the Abbey Life business for a purchase price, net of certain adjustments, of GBP 933 million (€1,087 million, based on year-end exchange rate) and an indemnity protection for up to GBP 175 million covering for a period of up to 8 years for potential outcomes in relation to an impending review by the Financial Conduct Authority (FCA).

The transaction was subject to regulatory approvals including that of the Prudential Regulatory Authority (PRA), as well as to a vote of the shareholders of Phoenix Group and the completion of a rights issue by Phoenix Group to fund the transaction. With Phoenix Group shareholders voting to approve the transaction on October 24, 2016 and the rights issue completed on November 8, 2016, Phoenix Group announced on December 13, 2016 that the PRA had given its consent to the acquisition of Abbey Life. Closing of the transaction has occurred on December 30, 2016. Accordingly, the Abbey Life entities were deconsolidated from the Group's balance sheet at year-end 2016.

With the above requirements fulfilled and prior to the closing date of the transaction, the Abbey Life entities became subject to the held-for-sale accounting rules. Therefore and immediately before its initial classification as held-for-sale, the disposal group, which also contained intangible assets of €1,015 million (comprised of goodwill of €500 million allocated from the disposing cash-generating unit Deutsche AM as well as the VOBA of €515 million (value of business acquired; see Note 26 "Goodwill and Other Intangible Assets")), was initially measured and recognized in accordance with applicable accounting rules. A comparison of the fair value less costs to sell and net assets of the disposal group resulted in an initial impairment of €1,015 million recorded in Deutsche AM's segment P&L of the fourth quarter 2016 as an Impairment of goodwill and other intangible assets.

Upon closing of the sale, cumulative losses of €49 million stemming from the termination of the Abbey Life business' cash flow hedge program, which were previously a component of other comprehensive income, were released to profit or loss. This was offset by other income items leading to €72 million of net positive revenues as a result of the sale. Together with the €1,015 million intangibles impairment already recognized, in the fourth quarter 2016, the Group recorded an overall pre-tax loss on the transaction of €943 million.

The sale has a net positive capital impact upon closing of the transaction and has improved Deutsche Bank's Common Equity Tier 1 capital ratio (CRR/CRD 4 fully loaded) as of December 31, 2016 by approximately 10 basis points. The transaction does not have a material impact on Deutsche Bank's Available Distributable Items.

## Sal. Oppenheim's Luxembourg-based asset servicing business

On December 22, 2016, Deutsche Bank announced that it has reached an agreement to sell its fund administration and custody business of Sal. Oppenheim Luxembourg to private bank Hauck & Aufhäuser. Accordingly, the balance sheet of the related business, which is held in Deutsche AM, was classified as a disposal group held for sale. The revaluation of the disposal group resulted in an impairment loss of €34 million recorded in Other income of the fourth quarter 2016. The completion of the transaction, which comprises the sale of two Luxembourg entities and its staff, is subject to customary closing conditions and regulatory approvals and is expected to close within twelve months.

## Disposals in 2016

Division	Disposal	Financial impact <sup>1</sup>	Date of the disposal
Private, Wealth & Commercial Clients	On December 28, 2015, Deutsche Bank had agreed to sell its entire 19.99 % stake in Hua Xia Bank Company Limited ("Hua Xia") to PICC Property and Casualty Company Limited ("PICC Property & Casualty"). Accordingly and as of year-end 2015, the equity method investment in Hua Xia of € 3.3 billion was reclassified to the held-for-sale category. The completion of the transaction was subject to customary closing conditions and regulatory approvals, including that of the China Banking Regulatory Commission, which granted its approval for PICC Property and Casualty in the fourth quarter 2016 to acquire Deutsche Bank's stake in Hua Xia.	Due to revaluation of the held-for-sale investment and up until its disposal in the fourth quarter 2016, the Group recorded revaluation losses of € 122 million during 2016 on the non-current asset, marking it down to € 3.1 billion. The revaluation losses recorded in other income were largely a result of the decline in the share price of Hua Xia and an adverse exchange rate development. Due to the agreed consideration for the Hua Xia stake, other transaction-related effects partly compensated the decline in the share price. In addition, accumulated other comprehensive income of € 662 million related to the investment was reclassified to the income statement. The overall transaction related net gain in 2016 amounted to € 624 million.	Fourth quarter 2016
Private, Wealth & Commercial Clients	Deutsche Bank completed the previously announced definitive agreement to sell its U.S. Private Client Services (PCS) business to Raymond James Financial, Inc. as of September 6, 2016.	None	Third quarter 2016
Deutsche Asset Management	In August 2015, Deutsche Bank had announced that it has entered into an agreement to sell its Indian asset management business to Pramerica Asset Managers Pvt. Ltd. In March 2016, all regulatory approvals have been obtained and the sale was completed.	None	First quarter 2016.

<sup>1</sup> Impairment losses and reversals of impairment losses are included in Other income.



## Non-Current Assets and Disposal Groups Held for Sale as of December 31, 2015

Division	Non-current assets and disposal groups held for sale	Financial impact <sup>1</sup>	Additional information
Private, Wealth & Commercial Clients	On December 28, 2015, Deutsche Bank had agreed to sell its entire 19.99 % stake in Hua Xia Bank Company Limited („Hua Xia“) to PICC Property and Casualty Company Limited. Accordingly and as of year-end 2015, the equity method investment in Hua Xia of € 3.3 billion was reclassified to the held-for-sale category.	Prior to its reclassification, Hua Xia had been accounted for as an associate under the equity method of accounting. The revaluation of the equity method investment to its fair value (quoted market price less costs of disposal in an active market (level 1)) resulted in a partial reversal of € 162 million from the initial impairment amount of € 649 million recorded during the third quarter 2015. Accordingly, the net impairment of € 487 million was recorded in former PBC and reported under Net income (loss) from equity method investments. The agreement to sell the stake in Hua Xia combined with the share price development resulted in an overall net loss of € 697 million in total.	Fourth quarter 2015
Private, Wealth & Commercial Clients	In line with the Bank's agenda to focus on strategic priorities, the Group announced that it has entered into a definitive asset purchase agreement to sell its U.S. Private Client Services unit ("PCS") to Raymond James Financial, Inc.	None	Fourth quarter 2015

<sup>1</sup> Impairment losses and reversals of impairment losses are included in Other income.

## Disposals in 2015

Division	Disposal	Financial impact <sup>1</sup>	Date of the disposal
Non-Core Operations Unit	In the first quarter 2015, the Group classified its investment in the Fairview Container Terminal in Port of Prince Rupert, Canada, which is a segment of Maher Terminals, a multi-user container terminal operator, as a disposal group held for sale. Under the disposal transaction, DP World, a Dubai-based marine terminal operator, agreed to acquire 100 % of the Fairview Container Terminal for a consideration of € 391 million (CAD 580 million).	None.	Third quarter 2015
Infrastructure	Piecemeal sale of parts of the Group's wholesale banking information technology (IT) infrastructure to Hewlett Packard.	None in 2015.	Second quarter 2015

<sup>1</sup> Impairment losses and reversals of impairment losses are included in Other income.

## 28 – Other Assets and Other Liabilities

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Other assets:</b>		
Brokerage and securities related receivables		
Cash/margin receivables	57,924	60,421
Receivables from prime brokerage	9,859	10,575
Pending securities transactions past settlement date	6,409	4,221
Receivables from unsettled regular way trades	30,908	19,722
Total brokerage and securities related receivables	105,100	94,939
Accrued interest receivable	2,433	2,649
Assets held for sale	563	3,491
Other	17,950	17,058
<b>Total other assets</b>	<b>126,045</b>	<b>118,137</b>

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Other liabilities:</b>		
Brokerage and securities related payables		
Cash/margin payables	70,706	71,161
Payables from prime brokerage	20,155	40,854
Pending securities transactions past settlement date	2,668	3,847
Payables from unsettled regular way trades	28,490	18,776
Total brokerage and securities related payables	122,019	134,637
Accrued interest payable	2,712	2,607
Liabilities held for sale	701	37
Other	30,008	37,725
<b>Total other liabilities</b>	<b>155,440</b>	<b>175,005</b>

For further details on the assets and liabilities held for sale please refer to Note 27 “Non-Current Assets and Disposal Groups Held for Sale”.

## 29 – Deposits

in € m.	Dec 31, 2016	Dec 31, 2015
Noninterest-bearing demand deposits	200,122	192,010
Interest-bearing deposits		
Demand deposits	129,654	153,559
Time deposits	130,299	124,196
Savings deposits	90,129	97,210
Total interest-bearing deposits	350,082	374,964
<b>Total deposits</b>	<b>550,204</b>	<b>566,974</b>

## 30 – Provisions

### Movements by Class of Provisions

in € m.	Home Savings Business	Operational Risk	Civil Litigations	Regulatory Enforcement	Re-structuring	Mortgage Repurchase Demands	Other <sup>1</sup>	Total
<b>Balance as of January 1, 2015</b>	<b>1,150</b>	<b>422</b>	<b>761</b>	<b>2,448</b>	<b>120</b>	<b>669</b>	<b>880</b>	<b>6,450</b>
Changes in the group of consolidated companies	0	0	0	0	0	0	2	2
New provisions	316	170	1,296	4,067	688	16	915	7,468
Amounts used	301	17	562	2,504	118	123	554	4,179
Unused amounts reversed	1	289	112	69	40	231	380	1,121
Effects from exchange rate fluctuations/								
Unwind of discount	(32)	18	38	119	1	78	39	261
Transfers	0	12	(4)	(13)	4	0	21	20
<b>Balance as of December 31, 2015</b>	<b>1,132</b>	<b>315</b>	<b>1,418</b>	<b>4,048</b>	<b>656</b>	<b>409</b>	<b>922</b>	<b>8,900</b>
Changes in the group of consolidated companies	0	(0)	0	0	(8)	0	(66)	(74)
New provisions	213	123	1,192	1,616	535	25	582	4,286
Amounts used	213	23	403	82	333	273	545	1,872
Unused amounts reversed	37	93	278	34	110	10	131	693
Effects from exchange rate fluctuations/								
Unwind of discount	(36)	0	12	84	4	13	5	82
Transfers	0	(13)	72	(24)	(1)	0	(31)	3
<b>Balance as of December 31, 2016</b>	<b>1,059</b>	<b>309</b>	<b>2,014</b>	<b>5,607</b>	<b>741</b>	<b>164</b>	<b>735</b>	<b>10,629</b>

<sup>1</sup> For the remaining portion of provisions as disclosed on the consolidated balance sheet, please see Note 21 "Allowance for Credit Losses", in which allowances for credit related off-balance sheet positions are disclosed.

### Classes of Provisions

**Home Savings** provisions arise out of the home savings business of Deutsche Postbank Group and Deutsche Bank Bauspar-Aktiengesellschaft. In home savings, a customer enters into a building loan agreement, whereby the customer becomes entitled to borrow on a building loan once the customer has on deposit with the lending bank a targeted amount of money. In connection with the building loan agreement, arrangement fees are charged and interest is paid on deposited amounts at a rate that is typically lower than that paid on other bank deposits. In the event the customer determines not to make the borrowing, the customer becomes entitled to a retroactive interest bonus, reflecting the difference between the low contract savings interest rate and a fixed interest rate, currently substantially above market rate. The home savings provision relates to the potential interest bonus and arrangement fee reimbursement liability. The model for the calculation of the potential interest bonus liability includes parameters for the percentage of customer base impacted, applicable bonus rate, customer status and timing of payment. Other factors impacting the provision are available statistical data relating to customer behavior and the general environment likely to affect the business in the future.

**Operational** provisions arise out of operational risk and exclude civil litigation and regulatory enforcement provisions, which are presented as separate classes of provisions.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The definition used for the purposes of determining operational provisions differs from the risk management definition, as it excludes risk of loss resulting from civil litigations or regulatory enforcement matters. For risk management purposes, operational risk includes legal risk, as payments to customers, counterparties and regulatory bodies in civil litigations or regulatory enforcement matters constitute loss events for operational shortcomings, but excludes business and reputational risk.

**Civil Litigation** provisions arise out of current or potential claims or proceedings alleging non-compliance with contractual or other legal or regulatory responsibilities, which have resulted or may result in demands from customers, counterparties or other parties in civil litigations.

**Regulatory Enforcement** provisions arise out of current or potential claims or proceedings alleging non-compliance with legal or regulatory responsibilities, which have resulted or may result in an assessment of fines or penalties by governmental regulatory agencies, self regulatory organizations or other enforcement authorities.

**Restructuring** provisions arise out of restructuring activities. The Group aims to enhance its long-term competitiveness through major reductions in costs, duplication and complexity in the years ahead. For details see Note 10 “Restructuring”.

**Mortgage Repurchase Demands** provisions arise out of Deutsche Bank’s U.S. residential mortgage loan business. From 2005 through 2008, as part of Deutsche Bank’s U.S. residential mortgage loan business, Deutsche Bank sold approximately U.S.\$ 84 billion of private label securities and U.S.\$ 71 billion of loans through whole loan sales. Deutsche Bank has been presented with demands to repurchase loans from purchasers, investors and financial insurers based on alleged material breaches of representations and warranties or to indemnify such persons with respect to losses allegedly caused thereby. Deutsche Bank’s general practice is to process valid repurchase demands that are presented in compliance with contractual rights.

As of December 31, 2016, Deutsche Bank has approximately U.S.\$ 847 million of mortgage repurchase demands outstanding and not subject to agreements to rescind (based on original principal balance of the loans). These demands consist primarily of demands made in respect of private label securitizations by the trustees or servicers thereof. Against these outstanding demands, Deutsche Bank recorded provisions of U.S.\$ 173 million (€164 million) as of December 31, 2016. Deutsche Bank is the beneficiary of indemnity agreements from the originators or sellers of certain of the mortgage loans subject to these demands, with respect to which Deutsche Bank has recognized receivables of U.S.\$ 64 million (€61 million) as of December 31, 2016. The net provisions against these demands following deduction of such receivables were U.S.\$ 109 million (€103 million) as of December 31, 2016.

As of December 31, 2016, Deutsche Bank has completed repurchases, obtained agreements to rescind, settled or rejected as untimely claims on loans with an original principal balance of approximately U.S.\$ 8.8 billion. In connection with those repurchases, agreements and settlements, Deutsche Bank has obtained releases for potential claims on approximately U.S.\$ 98.1 billion of loans sold by Deutsche Bank as described above.

Additional mortgage repurchase demands may be made in respect of mortgage loans that Deutsche Bank has sold, but Deutsche Bank cannot reliably estimate their timing or amount. On June 11, 2015, the New York Court of Appeals issued a ruling affirming dismissal of mortgage repurchase claims asserted in litigation relating to a residential mortgage-backed security issued by Deutsche Bank on the grounds that the action was not timely commenced. The Court held that the repurchase claims, which alleged breaches of contractual representations and warranties pertaining to the loans at issue, accrued as of the closing date of the securitization and, thus, were time-barred under New York’s six-year statute of limitations. This and related decisions could impact the extent to which future repurchase demands are made to Deutsche Bank and the likelihood of success of any such claims.

Deutsche Bank did not act as servicer for the loans sold to third parties as whole loans (which constitute almost half of all U.S. residential mortgage loans sold from 2005 through 2008) and, once sold, Deutsche Bank ceased to have access to information about their performance. While loan performance is publicly available on the mortgage loans that Deutsche Bank securitized, no direct correlation has been observed between their performance and repurchase demands received. Demands have been received on loans that have defaulted, as well as loans that are current and loans that have been repaid in full.

**Other** provisions include several specific items arising from a variety of different circumstances, including the provision for the reimbursement of loan processing fees, deferred sales commissions and provisions for bank levies.

## Provisions and Contingent Liabilities

The Group recognizes a provision for potential loss only when there is a present obligation arising from a past event that is probable to result in an economic outflow that can be reliably estimated. Where a reliable estimate cannot be made for such an obligation, no provision is recognized and the obligation is deemed a contingent liability. Contingent liabilities also include possible obligations for which the possibility of future economic outflow is more than remote but less than probable. Where a provision has been taken for a particular claim, no contingent liability is recorded; for matters or sets of matters consisting of more than one claim, however, provisions may be recorded for some claims, and contingent liabilities (or neither a provision nor a contingent liability) may be recorded for others.

The Group operates in a legal and regulatory environment that exposes it to significant litigation risks. As a result, the Group is involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. In recent years, regulation and supervision in a number of areas have increased, and regulators, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations and enforcement actions which are often followed by civil litigation. This trend has accelerated markedly as a result of the global financial crisis and the European sovereign debt crisis.

In determining for which of the claims the possibility of a loss is probable, or less than probable but more than remote, and then estimating the possible loss for those claims, the Group takes into consideration a number of factors, including but not limited to the nature of the claim and its underlying facts, the procedural posture and litigation history of each case, rulings by the courts or tribunals, the Group's experience and the experience of others in similar cases (to the extent this is known to the Group), prior settlement discussions, settlements by others in similar cases (to the extent this is known to the Group), available indemnities and the opinions and views of legal counsel and other experts.

The provisions the Group has recognized for civil litigation and regulatory enforcement matters as of December 31, 2016 and December 31, 2015 are set forth in the table above. For some matters for which the Group believes an outflow of funds is probable, no provisions were recognized as the Group could not reliably estimate the amount of the potential outflow.

For the matters for which a reliable estimate can be made, the Group currently estimates that, as of December 31, 2016, the aggregate future loss of which the possibility is more than remote but less than probable is approximately €1.5 billion for civil litigation matters (December 31, 2015: €1.4 billion) and €0.8 billion for regulatory enforcement matters (December 31, 2015: €1.0 billion). These figures include matters where the Group's potential liability is joint and several and where the Group expects any such liability to be paid by a third party. For other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is more than remote but less than probable but the amount is not reliably estimable, and accordingly such matters are not included in the contingent liability estimates. For still other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is remote and therefore has neither recognized a provision nor included them in the contingent liability estimates.

This estimated possible loss, as well as any provisions taken, is based upon currently available information and is subject to significant judgment and a variety of assumptions, variables and known and unknown uncertainties. These uncertainties may include inaccuracies in or incompleteness of the information available to the Group, particularly at the preliminary stages of matters, and assumptions by the Group as to future rulings of courts or other tribunals or the likely actions or positions taken by regulators or adversaries may prove incorrect. Moreover, estimates of possible loss for these matters are often not amenable to the use of statistical or other quantitative analytical tools frequently used in making judgments and estimates, and are subject to even greater degrees of uncertainty than in many other areas where the Group must exercise judgment and make estimates. The estimated possible loss, as well as any provisions taken, can be and often are substantially less than the amount initially requested by regulators or adversaries or the maximum potential loss that could be incurred were the matters to result in a final adjudication adverse to the Group. Moreover, in several regions in which the Group operates, an adversary often is not required to set forth the amount it

is seeking, and where it is, the amount may not be subject to the same requirements that generally apply to pleading factual allegations or legal claims.

The matters for which the Group determines that the possibility of a future loss is more than remote will change from time to time, as will the matters as to which a reliable estimate can be made and the estimated possible loss for such matters. Actual results may prove to be significantly higher or lower than the estimate of possible loss in those matters where such an estimate was made. In addition, loss may be incurred in matters with respect to which the Group believed the likelihood of loss was remote. In particular, the estimated aggregate possible loss does not represent the Group's potential maximum loss exposure for those matters.

The Group may settle litigation or regulatory proceedings or investigations prior to a final judgment or determination of liability. It may do so to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when the Group believes it has valid defenses to liability. It may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, the Group may, for similar reasons, reimburse counterparties for their losses even in situations where it does not believe that it is legally compelled to do so.

## Current Individual Proceedings

Set forth below are descriptions of civil litigation and regulatory enforcement matters or groups of matters for which the Group has taken material provisions, or for which there are material contingent liabilities that are more than remote, or for which there is the possibility of material business or reputational risk; similar matters are grouped together and some matters consist of a number of proceedings or claims. The disclosed matters include matters for which the possibility of a loss is more than remote but for which the Group cannot reliably estimate the possible loss.

**Esch Funds Litigation.** Sal. Oppenheim jr. & Cie. AG & Co. KGaA ("Sal. Oppenheim") was prior to its acquisition by Deutsche Bank in 2010 involved in the marketing and financing of participations in closed end real estate funds. These funds were structured as Civil Law Partnerships under German law. Usually, Josef Esch Fonds-Projekt GmbH performed the planning and project development. Sal. Oppenheim held an indirect interest in this company via a joint-venture. In relation to this business a number of civil claims have been filed against Sal. Oppenheim. Some but not all of these claims are also directed against former managing partners of Sal. Oppenheim and other individuals. The claims brought against Sal. Oppenheim relate to investments of originally approximately €1.1 billion. After certain claims have either been dismissed or settled, claims relating to investments of originally approximately €330 million are still pending. Currently, the aggregate amounts claimed in the pending proceedings are approximately €390 million. The investors are seeking to unwind their fund participation and to be indemnified against potential losses and debt related to the investment. The claims are based in part on an alleged failure of Sal. Oppenheim to provide adequate information on related risks and other material aspects important for the investors' decision. Based on the facts of the individual cases, some courts have decided in favor and some against Sal. Oppenheim. Appeals are pending. The Group has recorded provisions and contingent liabilities with respect to these cases but has not disclosed the amounts thereof because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

**FX Investigations and Litigations.** Deutsche Bank has received requests for information from certain regulatory and law enforcement agencies globally who are investigating trading in, and various other aspects of, the foreign exchange market. Deutsche Bank is cooperating with these investigations. Relatedly, Deutsche Bank has conducted its own internal global review of foreign exchange trading and other aspects of its foreign exchange business.

On October 19, 2016, the U.S. Commodity Futures Trading Commission, Division of Enforcement ("CFTC") issued a letter ("CFTC Letter") notifying Deutsche Bank that the CFTC "is not taking any further action at this time and has closed the investigation of Deutsche Bank" regarding foreign exchange. As is customary, the CFTC Letter states that the CFTC "maintains the discretion to decide to reopen the investigation at any time in the future." The CFTC Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices, which remain pending.

On December 7, 2016, it was announced that Deutsche Bank has reached an agreement with CADE, the Brazilian antitrust enforcement agency, to settle an investigation into conduct in the foreign exchange market by a former Brazil-based Deutsche Bank trader. This has had the effect of bringing to a close CADE's administrative process as far as it relates to Deutsche Bank.

On February 13, 2017, the United States Department of Justice ("DOJ"), Criminal Division, Fraud Section, issued a letter ("DOJ Letter") notifying Deutsche Bank that the DOJ has closed its criminal inquiry "concerning possible violations of federal criminal law in connection with the foreign exchange markets." As is customary, the DOJ Letter states that the DOJ may reopen its inquiry if it obtains additional information or evidence regarding the inquiry. The DOJ Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices, which remain pending.

Investigations conducted by certain other regulatory and law enforcement agencies are ongoing and Deutsche Bank is cooperating with these investigations.

Deutsche Bank also has been named as a defendant in multiple putative class actions brought in the U.S. District Court for the Southern District of New York alleging antitrust and U.S. Commodity Exchange Act claims relating to the alleged manipulation of foreign exchange rates. The complaints in the class actions do not specify the damages sought. On January 28, 2015, the federal court overseeing the class actions granted the motion to dismiss with prejudice in two actions involving non-U.S. plaintiffs while denying the motion to dismiss in one action involving U.S. plaintiffs then pending. Additional actions have been filed since the court's January 28, 2015 order. There are now four actions pending. The first pending action is a consolidated action brought on behalf of a putative class of over-the-counter traders and a putative class of central-exchange traders, who are domiciled in or traded in the United States or its territories, and alleges illegal agreements to restrain competition with respect to and to manipulate both benchmark rates and spot rates, particularly the spreads quoted on those spot rates; the complaint further alleges that those supposed conspiracies, in turn, resulted in artificial prices on centralized exchanges for foreign exchange futures and options. Deutsche Bank's motion to dismiss the consolidated action was granted in part and denied in part on September 20, 2016. A second action tracks the allegations in the consolidated action and asserts that such purported conduct gave rise to, and resulted in a breach of, defendants' fiduciary duties under the U.S. Employment Retirement Income Security Act of 1974 (ERISA). The third putative class action was filed in the same court on December 21, 2015, by Axiom Investment Advisors, LLC alleging that Deutsche Bank rejected FX orders placed over electronic trading platforms through the application of a function referred to as "Last Look" and that these orders were later filled at prices less favorable to putative class members (the "Last Look" action). Plaintiff has asserted claims for breach of contract, quasi-contractual claims, and claims under New York statutory law. Filed on September 26, 2016, the fourth putative class action (the "Indirect Purchasers" action) tracks the allegations in the consolidated action and asserts that such purported conduct injured "indirect purchasers" of FX instruments. These claims are brought pursuant to the Sherman Act, New York's Donnelly Act, California's Cartwright Act and California's Unfair Competition Law.

On August 24, 2016, the Court granted defendants' motion to dismiss the ERISA action. Plaintiffs in that action filed an appellate brief in the United States Court of Appeals for the Second Circuit on January 9, 2017. On February 14, 2017, the court granted in part and denied in part Deutsche Bank's motion to dismiss the Last Look action. Deutsche Bank moved to dismiss the Indirect Purchasers action on January 24, 2017. Discovery has commenced in the consolidated and Last Look actions. Discovery has not yet commenced in the ERISA and Indirect Purchasers actions.

Deutsche Bank also has been named as a defendant in two Canadian class proceedings brought in the provinces of Ontario and Quebec. Filed on September 10, 2015, these class actions assert factual allegations similar to those made in the consolidated action in the United States and seek damages pursuant to the Canadian Competition Act as well as other causes of action.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.



**Interbank Offered Rates Matters. *Regulatory and Law Enforcement Matters.*** Deutsche Bank has received requests for information from various regulatory and law enforcement agencies, including various U.S. state attorneys general, in connection with industry-wide investigations concerning the setting of the London Interbank Offered Rate (LIBOR), Euro Interbank Offered Rate (EURIBOR), Tokyo Interbank Offered Rate (TIBOR) and other interbank offered rates. Deutsche Bank is cooperating with these investigations.

As previously reported, Deutsche Bank reached a settlement with the European Commission on December 4, 2013 as part of a collective settlement to resolve the European Commission's investigations in relation to anticompetitive conduct in the trading of Euro interest rate derivatives and Yen interest rate derivatives. Under the terms of the settlement agreement, Deutsche Bank agreed to pay €725 million in total. This fine has been paid in full and does not form part of the Bank's provisions.

Also as previously reported, on April 23, 2015, Deutsche Bank entered into separate settlements with the U.S. Department of Justice (DOJ), the U.S. Commodity Futures Trading Commission (CFTC), the U.K. Financial Conduct Authority (FCA), and the New York State Department of Financial Services (DFS) to resolve investigations into misconduct concerning the setting of LIBOR, EURIBOR, and TIBOR. Under the terms of these agreements, Deutsche Bank agreed to pay penalties of U.S.\$ 2.175 billion to the DOJ, CFTC and DFS and GBP 226.8 million to the FCA. These fines have been paid in full and do not form part of the Bank's provisions, save for U.S.\$ 150 million that is payable to the DOJ, subject to court approval (currently scheduled for March 28, 2017), following the sentencing of DB Group Services (UK) Ltd. (an indirectly-held, wholly-owned subsidiary of Deutsche Bank) in connection with its guilty plea to one count of wire fraud. As part of the resolution with the DOJ, Deutsche Bank entered into a Deferred Prosecution Agreement with a three year term pursuant to which it agreed (among other things) to the filing of an Information in the U.S. District Court for the District of Connecticut charging Deutsche Bank with one count of wire fraud and one count of price fixing in violation of the Sherman Act.

On November 29, 2016, the U.S. Securities and Exchange Commission staff informed Deutsche Bank that it has concluded its IBOR investigation and that it does not intend to recommend an enforcement action by the Commission.

On December 21, 2016, the Swiss Competition Commission, WEKO, formally announced its IBOR-related settlement decisions addressing various banks, including Deutsche Bank AG, relating to EURIBOR and Yen LIBOR. Deutsche Bank will be required to pay a fine of CHF 5.0 million with respect to Yen Libor and approximately CHF 0.4 million for WEKO's fees. Deutsche Bank received full immunity from fines for EURIBOR in return for being the first party to notify such conduct to WEKO. The settlement amount is already fully reflected in the existing litigation provisions.

As reported above, Deutsche Bank is subject to an inquiry by a working group of U.S. state attorneys general in relation to the setting of LIBOR, EURIBOR, and TIBOR. The Bank continues to cooperate with the U.S. state attorneys generals' inquiry.

Other investigations of Deutsche Bank concerning the setting of various interbank offered rates remain ongoing, and Deutsche Bank remains exposed to further action. The Group has not disclosed whether it has established a provision or contingent liability with respect to the remaining investigations because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

**Overview of Civil Litigations.** Deutsche Bank is party to 47 civil actions concerning alleged manipulation relating to the setting of various Interbank Offered Rates which are described in the following paragraphs. Most of the civil actions, including putative class actions, are pending in the U.S. District Court for the Southern District of New York (SDNY), against Deutsche Bank and numerous other defendants. All but six of the civil actions were filed on behalf of parties who allege losses as a result of manipulation relating to the setting of U.S. dollar LIBOR. The six civil actions pending against Deutsche Bank that do not relate to U.S. dollar LIBOR are also pending in the SDNY, and include two actions concerning Yen LIBOR and Euroyen TIBOR, one action concerning EURIBOR, one consolidated action concerning Pound Sterling (GBP) LIBOR, one action concerning Swiss franc (CHF) LIBOR, and one action concerning two Singapore Dollar (SGD) benchmark rates, the Singapore Interbank Offered Rate (SIBOR) and the Swap Offer Rate (SOR).



Claims for damages for all 47 of the civil actions discussed have been asserted under various legal theories, including violations of the U.S. Commodity Exchange Act (CEA), federal and state antitrust laws, the U.S. Racketeer Influenced and Corrupt Organizations Act (RICO), and other federal and state laws. In all but five cases, the amount of damages has not been formally articulated by the plaintiffs. The five cases that allege a specific amount of damages are individual actions consolidated in the U.S. dollar LIBOR multidistrict litigation and seek a minimum of more than U.S.\$ 1.25 billion in damages in the aggregate from all defendants including Deutsche Bank. The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

*U.S. dollar LIBOR.* With two exceptions, all of the civil actions concerning U.S. dollar LIBOR are being coordinated as part of a multidistrict litigation (the “U.S. dollar LIBOR MDL”) in the SDNY. In light of the large number of individual cases pending against Deutsche Bank and their similarity, the civil actions included in the U.S. dollar LIBOR MDL are now subsumed under the following general description of the litigation pertaining to all such actions, without disclosure of individual actions except when the circumstances or the resolution of an individual case is material to Deutsche Bank.

Following a series of decisions in the U.S. dollar LIBOR MDL between March 2013 and December 2016 narrowing their claims, plaintiffs are currently asserting antitrust claims, CEA claims and state law fraud, contract, unjust enrichment and other tort claims. The court has also issued decisions dismissing certain plaintiffs’ claims for lack of personal jurisdiction and on statute of limitations grounds, which are currently the subject of additional briefing; further decisions are pending.

On May 23, 2016, the U.S. Court of Appeals for the Second Circuit issued an opinion reinstating antitrust claims against the defendants in the U.S. dollar LIBOR MDL, and remanded to the district court for further consideration. On December 20, 2016, the district court issued a ruling dismissing certain antitrust claims while allowing others to proceed.

Discovery is underway in several of the cases, with motions for class certification currently scheduled to be briefed by August 2017.

On January 10, 2017, Deutsche Bank entered into a preliminary agreement with plaintiffs to settle a putative class action pending as part of the U.S. dollar LIBOR MDL asserting claims based on alleged transactions in Eurodollar futures and options traded on the Chicago Mercantile Exchange (*FTC Capital GmbH v. Credit Suisse Group AG*). The settlement amount is already fully reflected in existing litigation reserves and no additional provisions have been taken for this settlement. The settlement agreement is subject to further documentation and approval by the court.

Finally, one of the actions in the U.S. dollar LIBOR MDL has been dismissed in its entirety, including (as to Deutsche Bank and other foreign defendants) on personal jurisdiction grounds, and plaintiffs have filed an appeal to the Second Circuit.

Both of the non-MDL U.S. dollar LIBOR cases have been dismissed. Plaintiffs in the non-MDL case proceeding in the SDNY have moved to amend their complaint, and a decision on that motion is pending. The dismissal of the other non-MDL case, which was proceeding in the U.S. District Court for the Central District of California, was affirmed by the Ninth Circuit in December 2016.

*Yen LIBOR and Euroyen TIBOR.* On January 24, 2017, Deutsche Bank entered into a preliminary agreement with plaintiffs to settle two putative class actions pending in the SDNY alleging manipulation of Yen LIBOR and Euroyen TIBOR (*Laydon v. Mizuho Bank, Ltd. and Sonterra Capital Master Fund Ltd. v. UBS AG*), and withdrew its pending motions to dismiss the *Sonterra* action. (The *Laydon* action has already been subject to decisions by the court on motions to dismiss and is currently in discovery.) The settlement amount is already fully reflected in existing litigation reserves and no additional provisions have been taken for this settlement. The settlement agreement is subject to further documentation and approval by the court.

EURIBOR. On January 24, 2017, Deutsche Bank entered into a preliminary agreement with plaintiffs to settle a putative class action pending in the SDNY alleging manipulation of EURIBOR (*Sullivan v. Barclays PLC*), and withdrew its pending motions to dismiss the action. The settlement amount is already fully reflected in existing litigation reserves and no additional provisions have been taken for this settlement. The settlement agreement is subject to further documentation and approval by the court.

*GBP LIBOR, CHF LIBOR, and SIBOR and SOR.* Putative class actions alleging manipulation of Pound Sterling (GBP) LIBOR, Swiss Franc (CHF) LIBOR, and the Singapore Interbank Offered Rate (SIBOR) and Swap Offer Rate (SOR), respectively, are each pending in the SDNY. Each of these actions is the subject of fully briefed motions to dismiss. Decisions are pending.

*Bank Bill Swap Rate Claims.* On August 16, 2016, a putative class action was filed in the U.S. District Court for the Southern District of New York against Deutsche Bank and other defendants, bringing claims based on alleged collusion and manipulation in connection with the Australian Bank Bill Swap Rate (“BBSW”). The complaint alleges that the defendants, among other things, engaged in money market transactions intended to influence the BBSW fixing, made false BBSW submissions, and used their control over BBSW rules to further the alleged misconduct. Plaintiffs bring suit on behalf of persons and entities that engaged in U.S.-based transactions in BBSW-linked financial instruments from 2003 through the present. An amended complaint was filed on December 16, 2016, and defendants’ motions to dismiss have been filed.

**Investigations Into Referral Hiring Practices and Certain Business Relationships.** Certain regulators and law enforcement authorities in various jurisdictions, including the U.S. Securities and Exchange Commission and the U.S. Department of Justice, are investigating, among other things, Deutsche Bank’s compliance with the U.S. Foreign Corrupt Practices Act and other laws with respect to the Bank’s hiring practices related to candidates referred by clients, potential clients and government officials, and its engagement of finders and consultants. Deutsche Bank is responding to and continuing to cooperate with these investigations. Certain regulators in other jurisdictions have also been briefed on these investigations. The Group has recorded a provision with respect to certain of these regulatory investigations. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these regulatory investigations. Based on the facts currently known, it is not practicable at this time for the Bank to predict the timing of a resolution.

**Kaupthing CLN Claims.** In June 2012, Kaupthing hf, an Icelandic stock corporation, acting through its winding-up committee, issued Icelandic law claw back claims for approximately €509 million (plus costs, as well as interest calculated on a damages rate basis and a late payment rate basis) against Deutsche Bank in both Iceland and England. The claims were in relation to leveraged credit linked notes (“CLNs”), referencing Kaupthing, issued by Deutsche Bank to two British Virgin Island special purpose vehicles (“SPVs”) in 2008. The SPVs were ultimately owned by high net worth individuals. Kaupthing claimed to have funded the SPVs and alleged that Deutsche Bank was or should have been aware that Kaupthing itself was economically exposed in the transactions. Kaupthing claimed that the transactions were voidable by Kaupthing on a number of alternative grounds, including the ground that the transactions were improper because one of the alleged purposes of the transactions was to allow Kaupthing to influence the market in its own CDS (credit default swap) spreads and thereby its listed bonds. Additionally, in November 2012, an English law claim (with allegations similar to those featured in the Icelandic law claims) was commenced by Kaupthing against Deutsche Bank in London (together with the Icelandic proceedings, the “Kaupthing Proceedings”). Deutsche Bank filed a defense in the Icelandic proceedings in late February 2013. In February 2014, proceedings in England were stayed pending final determination of the Icelandic proceedings. Additionally, in December 2014, the SPVs and their joint liquidators served Deutsche Bank with substantively similar claims arising out of the CLN transactions against Deutsche Bank and other defendants in England (the “SPV Proceedings”). The SPVs claimed approximately €509 million (plus costs, as well as interest), although the amount of that interest claim was less than in Iceland. Deutsche Bank has now reached a settlement of the Kaupthing and SPV Proceedings which has been paid in the first quarter of 2017. The settlement amount is already fully reflected in existing litigation reserves and no additional provisions have been taken for this settlement.

**Kirch.** The public prosecutor's office in Munich (Staatsanwaltschaft München I) has conducted and is currently conducting criminal investigations in connection with the Kirch case inter alia with regard to former Deutsche Bank Management Board members. The Kirch case involved several civil proceedings between Deutsche Bank AG and Dr. Leo Kirch as well as media companies controlled by him. The key issue was whether an interview given by Dr. Rolf Breuer, then Spokesman of Deutsche Bank's Management Board, in 2002 with Bloomberg television, during which Dr. Breuer commented on Dr. Kirch's (and his companies') inability to obtain financing, caused the insolvency of the Kirch companies. In February 2014, Deutsche Bank and the Kirch heirs reached a comprehensive settlement, which has ended all legal disputes between them.

The allegations of the public prosecutor are that the relevant former Management Board members failed to correct in a timely manner factual statements made by Deutsche Bank's litigation counsel in submissions filed in one of the civil cases between Kirch and Deutsche Bank AG before the Munich Higher Regional Court and the Federal Court of Justice, after allegedly having become aware that such statements were not correct, and/or made incorrect statements in such proceedings, respectively.

On April 25, 2016, following the trial before the Munich District Court regarding the main investigation involving Juergen Fitschen and four other former Management Board members, the Munich District Court acquitted all of the accused, as well as the Bank, which was a secondary participant in such proceedings. On April 26, 2016, the public prosecutor filed an appeal. An appeal is limited to a review of legal errors rather than facts. On October 18, 2016, a few weeks after the written judgment was served, the public prosecutor provided notice that it will uphold its appeal only with respect to former Management Board members Juergen Fitschen, Dr. Rolf Breuer and Dr. Josef Ackermann and that it will withdraw its appeal with respect to former Management Board members Dr. Clemens Boersig and Dr. Tessen von Heydebreck for whom the acquittal thereby becomes binding.

The other investigations by the public prosecutor (which also deal with attempted litigation fraud in the Kirch civil proceedings) are ongoing. Deutsche Bank is fully cooperating with the Munich public prosecutor's office.

The Group does not expect these proceedings to have significant economic consequences for it and has not recorded a provision or contingent liability with respect thereto.

**KOSPI Index Unwind Matters.** Following the decline of the Korea Composite Stock Price Index 200 (the "KOSPI 200") in the closing auction on November 11, 2010 by approximately 2.7 %, the Korean Financial Supervisory Service ("FSS") commenced an investigation and expressed concerns that the fall in the KOSPI 200 was attributable to a sale by Deutsche Bank of a basket of stocks, worth approximately €1.6 billion, that was held as part of an index arbitrage position on the KOSPI 200. On February 23, 2011, the Korean Financial Services Commission, which oversees the work of the FSS, reviewed the FSS' findings and recommendations and resolved to take the following actions: (i) to file a criminal complaint to the Korean Prosecutor's Office for alleged market manipulation against five employees of the Deutsche Bank group and Deutsche Bank's subsidiary Deutsche Securities Korea Co. (DSK) for vicarious corporate criminal liability; and (ii) to impose a suspension of six months, commencing April 1, 2011 and ending September 30, 2011, of DSK's business for proprietary trading of cash equities and listed derivatives and DMA (direct market access) cash equities trading, and the requirement that DSK suspend the employment of one named employee for six months. There was an exemption to the business suspension which permitted DSK to continue acting as liquidity provider for existing derivatives linked securities. On August 19, 2011, the Korean Prosecutor's Office announced its decision to indict DSK and four employees of the Deutsche Bank group on charges of spot/futures linked market manipulation. The criminal trial commenced in January 2012. On January 25, 2016, the Seoul Central District Court rendered a guilty verdict against a DSK trader and a guilty verdict against DSK. A criminal fine of KRW 1.5 billion (less than €2.0 million) was imposed on DSK. The Court also ordered forfeiture of the profits generated on the underlying trading activity. The Group disgorged the profits on the underlying trading activity in 2011. The criminal trial verdict has been appealed by both the prosecutor and the defendants.

In addition, a number of civil actions have been filed in Korean courts against Deutsche Bank and DSK by certain parties who allege they incurred losses as a consequence of the fall in the KOSPI 200 on November 11, 2010. First instance court decisions were rendered against the Bank and DSK in some of these cases starting in the fourth quarter of 2015. The outstanding known claims have an aggregate claim amount of approximately €50 million (at present exchange rates). The Group has recorded a provision with respect to these outstanding civil matters. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these matters.

**Life Settlements Investigation.** U.S. federal law enforcement authorities are investigating Deutsche Bank's historical life settlements business. Issues being examined include the origination and purchase of investments in life insurance assets during the 2005 to 2008 period. Relatedly, the Bank has been conducting its own internal review of its historical life settlement business. The Bank is cooperating with the investigating authorities.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

**Mortgage-Related and Asset-Backed Securities Matters and Investigation.** *Regulatory and Governmental Matters.* Deutsche Bank, along with certain affiliates (collectively referred in these paragraphs to as "Deutsche Bank"), have received subpoenas and requests for information from certain regulators and government entities, including members of the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force, concerning its activities regarding the origination, purchase, securitization, sale, valuation and/or trading of mortgage loans, residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), collateralized debt obligations (CDOs), other asset-backed securities and credit derivatives. Deutsche Bank is cooperating fully in response to those subpoenas and requests for information.

Discussions with the U.S. Department of Justice (DOJ) concerning a settlement of potential claims that the DOJ was considering bringing based on its investigation of Deutsche Bank's RMBS origination and securitization activities began with an initial demand of U.S.\$ 14 billion on September 12, 2016. On December 23, 2016, Deutsche Bank announced that it reached a settlement-in-principle with the DOJ to resolve potential claims related to its RMBS business conducted from 2005 to 2007. The settlement became final and was announced by the DOJ on January 17, 2017. Under the settlement, Deutsche Bank paid a civil monetary penalty of U.S.\$ 3.1 billion and agreed to provide U.S.\$ 4.1 billion in consumer relief.

In September 2016, Deutsche Bank received administrative subpoenas from the Maryland Attorney General seeking information concerning Deutsche Bank's RMBS and CDO businesses from 2002 to 2009. On January 10, 2017, Deutsche Bank and the Maryland Attorney General reached a settlement-in-principle to resolve the matter for U.S.\$ 15 million in cash and U.S.\$ 80 million in consumer relief (to be allocated from the overall U.S.\$ 4.1 billion consumer relief obligation agreed to as part of Deutsche Bank's settlement with the DOJ). The agreement remains subject to completion of settlement documentation.

The Group has recorded provisions with respect to some of the outstanding regulatory investigations but not others. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to prejudice seriously the resolution of these regulatory investigations.

**Issuer and Underwriter Civil Litigation.** Deutsche Bank has been named as defendant in numerous civil litigations brought by private parties in connection with its various roles, including issuer or underwriter, in offerings of RMBS and other asset-backed securities. These cases, described below, allege that the offering documents contained material misrepresentations and omissions, including with regard to the underwriting standards pursuant to which the underlying mortgage loans were issued, or assert that various representations or warranties relating to the loans were breached at the time of origination. The Group has recorded provisions with respect to several of these civil cases, but has not recorded provisions with respect to all of these matters. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to prejudice seriously the resolution of these matters.

Deutsche Bank is a defendant in a class action relating to its role as one of the underwriters of six RMBS offerings issued by Novastar Mortgage Corporation. No specific damages are alleged in the complaint. The lawsuit was brought by plaintiffs representing a class of investors who purchased certificates in those offerings. The parties recently reached a settlement-in-principle to resolve the matter for a total of U.S.\$ 165 million, a portion of which will be paid by the Bank. Deutsche Bank expects that, once the settlement is fully documented, there will be a court approval process that will take several months before the settlement becomes final.

Aozora Bank, Ltd. (Aozora) filed lawsuits against Deutsche Bank entities (among others) asserting fraud and related claims in connection with Aozora's investments in various CDOs, which allegedly declined in value. On January 14, 2015, the court granted the motion of Deutsche Bank AG and its subsidiary Deutsche Bank Securities Inc. to dismiss the action brought against both entities by Aozora relating to a CDO identified as Blue Edge ABS CDO, Ltd. Aozora appealed this decision and on March 31, 2016, the appellate court affirmed the lower court's dismissal. Aozora has not sought a further appeal. Separately, another Deutsche Bank subsidiary, Deutsche Investment Management Americas, Inc., is a defendant, along with UBS AG and affiliates, in an action brought by Aozora relating to a CDO identified as Brooklyn Structured Finance CDO, Ltd. On October 13, 2015, the court denied defendants' motion to dismiss Aozora's claims for fraud and aiding and abetting fraud, and defendants appealed the decision. Oral argument was held on September 14, 2016, and on November 3, 2016, the appellate court reversed the lower court decision and granted defendants' motions to dismiss Aozora's claims. Aozora has not sought a further appeal, and on December 15, 2016, the court entered judgment dismissing the complaint.

Deutsche Bank is a defendant in three actions related to RMBS offerings brought by the Federal Deposit Insurance Corporation (FDIC) as receiver for: (a) Colonial Bank (alleging no less than U.S.\$ 189 million in damages against all defendants), (b) Guaranty Bank (alleging no less than U.S.\$ 901 million in damages against all defendants), and (c) Citizens National Bank and Strategic Capital Bank (alleging no less than U.S.\$ 66 million in damages against all defendants). In separate actions brought by the FDIC as receiver for Colonial Bank and Guaranty Bank, the appellate courts have reinstated claims previously dismissed on statute of limitations grounds. In the case concerning Guaranty Bank, petitions for rehearing and certiorari to the U.S. Supreme Court were denied and discovery is ongoing. In the case concerning Colonial Bank, a petition for rehearing was denied and on October 6, 2016, defendants filed a petition for certiorari to the U.S. Supreme Court, which was denied on January 9, 2017. On January 18, 2017, a similar appeal in the action brought by the FDIC as receiver for Citizens National Bank and Strategic Capital Bank was also denied.

Residential Funding Company brought a repurchase action against Deutsche Bank for breaches of representations and warranties on loans sold to Residential Funding Company and for indemnification for losses incurred as a result of RMBS-related claims and actions asserted against Residential Funding Company. The complaint did not specify the amount of damages sought. On June 20, 2016, the parties executed a confidential settlement agreement, and on June 24, 2016, the Court dismissed the case with prejudice.

Deutsche Bank recently reached a settlement to resolve claims brought by the Federal Home Loan Bank of San Francisco on two resecuritizations of RMBS certificates for an amount not material to the Bank. Following this settlement and two other previous partial settlements of claims, Deutsche Bank remained a defendant with respect to one RMBS offering, for which Deutsche Bank, as an underwriter, was provided contractual indemnification. On January 23, 2017, a settlement agreement was executed to resolve the claims relating to that RMBS offering. Deutsche Bank expects that the matter will be dismissed shortly.

Deutsche Bank is a defendant in an action brought by Royal Park Investments (as purported assignee of claims of a special-purpose vehicle created to acquire certain assets of Fortis Bank) alleging common law claims related to the purchase of RMBS. The complaint did not specify the amount of damages sought. On April 29, 2016, Deutsche Bank filed a motion to dismiss, which is currently pending.



In June 2014, HSBC, as trustee, brought an action in New York state court against Deutsche Bank to revive a prior action, alleging that Deutsche Bank failed to repurchase mortgage loans in the ACE Securities Corp. 2006-SL2 RMBS offering. The revival action was stayed during the pendency of an appeal of the dismissal of a separate action wherein HSBC, as trustee, brought an action against Deutsche Bank alleging breaches of representations and warranties made by Deutsche Bank concerning the mortgage loans in the same offering. On March 29, 2016, the court dismissed the revival action, and on April 29, 2016, plaintiff filed a notice of appeal.

Deutsche Bank was named as a defendant in a civil action brought by the Charles Schwab Corporation seeking rescission of its purchase of a single Countrywide-issued RMBS certificate. In the fourth quarter of 2015, Bank of America, which indemnified Deutsche Bank in the case, reached an agreement to settle the action with respect to the single certificate at issue for Deutsche Bank. On March 16, 2016, the court finalized the dismissal with prejudice of Deutsche Bank Securities Inc. as a defendant.

On February 18, 2016, Deutsche Bank and Amherst Advisory & Management LLC (Amherst) executed settlement agreements to resolve breach of contract actions relating to five RMBS trusts. On June 30, 2016, the parties executed settlement agreements, amending and restating the agreements the parties signed on February 18, 2016. Following an August 2016 vote by the certificate holders in favor of the settlement, the trustee accepted the settlement agreements and dismissed the actions. On October 17, 2016, the parties filed stipulations of discontinuance with prejudice, which were so-ordered by the court on October 18 and October 19, 2016, thereby resolving the five actions. A portion of the settlement funds paid by Deutsche Bank was reimbursed by a non-party to the litigations.

Deutsche Bank was a defendant in an action brought by Phoenix Light SF Limited (as purported assignee of claims of special purpose vehicles created and/or managed by former WestLB AG) alleging common law and federal securities law claims related to the purchase of RMBS. On October 14, 2016, the parties finalized a settlement to resolve the matter for an amount not material to the Bank. On November 2, 2016, the court so-ordered a stipulation of discontinuance with prejudice, thereby resolving the action.

On February 3, 2016, Lehman Brothers Holding, Inc. (Lehman) instituted an adversary proceeding in United States Bankruptcy Court for the Southern District of New York against, among others, MortgageIT, Inc. (MIT) and Deutsche Bank AG, as alleged successor to MIT, asserting breaches of representations and warranties set forth in certain 2003 and 2004 loan purchase agreements concerning 63 mortgage loans that MIT sold to Lehman, which Lehman in turn sold to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). The complaint seeks indemnification for losses incurred by Lehman in connection with settlements entered into with Fannie Mae and Freddie Mac as part of the Lehman bankruptcy proceedings to resolve claims concerning those loans. On December 29, 2016, Lehman filed its second amended complaint against DB Structured Products, Inc. and MIT alleging damages of approximately U.S.\$ 10.3 million.

In the actions against Deutsche Bank solely as an underwriter of other issuers' RMBS offerings, Deutsche Bank has contractual rights to indemnification from the issuers, but those indemnity rights may in whole or in part prove effectively unenforceable where the issuers are now or may in the future be in bankruptcy or otherwise defunct.

*Trustee Civil Litigation.* Deutsche Bank is a defendant in eight separate civil lawsuits brought by various groups of investors concerning its role as trustee of certain RMBS trusts. The actions generally allege claims for breach of contract, breach of fiduciary duty, breach of the duty to avoid conflicts of interest, negligence and/or violations of the Trust Indenture Act of 1939, based on the trustees' alleged failure to perform adequately certain obligations and/or duties as trustee for the trusts. The eight actions include two putative class actions brought by a group of investors, including funds managed by BlackRock Advisors, LLC, PIMCO-Advisors, L.P., and others (the BlackRock Class Actions), one putative class action brought by Royal Park Investments SA/NV, and five individual lawsuits. One of the BlackRock Class Actions is pending in the U.S. District Court for the Southern District of New York in relation to 62 trusts, which allegedly suffered total realized collateral losses of U.S.\$ 9.8 billion, although the complaint does not specify a damage amount. On January 23, 2017, the Court granted in part and denied in part the Trustees's motion to dismiss. At a February 2, 2017 conference, the Court dismissed plaintiffs' representations and warranties claims as to 21 trusts whose originators or sponsors had entered bankruptcy. The only claims that remain are for violation of the Trust Indenture Act of 1939 as to some trusts, and breach of contract. Discovery is ongoing. The second BlackRock Class Action is pend-

ing in the Superior Court of California in relation to 465 trusts, which allegedly suffered total realized collateral losses of U.S.\$ 75.7 billion, although the complaint does not specify a damage amount. The trustees filed a demurrer seeking to dismiss the tort claims asserted by plaintiffs and a motion to strike certain elements of the breach of contract claim, and on October 18, 2016, the court sustained the trustees' demurrer, dismissing the tort claims, but denied the motion to strike. Discovery is ongoing in that action. The putative class action brought by Royal Park Investments SA/NV is pending in the U.S. District Court for the Southern District of New York and concerns ten trusts, which allegedly suffered total realized collateral losses of more than U.S.\$ 3.1 billion, although the complaint does not specify a damage amount. Royal Park's class certification motion is fully briefed but has not yet been decided. Discovery is ongoing.

The other five individual lawsuits include actions by (a) the National Credit Union Administration Board ("NCUA"), as an investor in 97 trusts, which allegedly suffered total realized collateral losses of U.S.\$ 17.2 billion, although the complaint does not specify a damage amount; (b) certain CDOs (collectively, "Phoenix Light") that hold RMBS certificates issued by 43 RMBS trusts, and seeking over U.S.\$ 527 million of damages; (c) the Western and Southern Life Insurance Company and five related entities (collectively "Western & Southern"), as investors in 18 RMBS trusts, against the trustee for 10 of those trusts, which allegedly suffered total realized collateral losses of "tens of millions of dollars in damages," although the complaint does not specify a damage amount; (d) Commerzbank AG, as an investor in 50 RMBS trusts, seeking recovery for alleged "hundreds of millions of dollars in losses;" and (e) IKB International, S.A. in Liquidation and IKB Deutsche Industriebank AG (collectively, "IKB"), as an investor in 37 RMBS trusts, seeking more than U.S.\$ 268 million of damages. In the NCUA case, the trustee's motion to dismiss for failure to state a claim is pending and discovery is stayed. In the Phoenix Light case, discovery is ongoing as to the 43 trusts that remain in the case. In the Western & Southern case, the trustee filed its answer to the amended complaint on November 18, 2016, and discovery is ongoing as to the ten trusts that remain in the case. In the Commerzbank case, the trustee's motion to dismiss for failure to state a claim was granted in part and denied in part on February 10, 2017, and discovery is ongoing as to the 50 trusts in the case. In the IKB case, a motion to dismiss was filed on October 5, 2016 and is pending; limited discovery has commenced as to the 34 trusts that remain in the case.

The Group believes a contingent liability exists with respect to these eight cases, but at present the amount of the contingent liability is not reliably estimable.

**Postbank Voluntary Public Takeover Offer.** On September 12, 2010, Deutsche Bank announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG. On October 7, 2010, the Bank published the official offer document. In its takeover offer, Deutsche Bank offered Postbank shareholders consideration of €25 for each Postbank share. The takeover offer was accepted for a total of approximately 48.2 million Postbank shares.

In November 2010, a former shareholder of Postbank, Effecten-Spiegel AG, which had accepted the takeover offer, brought a claim against Deutsche Bank alleging that the offer price was too low and was not determined in accordance with the applicable law of the Federal Republic of Germany. The plaintiff alleges that Deutsche Bank had been obliged to make a mandatory takeover offer for all shares in Deutsche Postbank AG, at the latest, in 2009. The plaintiff avers that, at the latest in 2009, the voting rights of Deutsche Post AG in Deutsche Postbank AG had to be attributed to Deutsche Bank AG pursuant to Section 30 of the German Takeover Act. Based thereon, the plaintiff alleges that the consideration offered by Deutsche Bank AG for the shares in Deutsche Postbank AG in the 2010 voluntary takeover offer needed to be raised to €57.25 per share.

The Cologne District Court dismissed the claim in 2011 and the Cologne appellate court dismissed the appeal in 2012. The Federal Court set aside the Cologne appellate court's judgment and referred the case back to the appellate court. In its judgment, the Federal Court stated that the appellate court had not sufficiently considered the plaintiff's allegation that Deutsche Bank AG and Deutsche Post AG "acted in concert" in 2009. The Cologne appellate court has scheduled a further hearing for November 8, 2017.

Starting in 2014, additional former shareholders of Deutsche Postbank AG, who accepted the 2010 tender offer, brought similar claims as Effecten-Spiegel AG against Deutsche Bank which are pending with the Cologne District Court, and three of these plaintiffs applied for model case proceedings (Musterverfahren) under the German Capital Markets Model Case Act. The Cologne District Court has heard these follow-on matters on January 27, 2017 and announced its intention to publish a decision on April 28, 2017.

In September 2015, former shareholders of Deutsche Postbank AG filed in the Cologne District Court shareholder actions against Deutsche Postbank AG to set aside the squeeze-out resolution taken in the shareholders meeting of Deutsche Postbank AG in August 2015. Among other things, the plaintiffs allege that Deutsche Bank AG was subject to a suspension of voting rights with respect to its shares in Postbank based on the allegation that Deutsche Bank AG failed to make a mandatory takeover offer at a higher price in 2009. The squeeze out is final and the proceeding itself has no reversal effect, but may result in damage payments. The claimants in this proceeding refer to legal arguments similar to those asserted in the Effecten-Spiegel proceeding described above. The Cologne District Court indicated its intention to announce a decision in the spring of 2017.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

**Precious Metals Investigations and Litigations.** Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to investigations of precious metals trading and related conduct. Deutsche Bank is cooperating with these investigations, and engaging with relevant authorities, as appropriate. Relatedly, Deutsche Bank has been conducting its own internal review of Deutsche Bank's historic participation in the precious metals benchmarks and other aspects of its precious metals trading and precious metals business.

Deutsche Bank is a defendant in two consolidated class action lawsuits pending in the U.S. District Court for the Southern District of New York. The suits allege violations of U.S. antitrust law, the U.S. Commodity Exchange Act and related state law arising out of the alleged manipulation of gold and silver prices through participation in the Gold and Silver Fixes, but do not specify the damages sought. Deutsche Bank has reached agreements to settle both actions, the financial terms of which are not material to Deutsche Bank. The agreements remain subject to final court approval.

In addition, Deutsche Bank is a defendant in Canadian class action proceedings in the province of Ontario concerning gold and in the provinces of Ontario and Quebec concerning silver. Each of the proceedings seeks damages for alleged violations of the Canadian Competition Act and other causes of action.

The Group has recorded provisions with respect to certain of these matters. The Group has not disclosed the amount of these provisions, nor has it disclosed whether it has established provisions with respect to other matters referred above or any contingent liability with respect to any of those matters, because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

**Russia/UK Equities Trading Investigation.** Deutsche Bank has investigated the circumstances around equity trades entered into by certain clients with Deutsche Bank in Moscow and London that offset one another. The total volume of the transactions under review is significant. Deutsche Bank's internal investigation of potential violations of law, regulation and policy and into the related internal control environment has concluded, and Deutsche Bank is assessing the findings identified during the investigation; to date it has identified certain violations of Deutsche Bank's policies and deficiencies in Deutsche Bank's control environment. Deutsche Bank has advised regulators and law enforcement authorities in several jurisdictions (including Germany, Russia, the U.K. and U.S.) of this investigation. Deutsche Bank has taken disciplinary measures with regards to certain individuals in this matter and will continue to do so with respect to others as warranted.



On January 30 and 31, 2017, the New York State Department of Financial Services (DFS) and UK Financial Conduct Authority (FCA) announced settlements with the Bank related to their investigations into this matter. The settlements conclude the DFS and the FCA's investigations into the bank's anti-money laundering (AML) control function in its investment banking division, including in relation to the equity trading described above. Under the terms of the settlement agreement with the DFS, Deutsche Bank entered into a Consent Order, and agreed to pay civil monetary penalties of U.S.\$ 425 million and to engage an independent monitor for a term of up to two years. Under the terms of the settlement agreement with the FCA, Deutsche Bank agreed to pay civil monetary penalties of approximately GBP 163 million. The settlement amounts were already materially reflected in existing litigation reserves.

Deutsche Bank is cooperating with other regulators and law enforcement authorities (including the DOJ and the Federal Reserve), which have their own ongoing investigations into these securities trades. The Group has recorded a provision with respect to these ongoing investigations. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of this matter.

**Sovereign, Supranational and Agency Bonds (SSA) Investigations and Litigations.** Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to SSA bond trading. Deutsche Bank is cooperating with these investigations.

Deutsche Bank is a defendant in several putative class action complaints filed in the U.S. District Court for the Southern District of New York alleging violations of U.S. antitrust law and common law related to alleged manipulation of the secondary trading market for SSA bonds. These cases are in their early stages and are in the process of being consolidated.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

**Trust Preferred Securities Litigation.** Deutsche Bank and certain of its affiliates and former officers are the subject of a consolidated putative class action, filed in the United States District Court for the Southern District of New York, asserting claims under the federal securities laws on behalf of persons who purchased certain trust preferred securities issued by Deutsche Bank and its affiliates between October 2006 and May 2008. On July 25, 2016, the court issued a decision dismissing all claims as to three of the five offerings at issue, but allowed certain claims relating to the November 2007 and February 2008 offerings to proceed. On November 17, 2016, Plaintiffs moved for class certification as to the November 2007 offering. On December 1, 2016, the Court stayed all proceedings in the action. On January 20, 2017, Plaintiffs amended their motion for class certification to include the February 2008 offering and seek to add an additional individual as a proposed class representative. On February 10, 2017, the Court (i) ordered that Plaintiffs on the November 2007 offering provide proof that they either sold at a loss or held to redemption, and otherwise stayed all proceedings with respect to the November 2007 offering, and (ii) stayed all proceedings with respect to the February 2008 offering pending a decision by the Supreme Court of the United States in *California Public Employees' Retirement System v. ANZ Securities* in which the Supreme Court is expected to consider whether the filing of a putative class action serves to toll the three-year time limitation in Section 13 of the Securities Act with respect to the claims of putative class members. A decision is expected before the end of June 2017.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to seriously prejudice its outcome.

**U.S. Embargoes-Related Matters.** Deutsche Bank has received requests for information from certain U.S. regulatory and law enforcement agencies concerning its historical processing of U.S. dollar payment orders through U.S. financial institutions for parties from countries subject to U.S. embargo laws. These agencies are investigating whether such processing complied with U.S. federal and state laws. In 2006, Deutsche Bank voluntarily decided that it would not engage in new U.S. dollar business with counterparties in Iran, Sudan, North Korea and Cuba and with certain Syrian banks, and to exit existing U.S. dollar business with such counterparties to the extent legally possible. In 2007, Deutsche Bank decided that it would not engage in any new business, in any currency, with counterparties in Iran, Syria, Sudan and North Korea and to exit existing business, in any currency, with such counterparties to the extent legally possible; it also decided to limit its non-U.S. dollar business with counterparties in Cuba. On November 3, 2015,

Deutsche Bank entered into agreements with the New York State Department of Financial Services and the Federal Reserve Bank of New York to resolve their investigations of Deutsche Bank. Deutsche Bank paid the two agencies U.S.\$ 200 million and U.S.\$ 58 million, respectively, and agreed to terminate certain employees, not rehire certain former employees and install an independent monitor for one year. In addition, the Federal Reserve Bank of New York ordered certain remedial measures, specifically, the requirement to ensure an effective OFAC compliance program and an annual review of such program by an independent party until the Federal Reserve Bank of New York is satisfied as to its effectiveness. The investigations of the U.S. law enforcement agencies (including the DOJ) remain ongoing.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

**U.S. Treasury Securities Investigations and Litigations.** Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to U.S. Treasuries auctions, trading, and related market activity. Deutsche Bank is cooperating with these investigations.

Deutsche Bank is a defendant in several putative class actions alleging violations of U.S. antitrust law, the U.S. Commodity Exchange Act and common law related to the alleged manipulation of the U.S. Treasury securities market. These cases are in their early stages and have been consolidated in the Southern District of New York.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

## 31 – Credit related Commitments and Contingent Liabilities

### Irrevocable lending commitments and lending related contingent liabilities

In the normal course of business the Group regularly enters into irrevocable lending commitments, including fronting commitments as well as contingent liabilities consisting of financial and performance guarantees, standby letters of credit and indemnity agreements on behalf of its customers. Under these contracts the Group is required to perform under an obligation agreement or to make payments to the beneficiary based on third party's failure to meet its obligations. For these instruments it is not known to the Group in detail if, when and to what extent claims will be made. In the event that the Group has to pay out cash in respect of its fronting commitments, the Group would immediately seek reimbursement from the other syndicate lenders. The Group considers all the above instruments in monitoring the credit exposure and may require collateral to mitigate inherent credit risk. If the credit risk monitoring provides sufficient perception about a loss from an expected claim, a provision is established and recorded on the balance sheet.

The following table shows the Group's irrevocable lending commitments and lending related contingent liabilities without considering collateral or provisions. It shows the maximum potential utilization of the Group in case all these liabilities entered into must be fulfilled. The table therefore does not show the expected future cash flows from these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

#### Irrevocable lending commitments and lending related contingent liabilities

in € m.	Dec 31, 2016	Dec 31, 2015
Irrevocable lending commitments	166,063	174,549
Contingent liabilities	52,341	57,325
<b>Total</b>	<b>218,404</b>	<b>231,874</b>

## Government Assistance

In the course of its business, the Group regularly applies for and receives government support by means of Export Credit Agency (“ECA”) guarantees covering transfer and default risks for the financing of exports and investments into Emerging Markets and to a lesser extent, developed markets for Structured Trade & Export Finance and short- and medium-term Trade Finance business. Almost all export-oriented states have established such ECAs to support their domestic exporters. The ECAs act in the name and on behalf of the government of their respective country and are either constituted directly as governmental departments or organized as private companies vested with the official mandate of the government to act on its behalf. Terms and conditions of such ECA guarantees are broadly similar due to the fact that most of the ECAs act within the scope of the Organization for Economic Cooperation and Development (“OECD”) consensus rules. The OECD consensus rules, an intergovernmental agreement of the OECD member states, define benchmarks intended to ensure that a fair competition between different exporting nations will take place.

In some countries dedicated funding programs with governmental support are offered for ECA-covered financings. On a selective basis, the Group makes use of such programs. In certain financings, the Group also receives government guarantees from national and international governmental institutions as collateral to support financings in the interest of the respective governments. The majority of such ECA guarantees received by the Group were issued either by the Euler-Hermes Kreditversicherungs-AG acting on behalf of the Federal Republic of Germany, by the Korean Export Credit Agencies (Korea Trade Insurance Corporation and The Export-Import Bank of Korea) acting on behalf of the Republic of Korea or by Chinese Export Credit Agency (China Export & Insurance Corporation (Sinosure)) acting on behalf of the People’s Republic of China.

## Irrevocable payment commitments with regard to levies

Irrevocable payment commitments related to bank levy according to Bank Recovery and Resolution Directive (BRRD), the Single Resolution Fund (SRF) and the German statutory deposit protection amounted to €280.4 million as of December 31, 2016, and to €155.5 million as of December 31, 2015.

## 32 – Other Short-Term Borrowings

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Other short-term borrowings:</b>		
Commercial paper	3,219	9,327
Other	14,076	18,683
<b>Total other short-term borrowings</b>	<b>17,295</b>	<b>28,010</b>

## 33 – Long-Term Debt and Trust Preferred Securities

### Long-Term Debt by Earliest Contractual Maturity

in € m.	Due in 2017	Due in 2018	Due in 2019	Due in 2020	Due in 2021	Due after 2021	Total Dec 31, 2016	Total Dec 31, 2015
<b>Senior debt:</b>								
Bonds and notes:								
Fixed rate	18,379	8,402	11,327	7,498	17,112	22,206	84,924	86,255
Floating rate	8,477	4,882	6,876	3,435	5,455	7,956	37,082	38,963
<b>Subordinated debt:</b>								
Bonds and notes:								
Fixed rate	0	70	28	1,096	0	3,688	4,882	4,602
Floating rate	231	70	0	0	0	1,605	1,906	1,811
<b>Other</b>	<b>1,672</b>	<b>29,891</b>	<b>1,870</b>	<b>904</b>	<b>842</b>	<b>8,344</b>	<b>43,523</b>	<b>28,385</b>
<b>Total long-term debt</b>	<b>28,758</b>	<b>43,315</b>	<b>20,102</b>	<b>12,933</b>	<b>23,409</b>	<b>43,799</b>	<b>172,316</b>	<b>160,016</b>

The Group did not have any defaults of principal, interest or other breaches with respect to its liabilities in 2016 and 2015.

### Trust Preferred Securities<sup>1</sup>

in € m.	Dec 31, 2016	Dec 31, 2015
Fixed rate	5,302	6,067
Floating rate	1,071	953
<b>Total trust preferred securities</b>	<b>6,373</b>	<b>7,020</b>

<sup>1</sup> Perpetual instruments, redeemable at specific future dates at the Group's option.

## 34 – Maturity Analysis of the earliest contractual undiscounted cash flows of Financial Liabilities

	Dec 31, 2016				
in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	200,122	0	0	0	0
Interest bearing deposits	129,704	147,531	46,176	17,027	11,247
Trading liabilities <sup>1</sup>	57,029	0	0	0	0
Negative market values from derivative financial instruments <sup>1</sup>	463,858	0	0	0	0
Financial liabilities designated at fair value through profit or loss	18,949	38,641	4,343	2,676	6,460
Investment contract liabilities <sup>2</sup>	0	0	592	0	0
Negative market values from derivative financial instruments qualifying for hedge accounting <sup>3</sup>	0	573	737	2,427	856
Central bank funds purchased	353	0	0	0	0
Securities sold under repurchase agreements	19,980	2,401	2,386	715	0
Securities loaned	4,168	11	0	0	0
Other short-term borrowings	13,322	1,995	1,802	0	0
Long-term debt	6	7,462	24,440	118,607	46,812
Trust preferred securities	0	78	2,539	4,361	0
Other financial liabilities	128,400	2,642	583	407	3,246
Off-balance sheet loan commitments	160,099	0	0	0	0
Financial guarantees	20,966	0	0	0	0
<b>Total<sup>4</sup></b>	<b>1,216,955</b>	<b>201,333</b>	<b>83,599</b>	<b>146,219</b>	<b>68,621</b>

<sup>1</sup> Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within "on demand" which Group's management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods.

<sup>2</sup> These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 "Insurance and Investment Contracts" for more detail on these contracts.

<sup>3</sup> Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate.

<sup>4</sup> The balances in the table do not agree to the numbers in the Group's balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote.

	Dec 31, 2015				
in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	192,010	0	0	0	0
Interest bearing deposits	153,788	156,710	42,680	15,382	12,004
Trading liabilities <sup>1</sup>	52,303	0	0	0	0
Negative market values from derivative financial instruments <sup>1</sup>	494,076	0	0	0	0
Financial liabilities designated at fair value through profit or loss	18,450	25,067	3,964	4,357	5,985
Investment contract liabilities <sup>2</sup>	0	104	873	1,701	5,843
Negative market values from derivative financial instruments qualifying for hedge accounting <sup>3</sup>	0	556	918	1,908	2,983
Central bank funds purchased	574	0	0	0	0
Securities sold under repurchase agreements	7,498	1,919	519	0	0
Securities loaned	2,818	16	0	1	414
Other short-term borrowings	17,782	2,771	6,865	0	0
Long-term debt	62	16,834	12,414	92,914	52,169
Trust preferred securities	0	831	628	5,772	1,285
Other financial liabilities	146,684	3,791	456	361	36
Off-balance sheet loan commitments	166,236	0	0	0	0
Financial guarantees	19,828	0	0	0	0
<b>Total<sup>4</sup></b>	<b>1,272,109</b>	<b>208,600</b>	<b>69,317</b>	<b>122,396</b>	<b>80,719</b>

<sup>1</sup> Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within "on demand" which Group's management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods. .

<sup>2</sup> These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 "Insurance and Investment Contracts" for more detail on these contracts.

<sup>3</sup> Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate.

<sup>4</sup> The balances in the table do not agree to the numbers in the Group's balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote.

## Additional Notes

### 35 – Common Shares

#### Common Shares

Deutsche Bank's share capital consists of common shares issued in registered form without par value. Under German law, each share represents an equal stake in the subscribed capital. Therefore, each share has a nominal value of €2.56, derived by dividing the total amount of share capital by the number of shares.

Number of shares	Issued and fully paid	Treasury shares	Outstanding
<b>Common shares, January 1, 2015</b>	<b>1,379,273,131</b>	<b>(260,182)</b>	<b>1,379,012,949</b>
Shares issued under share-based compensation plans	0	0	0
Capital increase	0	0	0
Shares purchased for treasury	0	(326,647,008)	(326,647,008)
Shares sold or distributed from treasury	0	326,532,326	326,532,326
<b>Common shares, December 31, 2015</b>	<b>1,379,273,131</b>	<b>(374,864)</b>	<b>1,378,898,267</b>
Shares issued under share-based compensation plans	0	0	0
Capital increase	0	0	0
Shares purchased for treasury	0	(355,069,462)	(355,069,462)
Shares sold or distributed from treasury	0	355,240,884	355,240,884
<b>Common shares, December 31, 2016</b>	<b>1,379,273,131</b>	<b>(203,442)</b>	<b>1,379,069,689</b>

There are no issued ordinary shares that have not been fully paid.

Shares purchased for treasury consist of shares held by the Group for a period of time, as well as any shares purchased with the intention of being resold in the short-term. In addition, the Group has bought back shares for equity compensation purposes. All such transactions were recorded in shareholders' equity and no revenues and expenses were recorded in connection with these activities. Treasury stock held as of year-end will mainly be used for future share-based compensation.

#### Authorized Capital

The Management Board is authorized to increase the share capital by issuing new shares for cash and in some circumstances noncash consideration. As of December 31, 2016, Deutsche Bank AG had authorized but unissued capital of €1,760,000,000 which may be issued in whole or in part until April 30, 2020. Further details are governed by Section 4 of the Articles of Association.

Authorized capital	Consideration	Pre-emptive rights	Expiration date
€ 352,000,000	Cash or noncash	May be excluded if the capital increase is for noncash consideration with the intent of acquiring a company or holdings in a company and may be excluded pursuant to Section 186 (3) sentence 4 of the Stock Corporation Act	April 30, 2020
€ 1,408,000,000	Cash	May be excluded insofar as is necessary to grant to the holders of option rights, convertible bonds and convertible participatory rights issued by the company (see Articles of Association Section 4)	April 30, 2020

## Conditional Capital

The Management Board is authorized to issue once or more than once, participatory notes that are linked with conversion rights or option rights and/or convertible bonds and/or bonds with warrants. The participatory notes, convertible bonds or bonds with warrants may also be issued by affiliated companies of Deutsche Bank AG. For this purpose share capital was increased conditionally upon exercise of these conversion and/or exchange rights or upon mandatory conversion.

	Expiration date for the issuance of conversion and/or option rights
Conditional capital	
€ 230,400,000	April 30, 2017
€ 256,000,000	April 30, 2019

## Dividends

The following table presents the amount of dividends proposed or declared for the years ended December 31, 2016, 2015 and 2014, respectively.

	2016 <sup>1</sup> (proposed)	2015	2014
Cash dividends declared (in € m.)	393	0	1,034
Cash dividends declared per common share (in €)	0.19	0.00	0.75

<sup>1</sup> Taking into account expected shares to be issued before the Annual General Meeting in May 2017, the dividend per share of €0.19 paid out of the distributable profit for 2016 contains the pay out of the distributable profit carried forward from 2015 of approximately €165 million and a dividend of €0.11 per share from the remaining distributable profit for 2016.

## 36 – Employee Benefits

### Share-Based Compensation Plans

The Group made grants of share-based compensation under the DB Equity Plan. This plan represents a contingent right to receive Deutsche Bank common shares after a specified period of time. The award recipient is not entitled to receive dividends during the vesting period of the award.

The share awards granted under the terms and conditions of the DB Equity Plan may be forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period. Vesting usually continues after termination of employment in cases such as redundancy or retirement.

In countries where legal or other restrictions hinder the delivery of shares, a cash plan variant of the DB Equity Plan was used for granting awards.



The following table sets forth the basic terms of these share plans.

Grant year(s)	Deutsch Bank Equity Plan	Vesting schedule	Early retirement provisions	Eligibility
2016	Annual Award	1/4: 12 months <sup>1</sup>	Yes	Select employees as annual performance-based compensation
		1/4: 24 months <sup>1</sup>		
		1/4: 36 months <sup>1</sup>		
		1/4: 48 months <sup>1</sup>		
		Or cliff vesting after 54 months <sup>1</sup>	Yes <sup>2</sup>	Members of Management Board or of Senior Management Group
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant <sup>3</sup>	No	Regulated employees
	Key Position Award (KPA) <sup>4</sup>	Cliff-vesting after 4 years <sup>3</sup>	Yes	Select employees as annual retention
2015/ 2014/ 2013	Annual Award	1/3: 12 months <sup>1</sup>	Yes	Select employees as annual performance-based compensation
		1/3: 24 months <sup>1</sup>		
		1/3: 36 months <sup>1</sup>		
		Or cliff vesting after 54 months <sup>1</sup>		
			Yes <sup>2</sup>	Members of Management Board or of Senior Management Group
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant <sup>5</sup>	No	Regulated employees
2012/ 2011	Annual Award	1/3: 12 months <sup>6</sup>	Yes	Select employees as annual performance-based compensation
		1/3: 24 months <sup>6</sup>		
		1/3: 36 months <sup>6</sup>		
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant <sup>5</sup>	No	Regulated employees

<sup>1</sup> For members of the Management Board or of the Senior Management Group and all other regulated employees a further retention period of six months applies.

<sup>2</sup> Early retirement provisions do not apply to members of the Management Board.

<sup>3</sup> For all regulated employees share delivery after a further retention period of twelve months.

<sup>4</sup> A predefined proportion of the individual's KPA is subject to an additional share price hurdle, meaning this award proportion only vests in the event that the Bank's share price reaches a certain share target price prior to vesting.

<sup>5</sup> For members of the Management Board share delivery after a retention period of three years. For all other regulated employees share delivery after a retention period of six months.

<sup>6</sup> For members of the Management Board a different schedule applies. For all other regulated employees share delivery after a further retention period of six months.

Furthermore, the Group offers a broad-based employee share ownership plan entitled Global Share Purchase Plan ("GSPP"). The GSPP offers employees in specific countries the opportunity to purchase Deutsche Bank shares in monthly installments over one year. At the end of the purchase cycle, the bank matches the acquired stock in a ratio of one to one up to a maximum of ten free shares, provided that the employee remains at Deutsche Bank Group for another year. In total, about 15,250 staff from 21 countries enrolled in the eighth cycle that began in November 2016.

The Group has other local share-based compensation plans, none of which, individually or in the aggregate, are material to the consolidated financial statements.

The following table shows the outstanding share award units as of the respective dates, which represent a contingent right to receive Deutsche Bank common shares after a specified period of time. It also includes the grants under the cash plan variant of the DB Equity Plan.

	Share units (in thousands)	Weighted-average grant date fair value per unit
Balance as of December 31, 2014	52,449	€ 31.60
Balance as of December 31, 2015	53,651	€ 28.18
Balance as of December 31, 2016	90,292	€ 20.22

Share-based payment transactions resulting in a cash payment give rise to a liability, which amounted to approximately €15 million, €19 million and €21 million for the years ended December 31, 2016, 2015 and 2014, respectively.

As of December 31, 2016, the grant volume of outstanding share awards was approximately €1.6 billion. Thereof, €1.1 billion had been recognized as compensation expense in the reporting year or prior to that. Hence, compensation expense for deferred share-based compensation not yet recognized amounted to €0.5 billion as of December 31, 2016.

In addition to the amounts shown in the table above, approximately 3.4 and 9.4 million shares were issued to plan participants in February and March 2017, resulting from the vesting of DB Equity Plan awards granted in prior years (thereof 0.1 million units for February and 0.1 million units for March 2017 vesting cycles under the cash plan variant of this DB Equity Plan).

## Post-employment Benefit Plans

### Nature of Plans

The Group sponsors a number of post-employment benefit plans on behalf of its employees, both defined contribution plans and defined benefit plans. The Group's plans are accounted for based on the nature and substance of the plan. Generally, for defined benefit plans the value of a participant's accrued benefit is based on each employee's remuneration and length of service; contributions to defined contribution plans are typically based on a percentage of each employee's remuneration. The rest of this note focuses predominantly on the Group's defined benefit plans.

The Group's defined benefit plans are primarily described on a geographical basis, reflecting differences in the nature and risks of benefits, as well as in the respective regulatory environments. In particular, the requirements set by local regulators can vary significantly and determine the design and financing of the benefit plans to a certain extent. Key information is also shown based on participant status, which provides a broad indication of the maturity of the Group's obligations.

	Dec 31, 2016				
in € m.	Germany	UK	U.S.	Other	Total
<b>Defined benefit obligation related to</b>					
Active plan participants	4,884	791	443	741	6,859
Participants in deferred status	2,139	2,559	560	99	5,357
Participants in payment status	4,955	1,146	545	251	6,897
<b>Total defined benefit obligation</b>	<b>11,978</b>	<b>4,496</b>	<b>1,548</b>	<b>1,091</b>	<b>19,113</b>
<b>Fair value of plan assets</b>	<b>10,975</b>	<b>5,352</b>	<b>1,219</b>	<b>973</b>	<b>18,519</b>
<b>Funding ratio (in %)</b>	<b>92</b>	<b>119</b>	<b>79</b>	<b>89</b>	<b>97</b>

	Dec 31, 2015				
in € m.	Germany	UK	U.S.	Other	Total
<b>Defined benefit obligation related to</b>					
Active plan participants	4,352	796	436	845	6,429
Participants in deferred status	1,883	2,350	538	196	4,967
Participants in payment status	4,548	1,177	533	300	6,558
<b>Total defined benefit obligation</b>	<b>10,783</b>	<b>4,323</b>	<b>1,507</b>	<b>1,341</b>	<b>17,954</b>
<b>Fair value of plan assets</b>	<b>10,371</b>	<b>5,322</b>	<b>1,182</b>	<b>1,210</b>	<b>18,085</b>
<b>Funding ratio (in %)</b>	<b>96</b>	<b>123</b>	<b>78</b>	<b>90</b>	<b>101</b>

The majority of the Group's defined benefit plan obligations relate to Germany, the United Kingdom and the United States. Within the other countries, the largest obligations relate to Switzerland, Channel Islands and Belgium. In Germany and some continental European countries, post-employment benefits are usually agreed on a collective basis with respective employee works councils or their equivalent. The Group's main pension plans are governed by boards of trustees, fiduciaries or their equivalent.

Post-employment benefits can form an important part of an employee's total remuneration. The Group's approach is that their design shall be attractive to employees in the respective market, but sustainable for the Group to provide over the longer term. At the same time, the Group tries to limit its risks related to provision of such benefits. Consequently the Group has moved to offer defined contribution plans in many locations over recent years.

In the past the Group typically offered pension plans based on final pay prior to retirement. These types of benefits still form a significant part of the pension obligations for participants in deferred and payment status. Currently, in Germany and the United States, the main defined benefit pension plans for active staff are cash account type plans where the Group credits an annual amount to individuals' accounts based on an employee's current salary. Dependent on the plan rules, the accounts increase either at a fixed interest rate or participate in market movements of certain underlying investments to limit the investment risk for the Group. Sometimes, in particular in Germany, there is a guaranteed benefit amount within the plan rules, e.g. payment of at least the amounts contributed. Upon retirement, beneficiaries may usually opt for a lump sum or for conversion of the accumulated account balance into an annuity. This conversion is often based on market conditions and mortality assumptions at retirement. In the United Kingdom, the main defined benefit pension plan was redesigned in 2011 for active employees still eligible to the plan to reduce the overall long-term risk exposure to the Group. In the Netherlands the Group converted the defined benefit plan into a collective defined contribution plan during 2016.

The Group also sponsors retirement and termination indemnity plans in several countries, as well as some post-employment medical plans for a number of current and retired employees, mainly in the United States. The post-employment medical plans typically pay fixed percentages of medical expenses of eligible retirees after a set deductible has been met. In the United States, once a retiree is eligible for Medicare, the Group contributes to a Health Reimbursement Account and the retiree is no longer eligible for the Group's medical program. The Group's total defined benefit obligation for post-employment medical plans was €201 million and €196 million at December 31, 2016 and December 31, 2015, respectively. In combination with the benefit structure, these plans represent limited risk for the Group.

The following amounts of expected benefit payments from the Group's defined benefit plans include benefits attributable to employees' past and estimated future service, and include both amounts paid from the Group's external pension trusts and paid directly by the Group in respect of unfunded plans.

in € m.	Germany	UK	U.S.	Other	Total
Actual benefit payments 2016	403	132	123	76	734
Benefits expected to be paid 2017	406	69	84	66	625
Benefits expected to be paid 2018	417	73	82	64	636
Benefits expected to be paid 2019	436	79	89	63	667
Benefits expected to be paid 2020	453	88	85	62	688
Benefits expected to be paid 2021	468	94	88	64	714
Benefits expected to be paid 2022 – 2026	2,644	601	472	330	4,047
Weighted average duration of defined benefit obligation (in years)	15	23	13	14	16

## Multi-employer Plans

In Germany, the Group is a member of the BVV together with other financial institutions. The BVV offers retirement benefits to eligible employees in Germany as a complement to post-employment benefit promises of the Group. Both employers and employees contribute on a regular basis to the BVV. The BVV provides annuities of a fixed amount to individuals on retirement and increases these fixed amounts if surplus assets arise within the plan. According to legislation in Germany, the employer is ultimately liable for providing the benefits to its employees. An increase in benefits may also arise due to additional obligations to retirees for the effects of inflation. BVV is a multi-employer defined benefit plan. However, in line with industry practice, the Group accounts for it as a defined contribution plan since insufficient information is available to identify assets and liabilities relating to the Group's current and former employees, primarily because the BVV does not fully allocate plan assets to beneficiaries nor to member companies. According to the BVV's most recent disclosures, there is no current deficit in the plan that may affect the amount of future Group contributions. Furthermore, any plan surplus emerging in the future will be distributed to the plan members, hence it cannot reduce

future Group contributions. In June 2016, the BVV's Annual General Meeting approved a reduction in benefits from future contributions for certain groups of employees. Similar to other participating companies, the Group committed to make up for reduced benefit levels by increasing contributions to the BVV from January 1, 2017. A corresponding labor agreement has been signed with the German works council.

The Group's expenses for defined contribution plans also include annual contributions by Deutsche Postbank AG to the pension fund for postal civil servants in Germany. Responsibility for the liability for these benefits lies with the German government.

## Governance and Risk

The Group maintains a Pensions Risk Committee to oversee its pension and related risks on a global basis. This Committee meets quarterly, reports directly to the Senior Executive Compensation Committee and is supported by the Pensions Operating Committee.

Within this context, the Group develops and maintains guidelines for governance and risk management, including funding, asset allocation and actuarial assumption setting. In this regard, risk management means the management and control of risks for the Group related to market developments (e.g., interest rate, credit spread, price inflation), asset investment, regulatory or legislative requirements, as well as monitoring demographic changes (e.g., longevity). Especially during and after acquisitions or changes in the external environment (e.g., legislation, taxation), topics such as the general plan design or potential plan amendments are considered. Any plan changes follow a process requiring approval by Group Human Resources. To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk.

In the Group's key pension countries, the Group's largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation and longevity, although these have been partially mitigated through the investment strategy adopted.

Overall, the Group seeks to minimize the impact of pensions on the Group's financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements. The Group measures its pension risk exposures on a regular basis using specific metrics developed by the Group for this purpose.

## Funding

The Group maintains various external pension trusts to fund the majority of its defined benefit plan obligations. The Group's funding policy is to maintain coverage of the defined benefit obligation by plan assets within a range of 90 % to 100 % of the obligation, subject to meeting any local statutory requirements. The Group has also determined that certain plans should remain unfunded, although their funding approach is subject to periodic review, e.g. when local regulations or practices change. Obligations for the Group's unfunded plans are accrued on the balance sheet.

For most of the externally funded defined benefit plans there are local minimum funding requirements. The Group can decide on any additional plan contributions, with reference to the Group's funding policy. There are some locations, e.g. the United Kingdom, where the trustees and the Bank jointly agree contribution levels. In most countries the Group expects to receive an economic benefit from any plan surpluses of plan assets compared to defined benefit obligations, typically by way of reduced future contributions. Given the broadly fully funded position and the investment strategy adopted in the Group's key funded defined benefit plans, any minimum funding requirements that may apply are not expected to place the Group under any material adverse cash strain in the short term. With reference to the Group's funding policy, the Group considers not re-claiming benefits paid from the Group's assets as an equivalent to making cash contributions into the external pension trusts during the year.

For post-retirement medical plans, the Group accrues for obligations over the period of employment and pays the benefits from Group assets when the benefits become due.

## Actuarial Methodology and Assumptions

December 31 is the measurement date for all plans. All plans are valued by independent qualified actuaries using the projected unit credit method. A Group policy provides guidance to local actuaries to ensure consistency globally on setting actuarial assumptions which are finally determined by the Group's Pensions Operating Committee.

The key actuarial assumptions applied in determining the defined benefit obligations at December 31 are presented below in the form of weighted averages.

	Dec 31, 2016				Dec 31, 2015			
	Germany	UK	U.S. <sup>1</sup>	Other	Germany	UK	U.S. <sup>1</sup>	Other
Discount rate (in %)	1.7	2.6	4.0	2.3	2.4	3.9	4.2	2.6
Rate of price inflation (in %)	1.7	3.6	2.2	2.0	1.6	3.4	2.3	2.2
Rate of nominal increase in future compensation levels (in %)	2.1	4.6	2.3	2.8	2.1	4.4	2.3	2.5
Rate of nominal increase for pensions in payment (in %)	1.6	3.5	2.2	1.1	1.5	3.3	2.3	1.1
<b>Assumed life expectancy at age 65</b>								
For a male aged 65 at measurement date	19.1	23.4	22.4	22.0	19.0	23.5	21.8	21.6
For a female aged 65 at measurement date	23.2	25.5	23.9	24.5	23.1	25.0	24.0	24.1
For a male aged 45 at measurement date	21.8	25.1	23.9	23.7	21.6	25.1	23.5	23.4
For a female aged 45 at measurement date	25.7	27.4	25.4	26.1	25.6	26.9	25.6	25.8
<b>Mortality tables applied</b>								
	Richttafeln Heubeck 2005G	SAPS (S2) Light with CMI 2015 projections	RP2014 White-collar with MP2016 projections	Country specific tables	Richttafeln Heubeck 2005G	SAPS (S1) Light with CMI 2015 projections	RP2014 Aggregate with MP 2014 projections	Country specific tables

<sup>1</sup> Cash balance interest crediting rate in line with the 30-year US government bond yield.

For the Group's most significant plans in the key countries, the discount rate used at each measurement date is set based on a high quality corporate bond yield curve – derived based on bond universe information sourced from reputable third-party index and data providers and rating agencies – reflecting the timing, amount and currency of the future expected benefit payments for the respective plan. For longer durations where limited bond information is available, reasonable yield curve extrapolation methods are applied using respective actual swap rates and credit spread assumptions. Consistent discount rates are used across all plans in each currency zone, based on the assumption applicable for the Group's largest plan(s) in that zone. For plans in the other countries, the discount rate is based on high quality corporate or government bond yields applicable in the respective currency, as appropriate at each measurement date with a duration broadly consistent with the respective plan's obligations.

The price inflation assumptions in the eurozone and the United Kingdom are set with reference to market measures of inflation based on inflation swap rates in those markets at each measurement date. For other countries, the price inflation assumptions are typically based on long term forecasts by Consensus Economics Inc.

The assumptions for the increases in future compensation levels and for increases to pensions in payment are developed separately for each plan, where relevant. Each is set based on the price inflation assumption and reflecting the Group's reward structure or policies in each market, as well as relevant local statutory and plan-specific requirements.

Among other assumptions, mortality assumptions can be significant in measuring the Group's obligations under its defined benefit plans. These assumptions have been set in accordance with current best practice in the respective countries. Future potential improvements in longevity have been considered and included where appropriate.

## Reconciliation in Movement of Liabilities and Assets – Impact on Financial Statements

in € m.	Germany	UK	U.S.	Other	2016 Total
<b>Change in the present value of the defined benefit obligation:</b>					
<b>Balance, beginning of year</b>	10,783	4,323	1,507	1,341	17,954
Defined benefit cost recognized in Profit & Loss					
Current service cost	190	23	21	62	296
Interest cost	256	151	61	35	503
Past service cost and gain or loss arising from settlements	2	5	0	(39) <sup>1</sup>	(32)
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	1,142	1,251	42	141	2,576
Actuarial gain or loss arising from changes in demographic assumptions	0	4	(6)	(3)	(5)
Actuarial gain or loss arising from experience	2	(66)	0	(3)	(67)
Cash flow and other changes					
Contributions by plan participants	3	0	0	19	22
Benefits paid	(403)	(132)	(123)	(76)	(734)
Payments in respect to settlements	0	0	0	(393) <sup>1</sup>	(393)
Acquisitions/Divestitures	0	(402) <sup>2</sup>	0	0	(402)
Exchange rate changes	0	(661)	46	(8)	(623)
Other <sup>3</sup>	3	0	0	15	18
<b>Balance, end of year</b>	11,978	4,496	1,548	1,091	19,113
thereof:					
Unfunded	4	13	206	123	346
Funded	11,974	4,483	1,342	968	18,767
<b>Change in fair value of plan assets:</b>					
<b>Balance, beginning of year</b>	10,371	5,322	1,182	1,210	18,085
Defined benefit cost recognized in Profit & Loss					
Interest income	249	185	48	32	514
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	484	1,042	10	97	1,633
Cash flow and other changes					
Contributions by plan participants	3	0	0	19	22
Contributions by the employer	271	22	56	73	422
Benefits paid <sup>4</sup>	(402)	(132)	(110)	(56)	(700)
Payments in respect to settlements	0	0	0	(393) <sup>1</sup>	(393)
Acquisitions/Divestitures	0	(282) <sup>2</sup>	0	0	(282)
Exchange rate changes	0	(804)	36	(19)	(787)
Other <sup>3</sup>	(1)	0	0	12	11
Plan administration costs	0	(1)	(3)	(2)	(6)
<b>Balance, end of year</b>	10,975	5,352	1,219	973	18,519
<b>Funded status, end of year</b>	(1,003)	856	(329)	(118)	(594)
<b>Change in irrecoverable surplus (asset ceiling)</b>					
<b>Balance, beginning of year</b>	0	0	0	0	0
Interest cost	0	0	0	0	0
Changes in irrecoverable surplus	0	0	0	0	0
Exchange rate changes	0	0	0	0	0
<b>Balance, end of year</b>	0	0	0	0	0
<b>Net asset (liability) recognized</b>	(1,003)	856	(329)	(118)	(594) <sup>5</sup>

<sup>1</sup> Converted defined benefit plan into a collective defined contribution plan in the Netherlands.<sup>2</sup> Abbey Life.<sup>3</sup> Includes the opening balance of a plan in Belgium for which defined contribution plan accounting was applied before and other smaller plans.<sup>4</sup> For funded plans only.<sup>5</sup> Thereof €934 million recognized in Other assets and €1,528 million in Other liabilities.

in € m.	2015				
	Germany	UK	U.S.	Other	Total
<b>Change in the present value of the defined benefit obligation:</b>					
<b>Balance, beginning of year</b>	11,263	4,295	1,375	1,260	18,193
Defined benefit cost recognized in Profit & Loss					
Current service cost	202	30	24	61	317
Interest cost	224	170	58	29	481
Past service cost and gain or loss arising from settlements	4	4	0	1	9
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	(551)	(143)	(39)	(50)	(783)
Actuarial gain or loss arising from changes in demographic assumptions	0	(66)	0	0	(66)
Actuarial gain or loss arising from experience	22	(103)	15	(9)	(75)
Cash flow and other changes					
Contributions by plan participants	3	0	0	13	16
Benefits paid	(383)	(123)	(85)	(69)	(660)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	259	159	54	472
Other <sup>1</sup>	(1)	0	0	51	50
<b>Balance, end of year</b>	10,783	4,323	1,507	1,341	17,954
thereof:					
Unfunded	2	14	203	114	333
Funded	10,781	4,309	1,304	1,227	17,621
<b>Change in fair value of plan assets:</b>					
<b>Balance, beginning of year</b>	10,634	5,095	1,072	1,109	17,910
Defined benefit cost recognized in Profit & Loss					
Interest income	213	201	45	26	485
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	(463)	(152)	(49)	(41)	(705)
Cash flow and other changes					
Contributions by plan participants	3	0	0	13	16
Contributions by the employer	367	2	64	51	484
Benefits paid <sup>2</sup>	(383)	(122)	(72)	(47)	(624)
Payments in respect to settlements	0	0	0	0	0
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	304	124	49	477
Other <sup>1</sup>	0	0	0	51	51
Plan administration costs	0	(6)	(2)	(1)	(9)
<b>Balance, end of year</b>	10,371	5,322	1,182	1,210	18,085
<b>Funded status, end of year</b>	(412)	999	(325)	(131)	131
<b>Change in irrecoverable surplus (asset ceiling)</b>					
<b>Balance, beginning of year</b>	0	0	0	0	0
Interest cost	0	0	0	0	0
Changes in irrecoverable surplus	0	0	0	0	0
<b>Balance, end of year</b>	0	0	0	0	0
<b>Net asset (liability) recognized</b>	(412)	999	(325)	(131)	131 <sup>3</sup>

<sup>1</sup> Includes the opening balances of a plan in India for which defined contribution plan accounting was applied before.

<sup>2</sup> For funded plans only.

<sup>3</sup> Thereof € 1,161 million recognized in Other assets and € 1,030 million in Other liabilities.

There are no reimbursement rights for the Group.



## Investment Strategy

The Group's investment objective is to protect the Group from adverse impacts of changes in the funding position of its defined benefit pension plans on key financial metrics, with a primary focus on immunizing the plans' IFRS funded status, while taking into account the plans' impact on other metrics, such as regulatory capital and local profit & loss accounts. Investment managers manage pension assets in line with investment mandates or guidelines as agreed with the pension plans' trustees and investment committees.

To achieve the primary objective of immunizing the IFRS funded status of key defined benefit plans, the Group applies a liability driven investment (LDI) approach. Risks from mismatches between fluctuations in the present value of the defined benefit obligations and plan assets due to capital market movements are minimized, subject to balancing relevant trade-offs. This is achieved by allocating plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation. Thereby, plan assets broadly reflect the underlying risk profile and currency of the pension obligations. For pension plans where a full LDI approach may impact adversely other key financial metrics important to the Group's overall financial position, the Group may deviate from this primary investment strategy. In 2015, the Group decided to adjust temporarily the investment strategy for the German main pension plan assets by reducing the interest rate and credit spread hedges. The Group closely monitors this divergence from the primary investment strategy and has put in place governance mechanisms to ensure a regular review of the deviation from the LDI approach.

Where the desired hedging level for these risks cannot be achieved with physical instruments (i.e. corporate and government bonds), derivatives are employed. Derivative overlays mainly include interest rate, inflation swaps and credit default swaps. Other instruments are also used, such as interest rate futures and options. In practice, a completely hedged approach is impractical, for instance because of insufficient market depth for ultra-long-term corporate bonds, as well as liquidity and cost considerations. Therefore, plan assets contain further asset categories to create long-term return enhancement and diversification benefits such as equity, real estate, high yield bonds or emerging markets bonds.

## Plan asset allocation to key asset classes

The following table shows the asset allocation of the Group's funded defined benefit plans to key asset classes, i.e. exposures include physical securities in discretely managed portfolios and underlying asset allocations of any commingled funds used to invest plan assets.

Asset amounts in the following table include both "quoted" (i.e. Level 1 assets in accordance with IFRS 13 – amounts invested in markets where the fair value can be determined directly from prices which are quoted in active, liquid markets) and "other" (i.e. Level 2 and 3 assets in accordance with IFRS 13) assets.



in € m.	Dec 31, 2016					Dec 31, 2015				
	Germany	UK	U.S.	Other	Total	Germany <sup>3</sup>	UK	U.S.	Other	Total
Cash and cash equivalents	1,085	115	45	73	1,318	777	138	27	86	1,028
Equity instruments <sup>1</sup>	1,129	634	116	87	1,966	1,027	648	113	272	2,060
Investment-grade bonds <sup>2</sup>										
Government	2,264	1,898	405	166	4,733	3,697	1,918	524	287	6,426
Non-government bonds	5,627	2,272	521	154	8,574	4,271	2,456	400	346	7,473
Non-investment-grade bonds										
Government	166	0	0	45	211	130	0	0	11	141
Non-government bonds	305	70	15	25	415	310	79	8	19	416
Structured products	38	237	65	22	362	35	259	45	12	351
Insurance	1	0	0	27	28	1	0	0	14	15
Alternatives										
Real estate	222	117	0	37	376	200	137	0	39	376
Commodities	6	13	0	0	19	7	7	0	8	22
Private equity	58	0	0	0	58	51	0	0	0	51
Other	667	34	0	330	1,031	641	38	0	100	779
Derivatives (Market Value)										
Interest rate	(614)	133	51	(2)	(432)	(812)	(60)	65	21	(786)
Credit	80	(1)	1	1	81	(11)	0	0	0	(11)
Inflation	0	(197)	0	7	(190)	0	(245)	0	(8)	(253)
Foreign exchange	(59)	2	0	0	(57)	42	(6)	0	2	38
Other	0	25	0	1	26	5	(47)	0	1	(41)
<b>Total fair value of plan assets</b>	<b>10,975</b>	<b>5,352</b>	<b>1,219</b>	<b>973</b>	<b>18,519</b>	<b>10,371</b>	<b>5,322</b>	<b>1,182</b>	<b>1,210</b>	<b>18,085</b>

<sup>1</sup> Allocation of equity exposure is broadly in line with the typical index in the respective market, e.g. the equity portfolio's benchmark of the UK retirement benefit plans is the MSCI All Countries World Index.

<sup>2</sup> Investment-grade means BBB and above. Average credit rating exposure for the Group's main plans is around A.

<sup>3</sup> Prior year numbers have been restated due to a refined classification approach for selected plan asset components in Germany.

The following table sets out the Group's funded defined benefit plan assets only invested in "quoted" assets, i.e. Level 1 assets in accordance with IFRS 13.

in € m.	Dec 31, 2016					Dec 31, 2015				
	Germany	UK	U.S.	Other	Total	Germany <sup>1</sup>	UK	U.S.	Other	Total
Cash and cash equivalents	1,145	115	42	39	1,341	1,241	138	29	68	1,476
Equity instruments	1,066	635	115	78	1,894	984	648	113	272	2,017
Investment-grade bonds										
Government	723	1,893	404	78	3,098	1,898	1,917	522	183	4,520
Non-government bonds	0	0	0	3	3	0	0	0	0	0
Non-investment-grade bonds										
Government	0	0	0	32	32	0	0	0	0	0
Non-government bonds	0	0	0	0	0	0	0	0	0	0
Structured products	0	0	0	0	0	0	259	0	11	270
Insurance	0	0	0	0	0	0	0	0	0	0
Alternatives										
Real estate	0	0	0	0	0	0	0	0	0	0
Commodities	4	0	0	0	4	6	0	0	0	6
Private equity	0	0	0	0	0	0	0	0	0	0
Other	8	0	0	0	8	32	0	0	6	38
Derivatives (Market Value)										
Interest rate	(1)	0	11	0	10	0	0	17	(1)	16
Credit	0	(1)	0	1	0	0	0	0	0	0
Inflation	0	0	0	0	0	0	0	0	0	0
Foreign exchange	0	2	0	0	2	42	(6)	0	2	38
Other	1	0	0	0	1	5	0	0	1	6
<b>Total fair value of quoted plan assets</b>	<b>2,946</b>	<b>2,644</b>	<b>572</b>	<b>231</b>	<b>6,393</b>	<b>4,208</b>	<b>2,956</b>	<b>681</b>	<b>542</b>	<b>8,387</b>

<sup>1</sup> Prior year numbers have been restated due to a refined classification approach for selected plan asset components in Germany.

All the remaining assets are invested in "other" assets, the majority of which are invested in Level 2 assets in accordance with IFRS 13, being primarily investment-grade corporate bonds. A relatively small element overall is in Level 3 assets in accordance with IFRS 13, being primarily real estate, insurance policies and derivative contracts.

The following tables show the asset allocation of the “quoted” and other defined benefit plan assets by key geography in which they are invested.

	Dec 31, 2016						
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	(54)	112	144	1,062	20	34	1,318
Equity instruments	279	103	847	279	321	137	1,966
Government bonds							
(investment-grade and above)	738	1,840	447	975	210	523	4,733
Government bonds (non-investment-grade)	1	18	5	13	7	167	211
Non-government bonds							
(investment-grade and above)	472	1,819	2,458	2,939 <sup>1</sup>	763	123	8,574
Non-government bonds (non-investment-grade)	9	50	186	130	28	12	415
Structured products	36	210	66	7	6	37	362
<b>Subtotal</b>	<b>1,481</b>	<b>4,152</b>	<b>4,153</b>	<b>5,405</b>	<b>1,355</b>	<b>1,033</b>	<b>17,579</b>
Share (in %)	8	24	24	31	8	6	100
Other asset categories							940
<b>Fair value of plan assets</b>							<b>18,519</b>

<sup>1</sup> Majority of this amount relates to bonds of French, Italian and Dutch corporate bonds.

	Dec 31, 2015 <sup>1</sup>						
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	(450)	147	81	1,195	26	29	1,028
Equity instruments	270	137	865	282	375	131	2,060
Government bonds							
(investment-grade and above)	1,842	1,895	549	1,454	225	461	6,426
Government bonds (non-investment-grade)	0	0	0	5	4	132	141
Non-government bonds							
(investment-grade and above)	427	1,838	2,184	2,081 <sup>2</sup>	864	79	7,473
Non-government bonds (non-investment-grade)	19	48	168	140	29	12	416
Structured products	34	219	42	39	16	1	351
<b>Subtotal</b>	<b>2,142</b>	<b>4,284</b>	<b>3,889</b>	<b>5,196</b>	<b>1,539</b>	<b>845</b>	<b>17,895</b>
Share (in %)	12	24	22	29	9	5	100
Other asset categories							190
<b>Fair value of plan assets</b>							<b>18,085</b>

<sup>1</sup> Prior year numbers have been restated due to a refined classification approach for selected plan asset components in Germany.

<sup>2</sup> Majority of this amount relates to bonds of French, Italian and Dutch corporate bonds.

Plan assets at December 31, 2016 include derivative transactions with Group entities with a negative market value of around €550 million. There is neither a material amount of securities issued by the Group nor other claims on Group assets included in the fair value of plan assets. The plan assets do not include any real estate which is used by the Group.

In addition, the Group estimates and allows for uncertain income tax positions which may have an impact on the Group's plan assets. Significant judgment is required in making these estimates and the Group's final liabilities may ultimately be materially different.

## Key Risk Sensitivities

The Group's defined benefit obligations are sensitive to changes in capital market conditions and actuarial assumptions. Sensitivities to capital market movements and key assumption changes are presented in the following table. Each market risk factor or assumption is changed in isolation. Sensitivities of the defined benefit obligations are approximated using geometric extrapolation methods based on plan durations for the respective assumption. Duration is a risk measure that indicates the broad sensitivity of the obligations to a change in an underlying assumption and provides a reasonable approximation for small to moderate changes in those assumptions.

For example, the discount rate duration is derived from the change in the defined benefit obligation to a change in the discount rate based on information provided by the local actuaries of the respective plans. The resulting duration is used to estimate the remeasurement liability loss or gain from changes in the discount rate. For other assumptions, a similar approach is used to derive the respective sensitivity results.

For defined benefit pension plans, changes in capital market conditions will impact the plan obligations via actuarial assumptions – mainly discount rate and price inflation rate – as well as the plan assets. Where the Group applies a LDI approach, the Bank's overall exposure to changes is reduced. Consequently, to aid understanding of the Group's risk exposures related to key capital market movements, the net impact of the change in the defined benefit obligations and plan assets due to a change of the related market risk factor or underlying actuarial assumption is shown; for sensitivities to changes in actuarial assumptions that do not impact the plan assets, only the impact on the defined benefit obligations is shown.

Asset-related sensitivities are derived for the Group's major plans by using risk sensitivity factors determined by the Group's Market Risk Management function. These sensitivities are calculated based on information provided by the plans' investment managers and extrapolated linearly to reflect the approximate change of the plan assets' market value in case of a change in the underlying risk factor.

The sensitivities illustrate plausible variations over time in capital market movements and key actuarial assumptions. The Group is not in a position to provide a view on the likelihood of these capital market or assumption changes. While these sensitivities illustrate the overall impact on the funded status of the changes shown, the significance of the impact and the range of reasonable possible alternative assumptions may differ between the different plans that comprise the aggregated results. Even though plan assets and plan obligations are sensitive to similar risk factors, actual changes in plan assets and obligations may not fully offset each other due to imperfect correlations between market risk factors and actuarial assumptions. Caution should be used when extrapolating these sensitivities due to non-linear effects that changes in capital market conditions and key actuarial assumptions may have on the overall funded status. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in these sensitivities.

Sensitivity analyses have been refined for discount rates and credits spreads to 50 basis points (100 basis points used previously) to reflect the low level of several key financial assumptions. For consistency, sensitivities shown for December 31, 2015 have been adjusted accordingly.

in € m.	Dec 31, 2016				Dec 31, 2015			
	Germany	UK	U.S.	Other	Germany	UK	U.S.	Other
<b>Discount rate (–50 bp):</b>								
(Increase) in DBO	(900)	(500)	(50)	(65)	(775)	(440)	(45)	(105)
Expected increase in plan assets <sup>1</sup>	600	555	35	25	330	515	40	65
<b>Expected net impact on funded status (de-) increase</b>	<b>(300)</b>	<b>55</b>	<b>(15)</b>	<b>(40)</b>	<b>(445)</b>	<b>75</b>	<b>(5)</b>	<b>(40)</b>
<b>Discount rate (+50 bp):</b>								
Decrease in DBO	835	450	40	60	725	395	35	95
Expected (decrease) in plan assets <sup>1</sup>	(600)	(555)	(35)	(25)	(330)	(515)	(40)	(65)
<b>Expected net impact on funded status (de-) increase</b>	<b>235</b>	<b>(105)</b>	<b>5</b>	<b>35</b>	<b>395</b>	<b>(120)</b>	<b>(5)</b>	<b>30</b>
<b>Credit spread (–50 bp):</b>								
(Increase) in DBO	(900)	(500)	(100)	(70)	(775)	(440)	(90)	(110)
Expected increase in plan assets <sup>1</sup>	500	115	25	10	230	125	25	20
<b>Expected net impact on funded status (de-) increase</b>	<b>(400)</b>	<b>(385)</b>	<b>(75)</b>	<b>(60)</b>	<b>(545)</b>	<b>(315)</b>	<b>(65)</b>	<b>(90)</b>
<b>Credit spread (+50 bp):</b>								
Decrease in DBO	835	450	95	65	725	395	85	100
Expected (decrease) in plan assets <sup>1</sup>	(500)	(115)	(25)	(10)	(230)	(125)	(25)	(20)
<b>Expected net impact on funded status (de-) increase</b>	<b>335</b>	<b>335</b>	<b>70</b>	<b>55</b>	<b>495</b>	<b>270</b>	<b>60</b>	<b>80</b>
<b>Rate of price inflation (–50 bp):<sup>2</sup></b>								
Decrease in DBO	340	395	0	25	305	340	0	50
Expected (decrease) in plan assets <sup>1</sup>	(220)	(350)	0	(15)	(215)	(355)	0	(10)
<b>Expected net impact on funded status (de-) increase</b>	<b>120</b>	<b>45</b>	<b>0</b>	<b>10</b>	<b>90</b>	<b>(15)</b>	<b>0</b>	<b>40</b>
<b>Rate of price inflation (+50 bp):<sup>2</sup></b>								
(Increase) in DBO	(350)	(435)	0	(30)	(315)	(370)	0	(55)
Expected increase in plan assets <sup>1</sup>	220	350	0	15	215	355	0	10
<b>Expected net impact on funded status (de-) increase</b>	<b>(130)</b>	<b>(85)</b>	<b>0</b>	<b>(15)</b>	<b>(100)</b>	<b>15</b>	<b>0</b>	<b>(45)</b>
<b>Rate of real increase in future compensation levels (–50 bp):</b>								
Decrease in DBO, net impact on funded status	75	25	0	15	70	15	0	15
<b>Rate of real increase in future compensation levels (+50 bp):</b>								
(Increase) in DBO, net impact on funded status	(75)	(25)	0	(15)	(70)	(15)	0	(15)
<b>Longevity improvements by 10 %:<sup>3</sup></b>								
(Increase) in DBO, net impact on funded status	(305)	(130)	(30)	(15)	(260)	(110)	(25)	(25)

<sup>1</sup> Expected changes in the fair value of plan assets contain the simulated impact from the biggest plans in Germany, the UK, the U.S., Channel Islands, Switzerland and Belgium which cover over 99 % of the total fair value of plan assets. The fair value of plan assets for other plans is assumed to be unchanged for this presentation.

<sup>2</sup> Incorporates sensitivity to changes in nominal increase for pensions in payment to the extent linked to the price inflation assumption.

<sup>3</sup> Estimated to be equivalent to an increase of around 1 year in overall life expectancy.

## Expected cash flows

The following table shows expected cash flows for post-employment benefits in 2017, including contributions to the Group's external pension trusts in respect of funded plans, direct payment to beneficiaries in respect of unfunded plans, as well as contributions to defined contribution plans.

in € m.	2017
	Total
Expected contributions to	
Defined benefit plan assets	300
BVV	70
Pension fund for Postbank's postal civil servants	90
Other defined contribution plans	310
Expected benefit payments for unfunded defined benefit plans	30
<b>Expected total cash flow related to post-employment benefits</b>	<b>800</b>

## Expense of employee benefits

The following table presents a breakdown of specific expenses according to the requirements of IAS 19 and IFRS 2 respectively.

in € m.	2016	2015	2014
<b>Expenses for defined benefit plans:</b>			
Service cost	272	326	296
Net interest cost (income)	(11)	(4)	3
<b>Total expenses defined benefit plans</b>	<b>261</b>	<b>322</b>	<b>299</b>
<b>Expenses for defined contribution plans:</b>			
BVV	50	53	51
Pension fund for Postbank's postal civil servants	95	95	97
Other defined contribution plans	284	264	228
<b>Total expenses for defined contribution plans</b>	<b>429</b>	<b>412</b>	<b>376</b>
<b>Total expenses for post-employment benefit plans</b>	<b>690</b>	<b>734</b>	<b>675</b>
<b>Employer contributions to mandatory German social security pension plan</b>	<b>237</b>	<b>231</b>	<b>229</b>
Expenses for share-based payments, equity settled <sup>1</sup>	620	816	860
Expenses for share-based payments, cash settled <sup>1</sup>	3	15	11
Expenses for cash retention plans <sup>1</sup>	487	738	815
Expenses for severance payments <sup>2</sup>	149	184	205

<sup>1</sup> Including expenses for new hire awards and the acceleration of expenses not yet amortized due to the discontinuation of employment including those amounts which are recognized as part of the Group's restructuring expenses.

<sup>2</sup> Excluding the acceleration of expenses for deferred compensation awards not yet amortized.

## 37 – Income Taxes

in € m.	2016	2015	2014
<b>Current tax expense (benefit):</b>			
Tax expense (benefit) for current year	881	1,385	764
Adjustments for prior years	(23)	277	(12)
<b>Total current tax expense (benefit)</b>	<b>858</b>	<b>1,662</b>	<b>752</b>
<b>Deferred tax expense (benefit):</b>			
Origination and reversal of temporary difference, unused tax losses and tax credits	(276)	(378)	644
Effect of changes in tax law and/or tax rate	(3)	140	44
Adjustments for prior years	(33)	(749)	(15)
<b>Total deferred tax expense (benefit)</b>	<b>(312)</b>	<b>(987)</b>	<b>673</b>
<b>Total income tax expense (benefit)</b>	<b>546</b>	<b>675</b>	<b>1,425</b>

Income tax expense includes policyholder tax attributable to policyholder earnings, amounting to an income tax expense of € 23 million in 2016, an income tax benefit of € 0.4 million in 2015 and an income tax benefit of € 2 million in 2014.

Total current tax expense includes benefits from previously unrecognized tax losses, tax credits and deductible temporary differences, which reduced the current tax expense by € 7 million in 2016. In 2015 and 2014 these effects reduced the current tax expense by € 3 million and by € 5 million respectively.

Total deferred tax benefit includes benefits from previously unrecognized tax losses (tax credits/deductible temporary differences) and the reversal of previous write-downs of deferred tax assets and expenses arising from write-downs of deferred tax assets, which increased the deferred tax benefit by € 38 million in 2016. In 2015 and 2014 these effects reduced the deferred tax benefit by € 187 million and the deferred tax expense by € 303 million.

### Difference between applying German statutory (domestic) income tax rate and actual income tax expense/(benefit)

in € m.	2016	2015	2014
<b>Expected tax expense (benefit) at domestic income tax rate of 31.3 % (31.0 % for 2015 and 2014)</b>	<b>(254)</b>	<b>(1,890)</b>	<b>966</b>
Foreign rate differential	(38)	(157)	88
Tax-exempt gains on securities and other income	(599)	(345)	(371)
Loss (income) on equity method investments	(19)	(21)	(93)
Nondeductible expenses	1,074	1,288	649
Impairments of goodwill	250	1,407	0
Changes in recognition and measurement of deferred tax assets <sup>1</sup>	(45)	184	(308)
Effect of changes in tax law and/or tax rate	(3)	140	44
Effect related to share-based payments	66	(5)	78
Effect of policyholder tax	23	0	(2)
Other <sup>1</sup>	91	74	374
<b>Actual income tax expense (benefit)</b>	<b>546</b>	<b>675</b>	<b>1,425</b>

<sup>1</sup> Current and deferred tax expense/(benefit) relating to prior years are mainly reflected in the line items "Changes in recognition and measurement of deferred tax assets" and "Other".

The Group is under continuous examinations by tax authorities in various jurisdictions. In 2015 and 2014 "Other" in the preceding table mainly includes the effects of these examinations by the tax authorities.

The outcome of the recent U.S. federal election may result in significant tax policy changes. Tax reform proposals currently under consideration contemplate a significant reduction of tax rates on business income and significant changes to the overall framework for taxation, the scope as well as the application of which to the financial services industry is currently unclear. A reduction in the corporate tax rate may impact the effective tax rate of the Group in future periods. The Group's deferred tax assets may also be impacted and may need to be re-measured. The specific impact on Deutsche Bank's financial condition cannot be determined at this time.

The domestic income tax rate, including corporate tax, solidarity surcharge, and trade tax, used for calculating deferred tax assets and liabilities was 31.3 % for 2016 and 31 % for the years 2015 and 2014.

**Income taxes charged or credited to equity (other comprehensive income/additional paid in capital)**

in € m.	2016	2015	2014
Actuarial gains/losses related to defined benefit plans	<b>344</b>	(213)	407
Financial assets available for sale:			
Unrealized net gains/losses arising during the period	20	104	(457)
Net gains/losses reclassified to profit or loss	<b>81</b>	10	5
Derivatives hedging variability of cash flows:			
Unrealized net gains/losses arising during the period	(14)	3	(7)
Net gains/losses reclassified to profit or loss	<b>1</b>	(6)	(146)
Other equity movement:			
Unrealized net gains/losses arising during the period	(71)	(90)	(68)
Net gains/losses reclassified to profit or loss	<b>100</b>	(2)	1
<b>Income taxes (charged) credited to other comprehensive income</b>	<b>461</b>	(194)	(265)
<b>Other income taxes (charged) credited to equity</b>	<b>93</b>	72	(21)

**Major components of the Group's gross deferred tax assets and liabilities**

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Deferred tax assets:</b>		
Unused tax losses	3,931	3,477
Unused tax credits	358	215
Deductible temporary differences:		
Trading activities	7,248	7,748
Property and equipment	458	468
Other assets	1,606	1,640
Securities valuation	80	92
Allowance for loan losses	1,039	982
Other provisions	1,079	1,310
Other liabilities	1,353	1,028
<b>Total deferred tax assets pre offsetting</b>	<b>17,152</b>	16,960
<b>Deferred tax liabilities:</b>		
Taxable temporary differences:		
Trading activities	7,128	7,446
Property and equipment	57	64
Other assets	560	954
Securities valuation	381	523
Allowance for loan losses	29	50
Other provisions	355	351
Other liabilities	462	556
<b>Total deferred tax liabilities pre offsetting</b>	<b>8,972</b>	9,944

**Deferred tax assets and liabilities, after offsetting**

in € m.	Dec 31, 2016	Dec 31, 2015
Presented as deferred tax assets	<b>8,666</b>	7,762
Presented as deferred tax liabilities	<b>486</b>	746
<b>Net deferred tax assets</b>	<b>8,180</b>	7,016

The change in the balance of deferred tax assets and deferred tax liabilities does not equal the deferred tax expense/(benefit). This is due to (1) deferred taxes that are booked directly to equity, (2) the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than euro, (3) the acquisition and disposal of entities as part of ordinary activities and (4) the reclassification of deferred tax assets and liabilities which are presented on the face of the balance sheet as components of other assets and liabilities.

**Items for which no deferred tax assets were recognized**

in € m.

	Dec 31, 2016 <sup>1</sup>	Dec 31, 2015 <sup>1</sup>
<b>Deductible temporary differences</b>	<b>1</b>	<b>(277)</b>
Not expiring	(4,368)	(4,372)
Expiring in subsequent period	(189)	(2)
Expiring after subsequent period	(746)	(1,067)
<b>Unused tax losses</b>	<b>(5,303)</b>	<b>(5,441)</b>
Expiring after subsequent period	(13)	(95)
<b>Unused tax credits</b>	<b>(14)</b>	<b>(97)</b>

<sup>1</sup> Amounts in the table refer to deductible temporary differences, unused tax losses and tax credits for federal income tax purposes.

Deferred tax assets were not recognized on these items because it is not probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized.

As of December 31, 2016 and December 31, 2015, the Group recognized deferred tax assets of €5.8 billion and €5.0 billion, respectively, that exceed deferred tax liabilities in entities which have suffered a loss in either the current or preceding period. This is based on management's assessment that it is probable that the respective entities will have taxable profits against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized. Generally, in determining the amounts of deferred tax assets to be recognized, management uses historical profitability information and, if relevant, forecasted operating results, based upon approved business plans, including a review of the eligible carry-forward periods, tax planning opportunities and other relevant considerations.

As of December 31, 2016 and December 31, 2015, the Group had temporary differences associated with the Group's parent company's investments in subsidiaries, branches and associates and interests in joint ventures of €67 million and €93 million respectively, in respect of which no deferred tax liabilities were recognized.

## 38 – Derivatives

### Derivative Financial Instruments and Hedging Activities

Derivative contracts used by the Group include swaps, futures, forwards, options and other similar types of contracts. In the normal course of business, the Group enters into a variety of derivative transactions for sales, market-making and risk management purposes. The Group's objectives in using derivative instruments are to meet customers' risk management needs and to manage the Group's exposure to risks.

In accordance with the Group's accounting policy relating to derivatives and hedge accounting as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates", all derivatives are carried at fair value in the balance sheet regardless of whether they are held for trading or non-trading purposes.

### Derivatives held for Sales and Market-Making Purposes

#### Sales and Market-Making

The majority of the Group's derivatives transactions relate to sales and market-making activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Market-making involves quoting bid and offer prices to other market participants, enabling revenue to be generated based on spreads and volume.



## Risk Management

The Group uses derivatives in order to reduce its exposure to market risks as part of its asset and liability management. This is achieved by entering into derivatives that hedge specific portfolios of fixed rate financial instruments and forecast transactions as well as strategic hedging against overall balance sheet exposures. The Group actively manages interest rate risk through, among other things, the use of derivative contracts. Utilization of derivative financial instruments is modified from time to time within prescribed limits in response to changing market conditions, as well as to changes in the characteristics and mix of the related assets and liabilities.

## Derivatives qualifying for Hedge Accounting

The Group applies hedge accounting if derivatives meet the specific criteria described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

## Fair Value Hedge Accounting

The Group enters into fair value hedges, using primarily interest rate swaps and options, in order to protect itself against movements in the fair value of fixed-rate financial instruments due to movements in market interest rates.

in € m.	Dec 31, 2016		Dec 31, 2015	
	Assets	Liabilities	Assets	Liabilities
Derivatives held as fair value hedges <sup>1</sup>	6,893	1,749	6,764	2,193

<sup>1</sup> In 2016 the Group changed the presentation of the figures from a net presentation (after set-off) to a gross presentation (before set-off). Comparative figures for December 31, 2015 have been adjusted accordingly.

For the years ended December 31, 2016, 2015 and 2014, a loss of €0.6 billion, a loss of €1.1 billion and a gain of €1.0 billion, respectively, were recognized on the hedging instruments. For the same periods, the results on the hedged items, which were attributable to the hedged risk, were a gain of €1.0 billion, a gain of €1.0 billion and a loss of €1.3 billion.

## Cash Flow Hedge Accounting

The Group enters into cash flow hedges, using interest rate swaps and equity index swaps, in order to protect itself against exposure to variability in interest rates and equities.

in € m.	Dec 31, 2016		Dec 31, 2015	
	Assets	Liabilities	Assets	Liabilities
Derivatives held as cash flow hedges	242	0	239	0

### Periods when hedged cash flows are expected to occur and when they are expected to affect the income statement

in € m.	Within 1 year	1–3 years	3–5 years	Over 5 years
<b>As of December 31, 2016</b>				
Cash inflows from assets	33	34	5	0
Cash outflows from liabilities	0	0	0	0
<b>Net cash flows 2016</b>	<b>33</b>	<b>34</b>	<b>5</b>	<b>0</b>
<b>As of December 31, 2015</b>				
Cash inflows from assets	32	49	0	0
Cash outflows from liabilities	(20)	(33)	(26)	(15)
<b>Net cash flows 2015</b>	<b>12</b>	<b>16</b>	<b>(26)</b>	<b>(15)</b>

**Cash Flow Hedge Balances**

in € m.	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014
Reported in Equity <sup>1</sup>	198	138	118
thereof relates to terminated programs	0	(14)	(15)
Gains (losses) posted to equity for the year ended	62	1	(6)
Gains (losses) removed from equity for the year ended	2	(20)	(339)
Ineffectiveness recorded within P&L	(17)	(1)	(3)

<sup>1</sup> Reported in equity refers to accumulated other comprehensive income as presented in the Consolidated Statement of Comprehensive Income.

As of December 31, 2016 the longest term cash flow hedge matures in 2021.

**Net Investment Hedge Accounting**

Using foreign exchange forwards and swaps, the Group enters into hedges of translation adjustments resulting from translating the financial statements of net investments in foreign operations into the reporting currency of the parent at period end spot rates.

in € m.	Dec 31, 2016		Dec 31, 2015	
	Assets	Liabilities	Assets	Liabilities
Derivatives held as net investment hedges	286	4,076	226	5,379

For the years ended December 31, 2016, 2015 and 2014, losses of €437 million, €425 million and €357 million, respectively, were recognized due to hedge ineffectiveness which includes the forward points element of the hedging instruments.

**39 –  
Related Party Transactions**

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. The Group's related parties include:

- key management personnel, close family members of key management personnel and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members,
- subsidiaries, joint ventures and associates and their respective subsidiaries, and
- post-employment benefit plans for the benefit of Deutsche Bank employees.

## Transactions with Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of Deutsche Bank, directly or indirectly. The Group considers the members of the Management Board and of the Supervisory Board of the parent company to constitute key management personnel for purposes of IAS 24.

### Compensation expense of key management personnel

in € m.	2016	2015	2014
Short-term employee benefits	40	31	26
Post-employment benefits	9	6	4
Other long-term benefits	7	11	7
Termination benefits	0	20	0
Share-based payment	12	15	5
<b>Total</b>	<b>68</b>	<b>83</b>	<b>42</b>

The above mentioned table does not contain compensation that employee representatives and former board members on the Supervisory Board have received. The aggregated compensation paid to such members for their services as employees of Deutsche Bank or status as former employees (retirement, pension and deferred compensation) amounted to €1.1 million as of December 31, 2016, €1.1 million as of December 31, 2015 and €1.1 million as of December 31, 2014.

Among the Group's transactions with key management personnel as of December 31, 2016 were loans and commitments of €49 million and deposits of €7 million. As of December 31, 2015, the Group's transactions with key management personnel were loans and commitments of €11 million and deposits of €8 million.

In addition, the Group provides banking services, such as payment and account services as well as investment advice, to key management personnel and their close family members.

## Transactions with Subsidiaries, Joint Ventures and Associates

Transactions between Deutsche Bank AG and its subsidiaries meet the definition of related party transactions. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Group and its associated companies and joint ventures and their respective subsidiaries also qualify as related party transactions.

Transactions for subsidiaries, joint ventures and associates are presented combined in below table as these are not material individually.

**Loans**

in € m.

	2016	2015
<b>Loans outstanding, beginning of year</b>	<b>396</b>	<b>321</b>
Movement in loans during the period <sup>1</sup>	(86)	89
Changes in the group of consolidated companies	0	(31)
Exchange rate changes/other	(13)	18
<b>Loans outstanding, end of year<sup>2</sup></b>	<b>297</b>	<b>396</b>
<b>Other credit risk related transactions:</b>		
Allowance for loan losses	0	1
Provision for loan losses	0	0
Guarantees and commitments	62	263

<sup>1</sup> Net impact of loans issued and loans repayment during the year is shown as "Movement in loans during the period".<sup>2</sup> Loans past due were €7 million as of December 31, 2016 and €4 million as of December 31, 2015. For the above loans the Group held collateral of €22 million and €69 million as of December 31, 2016 and December 31, 2015, respectively.**Deposits**

in € m.

	2016	2015
<b>Deposits outstanding, beginning of year</b>	<b>162</b>	<b>128</b>
Movement in deposits during the period <sup>1</sup>	(74)	31
Changes in the group of consolidated companies	0	(0)
Exchange rate changes/other	(1)	2
<b>Deposits outstanding, end of year</b>	<b>87</b>	<b>162</b>

<sup>1</sup> Net impact of deposits received and deposits repaid during the year is shown as "Movement in deposits during the period".**Other Transactions**

Trading assets and positive market values from derivative financial transactions with associated companies amounted to €8 million as of December 31, 2016 and €32 million as of December 31, 2015. Trading liabilities and negative market values from derivative financial transactions with associated companies amounted to €0 million as of December 31, 2016 and €0 million as of December 31, 2015.

**Transactions with Pension Plans**

Under IFRS, certain post-employment benefit plans are considered related parties. The Group has business relationships with a number of its pension plans pursuant to which it provides financial services to these plans, including investment management services. The Group's pension funds may hold or trade Deutsche Bank shares or securities.

**Transactions with related party pension plans**

in € m.

	2016	2015
Equity shares issued by the Group held in plan assets	0	0
Other assets	0	0
Fees paid from plan assets to asset managers of the Group	22	41
Market value of derivatives with a counterparty of the Group	(547)	(793)
Notional amount of derivatives with a counterparty of the Group	8,755	10,516

## 40 – Information on Subsidiaries

### Composition of the Group

Deutsche Bank AG is the direct or indirect holding company for the Group's subsidiaries.

The Group consists of 938 (2015: 1,217) consolidated entities, thereof 349 (2015: 545) consolidated structured entities. 678 (2015: 796) of the entities controlled by the Group are directly or indirectly held by the Group at 100 % of the ownership interests (share of capital). Third parties also hold ownership interests in 260 (2015: 421) of the consolidated entities (noncontrolling interests). As of December 31, 2015 and 2016, the noncontrolling interests are neither individually nor cumulatively material to the Group.

### Significant restrictions to access or use the Group's assets

Statutory, contractual or regulatory requirements as well as protective rights of noncontrolling interests might restrict the ability of the Group to access and transfer assets freely to or from other entities within the Group and to settle liabilities of the Group.

Since the Group did not have any material noncontrolling interests at the balance sheet date, any protective rights associated with these did not give rise to significant restrictions.

The following restrictions impact the Group's ability to use assets:

- The Group has pledged assets to collateralize its obligations under repurchase agreements, securities financing transactions, collateralized loan obligations and for margining purposes for OTC derivative liabilities.
- The assets of consolidated structured entities are held for the benefit of the parties that have bought the notes issued by these entities.
- Regulatory and central bank requirements or local corporate laws may restrict the Group's ability to transfer assets to or from other entities within the Group in certain jurisdictions.

#### Restricted assets

in € m.	Dec 31, 2016		Dec 31, 2015	
	Total assets	Restricted assets	Total assets	Restricted assets
Interest-earning deposits with banks	163,292	1,314	78,263	2,190
Financial assets at fair value through profit or loss	743,781	54,711	820,883	79,222
Financial assets available for sale	56,228	19,870	73,583	11,046
Loans	408,909	74,172	427,749	46,352
Other	218,336	7,693	239,441	9,294
<b>Total</b>	<b>1,590,546</b>	<b>157,760</b>	<b>1,629,130</b>	<b>148,105</b>

The table above excludes assets that are not encumbered at an individual entity level but which may be subject to restrictions in terms of their transferability within the Group. Such restrictions may be based on local connected lending requirements or similar regulatory restrictions. In this situation, it is not feasible to identify individual balance sheet items that cannot be transferred. This is also the case for regulatory minimum liquidity requirements. The Group identifies the volume of liquidity reserves in excess of local stress liquidity outflows. The aggregate amount of such liquidity reserves that are considered restricted for this purpose is €37.4 billion as of December 31, 2016 (as of December 31, 2015: €19.7 billion).

## 41 – Structured Entities

### Nature, purpose and extent of the Group's interests in structured entities

The Group engages in various business activities with structured entities which are designed to achieve a specific business purpose. A structured entity is one that has been set up so that any voting rights or similar rights are not the dominant factor in deciding who controls the entity. An example is when voting rights relate only to administrative tasks and the relevant activities are directed by contractual arrangements.

A structured entity often has some or all of the following features or attributes:

- Restricted activities;
- A narrow and well defined objective;
- Insufficient equity to permit the structured entity to finance its activities without subordinated financial support;
- Financing in the form of multiple contractually linked instruments to investors that create concentrations of credit or other risks (tranches).

The principal uses of structured entities are to provide clients with access to specific portfolios of assets and to provide market liquidity for clients through securitizing financial assets. Structured entities may be established as corporations, trusts or partnerships. Structured entities generally finance the purchase of assets by issuing debt and equity securities that are collateralized by and/or indexed to the assets held by the structured entities. The debt and equity securities issued by structured entities may include tranches with varying levels of subordination.

Structured entities are consolidated when the substance of the relationship between the Group and the structured entities indicate that the structured entities are controlled by the Group, as discussed in Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

## Consolidated structured entities

The Group has contractual arrangements which may require it to provide financial support to the following types of consolidated structured entities.

### Securitization vehicles

The Group uses securitization vehicles for funding purchase of diversified pool of assets. The Group provides financial support to these entities in the form of liquidity facility. As of December 31, 2016 and December 31, 2015, there were outstanding loan commitments to these entities for €3 million and €251 million respectively.

### Funds

The Group may provide funding and liquidity facility or guarantees to funds consolidated by the group. As of December 31, 2016 and December 31, 2015 notional value of the liquidity facilities and guarantees provided by the group to such funds was €11.3 billion and €13.4 billion.

## Unconsolidated structured entities

These are entities which are not consolidated because the Group does not control them through voting rights, contract, funding agreements, or other means. The extent of the Group's interests to unconsolidated structured entities will vary depending on the type of structured entities.

Below is a description of the Group's involvements in unconsolidated structured entities by type.

### Repackaging and investment entities

Repackaging and investment entities are established to meet clients' investment needs through the combination of securities and derivatives. These entities are not consolidated by the Group because the Group does not have power to influence the returns obtained from the entities. These entities are usually set up to provide a certain investment return pre-agreed with the investor, and the Group is not able to change the investment strategy or return during the life of the transaction.

### Third party funding entities

The Group provides funding to structured entities that hold a variety of assets. These entities may take the form of funding entities, trusts and private investment companies. The funding is collateralized by the asset in the structured entities. The group's involvement involves predominantly both lending and loan commitments.

The vehicles used in these transactions are controlled by the borrowers where the borrowers have the ability to decide whether to post additional margin or collateral in respect of the financing. In such cases, where borrowers can decide to continue or terminate the financing, the borrowers will consolidate the vehicle.

### Securitization Vehicles

The Group establishes securitization vehicles which purchase diversified pools of assets, including fixed income securities, corporate loans, and asset-backed securities (predominantly commercial and residential mortgage-backed securities and credit card receivables). The vehicles fund these purchases by issuing multiple tranches of debt and equity securities, the repayment of which is linked to the performance of the assets in the vehicles.

The Group often transfers assets to these securitization vehicles and provides financial support to these entities in the form of liquidity facilities.

The Group also invests and provides liquidity facilities to third party sponsored securitization vehicles.

The securitization vehicles that are not consolidated into the Group are those where the Group does not hold the power or ability to unilaterally remove the servicer or special servicer who has been delegated power over the activities of the entity.

### Funds

The Group establishes structured entities to accommodate client requirements to hold investments in specific assets. The Group also invests in funds that are sponsored by third parties. A group entity may act as fund manager, custodian or some other capacity and provide funding and liquidity facilities to both group sponsored and third party funds. The funding provided is collateralized by the underlying assets held by the fund.

The Group does not consolidate funds when Deutsche Bank is deemed agent or when another third party investor has the ability to direct the activities of the fund.

### Other

These are Deutsche Bank sponsored or third party structured entities that do not fall into any criteria above. These entities are not consolidated by the Group when the Group does not hold power over the decision making of these entities.

### Income derived from involvement with structured entities

The Group earns management fees and, occasionally, performance-based fees for its investment management service in relation to funds. Interest income is recognized on the funding provided to structured entities. Any trading revenue as a result of derivatives with structured entities and from the movements in the value of notes held in these entities is recognized in 'Net gains/losses on financial assets/liabilities held at fair value through profit and loss'.

### Interests in unconsolidated structured entities

The Group's interests in unconsolidated structured entities refer to contractual and non-contractual involvement that exposes the Group to variability of returns from the performance of the structured entities. Examples of interests in unconsolidated structured entities include debt or equity investments, liquidity facilities, guarantees and certain derivative instruments in which the Group is absorbing variability of returns from the structured entities.

Interests in unconsolidated structured entities exclude instruments which introduce variability of returns into the structured entities. For example, when the Group purchases credit protection from an unconsolidated structured entity whose purpose and design is to pass through credit risk to investors, the Group is providing the variability of returns to the entity rather than absorbing variability. The purchased credit protection is therefore not considered as an interest for the purpose of the table below.

### Maximum Exposure to unconsolidated structured entities

The maximum exposure to loss is determined by considering the nature of the interest in the unconsolidated structured entity. The maximum exposure for loans and trading instruments is reflected by their carrying amounts in the consolidated balance sheet. The maximum exposure for derivatives and off balance sheet commitments such as guarantees, liquidity facilities and loan commitments under IFRS 12, as interpreted by the Group, is reflected by the notional amounts. Such amounts or their development do not reflect the economic risks faced by the Group because they do not take into account the effects of collateral or hedges nor the probability of such losses being incurred. At December 31, 2016, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were €145 billion, €644 billion and €27 billion respectively. At December 31, 2015, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were €255 billion, €606 billion and €31 billion respectively.



## Size of structured entities

The Group provides a different measure for size of structured entities depending on their type. The following measures have been considered as appropriate indicators for evaluating the size of structured entities:

- **Funds** – Net asset value or asset under management where the Group holds fund units and notional of derivatives when the Group's interest comprises of derivatives.
- **Securitizations** – notional of notes in issue when the Group derives its interests through notes its holds and notional of derivatives when the Group's interests is in the form of derivatives.
- **Third party funding entities** – Total assets in entities
- **Repackaging and investment entities** – Fair value of notes in issue

For Third party funding entities, size information is not publicly available, therefore the Group has disclosed the greater of the collateral the Group has received/pledged or the notional of the exposure the Group has to the entity.

The following table shows, by type of structured entity, the carrying amounts of the Group's interests recognized in the consolidated statement of financial position as well as the maximum exposure to loss resulting from these interests. It also provides an indication of the size of the structured entities. The carrying amounts presented below do not reflect the true variability of returns faced by the Group because they do not take into account the effects of collateral or hedges.

### Carrying amounts and size relating to Deutsche Bank's interests

	Dec 31, 2016				
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
<b>Assets</b>					
Cash and central bank balances	0	0	0	0	0
Interbank balances (w/o central banks)	(15)	0	0	345	331
Central bank funds sold and securities purchased under resale agreements	68	87	18	3,113	3,286
Securities Borrowed	0	0	0	11,643	11,643
Total financial assets at fair value through profit or loss	1,231	3,068	6,332	54,943	65,576
Trading assets	659	2,309	6,211	15,031	24,210
Positive market values (derivative financial instruments)	538	262	111	7,587	8,499
Financial assets designated at fair value through profit or loss	34	497	10	32,326	32,867
Financial assets available for sale	62	599	271	1,008	1,940
Loans	157	36,710	20,219	19,604	76,690
Other assets	50	40	181	20,454	20,726
<b>Total assets</b>	<b>1,554</b>	<b>40,504</b>	<b>27,022</b>	<b>111,111</b>	<b>180,192</b>
<b>Liabilities</b>					
Total financial liabilities at fair value through profit or loss	354	36	27	11,036	11,453
Negative market values (derivative financial instruments)	354	36	27	11,036	11,453
<b>Total liabilities</b>	<b>354</b>	<b>36</b>	<b>27</b>	<b>11,036</b>	<b>11,453</b>
Off-balance sheet exposure	0	5,150	10,591	11,448	27,189
<b>Total</b>	<b>1,200</b>	<b>45,619</b>	<b>37,586</b>	<b>111,523</b>	<b>195,928</b>
<b>Size of structured entity</b>	<b>9,487</b>	<b>65,234</b>	<b>454,950</b>	<b>1,888,491</b>	

	Dec 31, 2015				
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
<b>Assets</b>					
Cash and central bank balances <sup>1</sup>	0	0	0	0	0
Interbank balances (w/o central banks) <sup>1</sup>	18	0	110	422	550
Central bank funds sold and securities purchased under resale agreements	0	0	20	1,445	1,465
Securities Borrowed	0	0	66	23,045	23,111
Total financial assets at fair value through profit or loss	1,924	3,106	14,203	66,109	85,455
Trading assets	1,256	1,339	13,886	18,709	35,303 <sup>2</sup>
Positive market values (derivative financial instruments)	619	114	94	6,525	7,352
Financial assets designated at fair value through profit or loss	48	1,653	223	40,876	42,800
Financial assets available for sale	0	421	568	1,722	2,711
Loans	135	34,340	25,026	20,958	80,459
Other assets	103	2,150	565	18,365	21,182
<b>Total assets</b>	<b>2,179</b>	<b>40,017</b>	<b>40,558</b>	<b>132,065</b>	<b>214,932<sup>2</sup></b>
<b>Liabilities</b>					
Total financial liabilities at fair value through profit or loss	319	150	669	9,961	11,099
Negative market values (derivative financial instruments)	319	150	669	9,961	11,099
<b>Total liabilities</b>	<b>319</b>	<b>150</b>	<b>669</b>	<b>9,961</b>	<b>11,099</b>
Off-balance sheet exposure	2	7,724	9,408	13,459	30,710 <sup>2</sup>
<b>Total</b>	<b>1,863</b>	<b>47,591</b>	<b>49,297</b>	<b>135,563</b>	<b>234,544</b>
<b>Size of structured entity</b>	<b>10,607</b>	<b>63,187</b>	<b>896,028<sup>3</sup></b>	<b>2,694,148</b>	

<sup>1</sup> From December 31, 2015 onwards Cash and due from banks changed to Cash and central bank balances and Interest-earning deposits with banks changed to Interbank balances (w/o central banks).

<sup>2</sup> Includes 113 million for total assets and 116 million for off-balance sheet exposure for entity type Others.

<sup>3</sup> 2015 size information has been adjusted to eliminate double counting in underlying data.

**Trading assets** – Total trading assets as of December 31, 2016 and December 31, 2015 of €24.2 billion and €35.3 billion are comprised primarily of €6.2 billion and €13.8 billion in Securitizations and €15 billion and €18.7 billion in Funds structured entities respectively. The Group's interests in securitizations are collateralized by the assets contained in these entities. Where the Group holds fund units these are typically in regards to market making in funds or otherwise serve as hedges for notes issued to clients. Moreover the credit risk arising from loans made to Third party funding structured entities is mitigated by the collateral received.

**Financial assets designated at fair value through profit or loss** – Reverse repurchase agreements to Funds comprise the majority of the interests in this category and are collateralized by the underlying securities.

**Loans** – Loans as of December 31, 2016 and December 31, 2015 consists of €76.7 billion and €80.4 billion investment in securitization tranches and financing to Third party funding entities. The Group's financing to Third party funding entities is collateralized by the assets in those structured entities.

**Other assets** – Other assets as of December 31, 2016 and December 31, 2015 of €20.7 billion and €21.2 billion, respectively, consists primarily of prime brokerage receivables and cash margin balances.

**Pending Receivables** – Pending Receivable balances are not included in this disclosure note due to the fact that these balances arise from typical customer supplier relationships out of e.g. brokerage type activities and their inherent volatility would not provide users of the financial statements with effective information about Deutsche Bank's exposures to structured entities.

## Financial Support

Deutsche Bank did not provide non-contractual support during the year to unconsolidated structured entities.

### Sponsored Unconsolidated Structured Entities where the Group has no interest as of December 31, 2016 and December 31, 2015.

As a sponsor, the Group is involved in the legal set up and marketing of the entity and supports the entity in different ways, namely:

- transferring assets to the entities
- providing seed capital to the entities
- providing operational support to ensure the entity's continued operation
- providing guarantees of performance to the structured entities.

The Group is also deemed a sponsor for a structured entity if market participants would reasonably associate the entity with the Group. Additionally, the use of the Deutsche Bank name for the structured entity indicates that the Group has acted as a sponsor.

The gross revenues from sponsored entities where the Group did not hold an interest as of December 31, 2016 and December 31, 2015 were €(145) million and €20.2 million respectively. Instances where the Group does not hold an interest in an unconsolidated sponsored structured entity include cases where any seed capital or funding to the structured entity has already been repaid in full to the Group during the year. This amount does not take into account the impacts of hedges and is recognized in Net gains/losses on financial assets/liabilities at fair value through profit and loss. The aggregated carrying amounts of assets transferred to sponsored unconsolidated structured entities in 2016 were 894 million for securitization and € 20 million for repackaging and investment entities. In 2015, they were €981 million for securitization and €281 million for repackaging and investment entities.

## 42 – Insurance and Investment Contracts

On the December 30, 2016 the sale of 100 % of the equity of Abbey Life Assurance Company was completed to Phoenix Group Ltd. As a consequence of this sale all of the Group's insurance contracts business and the majority of the investment contract business were disposed of leaving only €592 million in a remaining program.

The impact of the transfer of Abbey Life to the held-for-sale category, impairment of VOBA and sale of Abbey Life is discussed in the Note 27 "Non-Current Assets and Disposal Groups Held for Sale".

### Liabilities arising from Insurance and Investment Contracts

in € m.	Dec 31, 2015		
	Gross	Reinsurance	Net
Insurance contracts	4,921	(78)	4,843
Investment contracts	8,522	0	8,522
<b>Total</b>	<b>13,443</b>	<b>(78)</b>	<b>13,365</b>

## Carrying Amount

The following table presents an analysis of the change in insurance and investment contracts liabilities in 2015.

in € m.	2015	
	Insurance contracts	Investment contracts
<b>Balance, beginning of year</b>	<b>4,750</b>	<b>8,523</b>
New business	120	48
Claims/withdrawals paid	(426)	(708)
Other changes in existing business	195	191
Exchange rate changes	282	468
<b>Balance, end of year</b>	<b>4,921</b>	<b>8,522</b>

As of December 31, 2016 the Group had no insurance contract liabilities. As of December 31, 2015 the Group had insurance contract liabilities of €4.9 billion. Of this, €2.8 billion represents traditional annuities in payment, €1.7 billion universal life contracts and €431 million unit linked pension contracts with guaranteed annuity rates (made up of a unit linked liability of €283 million and a best estimate reserve of €148 million for the guaranteed annuity rates).

## 43 – Current and Non-Current Assets and Liabilities

### Asset and liability line items by amounts recovered or settled within or after one year

#### Asset items as of December 31, 2016

in € m.	Amounts recovered or settled		Total Dec 31, 2016
	within one year	after one year	
Cash and central bank balances	181,364	0	181,364
Interbank balances (w/o central banks)	10,996	610	11,606
Central bank funds sold and securities purchased under resale agreements	15,756	531	16,287
Securities borrowed	20,081	0	20,081
Financial assets at fair value through profit or loss	725,099	18,682	743,781
Financial assets available for sale	9,211	47,016	56,228
Equity method investments	0	1,027	1,027
Loans	115,673	293,236	408,909
Securities held to maturity	0	3,206	3,206
Property and equipment	0	2,804	2,804
Goodwill and other intangible assets	0	8,982	8,982
Other assets	118,246	7,799	126,045
Assets for current tax	1,329	230	1,559
<b>Total assets before deferred tax assets</b>	<b>1,197,755</b>	<b>384,124</b>	<b>1,581,880</b>
Deferred tax assets			8,666
<b>Total assets</b>			<b>1,590,546</b>

### Liability items as of December 31, 2016

in € m.	Amounts recovered or settled		Total
	within one year	after one year	Dec 31, 2016
Deposits	522,885	27,319	550,204
Central bank funds purchased and securities sold under repurchase agreements	25,035	705	25,740
Securities loaned	3,598	0	3,598
Financial liabilities at fair value through profit or loss	576,336	5,635	581,971
Other short-term borrowings	17,295	0	17,295
Other liabilities	150,253	5,187	155,440
Provisions	10,973	0	10,973
Liabilities for current tax	723	606	1,329
Long-term debt	28,758	143,558	172,316
Trust preferred securities	2,197	4,176	6,373
<b>Total liabilities before deferred tax liabilities</b>	<b>1,338,054</b>	<b>187,186</b>	<b>1,525,240</b>
Deferred tax liabilities			486
<b>Total liabilities</b>			<b>1,525,727</b>

### Asset items as of December 31, 2015

in € m.	Amounts recovered or settled		Total
	within one year	after one year	Dec 31, 2015
Cash and central bank balances	96,940	0	96,940
Interbank balances (w/o central banks)	12,620	223	12,842
Central bank funds sold and securities purchased under resale agreements	21,240	1,216	22,456
Securities borrowed	33,556	1	33,557
Financial assets at fair value through profit or loss	783,383	37,499	820,883
Financial assets available for sale	7,359	66,225	73,583
Equity method investments	0	1,013	1,013
Loans	130,483	297,266	427,749
Securities held to maturity	0	0	0
Property and equipment	0	2,846	2,846
Goodwill and other intangible assets	0	10,078	10,078
Other assets	111,653	6,484	118,137
Assets for current tax	997	288	1,285
<b>Total assets before deferred tax assets</b>	<b>1,198,231</b>	<b>423,139</b>	<b>1,621,368</b>
Deferred tax assets			7,762
<b>Total assets</b>			<b>1,629,130</b>

### Liability items as of December 31, 2015

in € m.	Amounts recovered or settled		Total
	within one year	after one year	Dec 31, 2015
Deposits	541,557	25,417	566,974
Central bank funds purchased and securities sold under repurchase agreements	9,803	0	9,803
Securities loaned	2,857	414	3,270
Financial liabilities at fair value through profit or loss	584,474	15,280	599,754
Other short-term borrowings	28,010	0	28,010
Other liabilities	168,205	6,800	175,005
Provisions	9,207	0	9,207
Liabilities for current tax	1,086	613	1,699
Long-term debt	26,129	133,887	160,016
Trust preferred securities	995	6,025	7,020
<b>Total liabilities before deferred tax liabilities</b>	<b>1,372,324</b>	<b>188,436</b>	<b>1,560,760</b>
Deferred tax liabilities			746
<b>Total liabilities</b>			<b>1,561,506</b>

## 44 – Events after the Reporting Period

On January 13, 2017 Deutsche Bank signed an agreement to dispose of its non-strategic participation of 16.8 % in the German payment service provider Concardis GmbH. The transaction is expected to be completed in the first half of 2017 subject to regulatory approvals. The transaction is expected to have a positive effect on half year results.

As announced on March 5, 2017, Deutsche Bank expects to issue new shares with an expected volume in proceeds of around €8 billion. The Group plans to complete this capital raise in the first half of April and plans a series of additional measures and sets new financial targets that replace the former targets. These measures include a revision of the Group's segmental structure which is expected to be implemented over the course of 2017 that, once further specified, will trigger a restatement of our segmental disclosures and an impairment review of related Goodwill balances. Furthermore, the Management Board has revisited its dividend strategy and will propose to pay a dividend of €0.19 per share taking into account expected shares following the aforementioned capital increase to the Annual General Meeting in May 2017. The bank expects to pay a total amount of approximately €400 million in May 2017.

## 45 – Condensed Deutsche Bank AG (Parent Company only) Financial Information

### Condensed Statement of Income

in € m.	2016	2015	2014
Interest income, excluding dividends from subsidiaries	14,247	13,760	12,262
Dividends received from subsidiaries:			
Bank subsidiaries	1,042	296	405
Nonbank subsidiaries	2,935	5,010	2,775
Interest expense	7,947	7,559	7,833
<b>Net interest and dividend income</b>	<b>10,278</b>	<b>11,506</b>	<b>7,609</b>
Provision for credit losses	872	359	764
<b>Net interest and dividend income after provision for credit losses</b>	<b>9,406</b>	<b>11,147</b>	<b>6,845</b>
Noninterest income:			
Commissions and fee income	4,145	4,265	4,349
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	1,791	4,918	3,559
Other income (loss) <sup>1</sup>	(606)	(1,371)	(1,597)
<b>Total noninterest income</b>	<b>5,330</b>	<b>7,812</b>	<b>6,311</b>
Noninterest expenses:			
Compensation and benefits	5,137	5,763	5,187
General and administrative expenses	7,524	10,997	6,755
Services provided by (to) affiliates, net	1,263	1,621	77
Impairment of goodwill and other intangible assets	14	519	0
<b>Total noninterest expenses</b>	<b>13,938</b>	<b>18,899</b>	<b>12,019</b>
<b>Income (loss) before income taxes</b>	<b>797</b>	<b>60</b>	<b>1,137</b>
Income tax expense (benefit)	161	1,003	602
<b>Net income (loss) attributable to Deutsche Bank shareholders and additional equity components</b>	<b>636</b>	<b>(943)</b>	<b>535</b>

<sup>1</sup> Includes net gains (losses) on financial assets available for sale and impairments/write-ups on investments in subsidiaries.

### Condensed Statement of Comprehensive Income

in € m.	2016	2015	2014
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	636	(943)	535
Other comprehensive income (loss), net of tax	360	1,183	2,174
<b>Total comprehensive income (loss), net of tax</b>	<b>996</b>	<b>240</b>	<b>2,709</b>

## Condensed Balance Sheet

in € m.	Dec 31, 2016	Dec 31, 2015
<b>Assets:</b>		
Cash and central bank balances:	120,112	65,379
Interbank balances (w/o central banks):		
Bank subsidiaries	43,631	66,498
Other	6,254	9,785
Central bank funds sold, securities purchased under resale agreements, securities borrowed:		
Bank subsidiaries	4,394	5,336
Nonbank subsidiaries	43,290	61,380
Other	14,256	17,281
Financial assets at fair value through profit or loss:		
Bank subsidiaries	12,021	13,955
Nonbank subsidiaries	14,536	17,739
Other	641,455	690,362
Financial assets available for sale	31,669	46,884
Investments in associates	387	340
Investment in subsidiaries:		
Bank subsidiaries	11,530	12,032
Nonbank subsidiaries	36,461	36,759
Loans:		
Bank subsidiaries	49,393	37,295
Nonbank subsidiaries	54,549	59,728
Other	158,700	159,566
Other assets:		
Bank subsidiaries	1,231	1,514
Nonbank subsidiaries	23,923	15,972
Other	110,877	100,880
<b>Total assets</b>	<b>1,378,670</b>	<b>1,418,684</b>
<b>Liabilities and equity:</b>		
Deposits:		
Bank subsidiaries	82,276	100,159
Nonbank subsidiaries	25,773	28,214
Other	282,991	284,948
Central bank funds purchased, securities sold under repurchase agreements and securities loaned:		
Bank subsidiaries	2,344	2,773
Nonbank subsidiaries	49,903	31,189
Other	10,860	4,271
Financial liabilities at fair value through profit or loss:		
Bank subsidiaries	9,745	11,383
Nonbank subsidiaries	6,254	7,198
Other	535,349	558,469
Other short-term borrowings:		
Bank subsidiaries	88	230
Nonbank subsidiaries	692	1,206
Other	16,419	25,239
Other liabilities:		
Bank subsidiaries	1,222	1,808
Nonbank subsidiaries	16,100	25,496
Other	126,876	133,333
Long-term debt	155,913	147,713
<b>Total liabilities</b>	<b>1,322,807</b>	<b>1,363,629</b>
Total shareholders' equity	51,193	50,379
Additional equity components	4,670	4,676
<b>Total equity</b>	<b>55,863</b>	<b>55,055</b>
<b>Total liabilities and equity</b>	<b>1,378,670</b>	<b>1,418,684</b>

**Condensed Statement of Cash Flows**

in € m.

	2016	2015	2014
<b>Net cash provided by (used in) operating activities</b>	<b>25,873</b>	<b>49,259</b>	<b>(19,616)</b>
<b>Cash flows from investing activities:</b>			
Proceeds from:			
Sale of financial assets available for sale	22,205	14,948	8,546
Maturities of financial assets available for sale	4,530	4,034	5,566
Sale of investments in associates	12	13	17
Sale of property and equipment	8	19	4
Purchase of:			
Financial assets available for sale	(15,150)	(26,426)	(24,377)
Investments in associates	(11)	(93)	(60)
Property and equipment	(284)	(164)	(227)
Net change in investments in subsidiaries	(1,619)	3,664	2,935
Other, net	(1,360)	(1,047)	(760)
<b>Net cash provided by (used in) investing activities</b>	<b>8,331</b>	<b>(5,052)</b>	<b>(8,356)</b>
<b>Cash flows from financing activities:</b>			
Issuances of subordinated long-term debt	793	3,303	91
Repayments and extinguishments of subordinated long-term debt	(104)	(1,126)	(2,384)
Capital increase	0	0	8,508
Purchases of treasury shares	(5,256)	(9,003)	(9,026)
Sale of treasury shares	4,979	8,142	8,161
Additional Equity Components (AT1) issued	0	0	4,676
Purchases of Additional Equity Components (AT1)	(129)	177	589
Sale of Additional Equity Components (AT1)	124	(176)	(588)
Coupon on additional equity components, pre tax	(333)	(269)	0
Cash dividends paid	0	(1,034)	(765)
<b>Net cash provided by (used in) financing activities</b>	<b>74</b>	<b>14</b>	<b>9,262</b>
Net effect of exchange rate changes on cash and cash equivalents	187	(1,503)	217
Net increase (decrease) in cash and cash equivalents	34,465	42,718	(18,493)
Cash and cash equivalents at beginning of period	110,351	67,633	86,126
Cash and cash equivalents at end of period	144,816	110,351	67,633
<b>Net cash provided by (used in) operating activities include</b>			
Income taxes paid (received), net	(974)	418	(29)
Interest paid	7,871	8,244	8,209
Interest and dividends received	18,324	19,233	15,746
<b>Cash and cash equivalents comprise</b>			
Cash and central bank balances (not included Interest-earning time deposits with central banks)	119,213	64,472	20,943
Interbank balances (w/o central banks)	25,603	45,880	46,960
<b>Total</b>	<b>144,816</b>	<b>110,352</b>	<b>67,633</b>

**Parent Company's Long-Term Debt by Remaining Maturities**

	Due in 2017	Due in 2018	Due in 2019	Due in 2020	Due in 2021	Due after 2021	Total Dec 31, 2016	Total Dec 31, 2015
By remaining maturities								
in € m.								
<b>Senior debt:</b>								
Bonds and notes:								
Fixed rate	15,326	6,581	9,685	5,541	11,655	17,676	66,464	68,006
Floating rate	8,473	4,884	6,636	3,435	5,380	8,067	36,875	38,913
<b>Subordinated debt</b>								
Bonds and notes:								
Fixed rate	848	4,180	301	1,096	0	3,417	9,842	9,888
Floating rate	0	50	0	0	0	2,124	2,174	2,126
Other	2,042	25,802	2,366	872	793	8,681	40,557	28,779
<b>Total long-term debt</b>	<b>26,690</b>	<b>41,497</b>	<b>18,988</b>	<b>10,945</b>	<b>17,828</b>	<b>39,965</b>	<b>155,913</b>	<b>147,713</b>



## 46 – SEC Registered Trust Preferred Securities

Deutsche Bank AG has, via several subsidiaries, issued “trust preferred” securities that are listed on the New York Stock Exchange. In each such transaction, a Delaware statutory business trust (the “Trust”) issues trust preferred securities (the “Trust Preferred Securities”) in a public offering in the United States. All the proceeds from the sale of the Trust Preferred Securities are invested by the Trust in the Class B Preferred Securities (the “Class B Preferred Securities”) of a wholly-owned subsidiary of Deutsche Bank AG organized in the form of a limited liability company (the “LLC”). The LLC uses all the proceeds from the sale of the Class B Preferred Securities to the Trust to purchase a debt obligation from Deutsche Bank AG (the “Debt Obligation”). The distributions on the Class B Preferred Securities match those of the Trust Preferred Securities. The Trust Preferred Securities and the Class B Preferred Securities pay distributions quarterly in arrears and are redeemable only upon the occurrence of certain events specified in the documents governing the terms of those securities. Subject to limited exceptions, the Class B Preferred Securities generally cannot be redeemed until at least five or ten years after their issuance. The Trust Preferred Securities and the Class B Preferred Securities are each subject to a full and unconditional subordinated guarantee of Deutsche Bank AG. These subordinated guarantees are general and unsecured obligations of Deutsche Bank AG and rank, both as to payment and in liquidation of Deutsche Bank AG, junior in priority of payment to all current and future indebtedness of Deutsche Bank AG and on parity in priority of payment with the most senior preference shares, if any, of Deutsche Bank AG.

### Issuances of SEC Registered Trust Preferred Securities

Trust	LLC	Issuance Date	Earliest Redemption Date	Parent Long-term Debt <sup>1</sup>
Deutsche Bank Contingent Capital Trust II	Deutsche Bank Contingent Capital LLC II	May 23, 2007	May 23, 2017	€ 757 million
Deutsche Bank Contingent Capital Trust III	Deutsche Bank Contingent Capital LLC III	February 20, 2008	February 20, 2018	€ 1,869 million
Deutsche Bank Contingent Capital Trust V	Deutsche Bank Contingent Capital LLC V	May 9, 2008 <sup>2</sup>	June 30, 2018	€ 1,311 million

<sup>1</sup> Amount of long term-debt of the Parent Company represented by the Debt Obligations issued by Deutsche Bank AG to the applicable LLC and amount of Trust Preferred Securities of Deutsche Bank AG Consolidated represented by the Trust Preferred Securities issued by the respective Trust as of December 31, 2016.

<sup>2</sup> On March 30, 2010 Deutsche Bank AG additionally issued an amount of U.S.\$ 120 million.

## Report of Independent Registered Public Accounting Firm

To the Supervisory Board of  
Deutsche Bank Aktiengesellschaft:

We have audited the consolidated balance sheets of Deutsche Bank Aktiengesellschaft (the “Company”) and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and the related notes, and the specific disclosures described in Note 1 to the consolidated financial statements as being part of the financial statements. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Deutsche Bank Aktiengesellschaft and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2017 expressed an unqualified opinion on the effectiveness of the Company’s internal control over financial reporting.

Frankfurt am Main, Germany

March 15, 2016

KPMG AG

Wirtschaftsprüfungsgesellschaft

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269	Notes to the
Consolidated Statement of	Consolidated Financial Statements – 275
Comprehensive Income – 270	Notes to the
Consolidated Balance Sheet – 271	Consolidated Income Statement – 309
Consolidated Statement of	Notes to the Consolidated Balance Sheet – 315
Changes in Equity – 272	<a href="#">Additional Notes – 382</a>
Consolidated Statement of Cash Flows – 274	Confirmations – 441

[Page intentionally left blank for SEC filing purposes]



[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269  
Consolidated Statement of  
Comprehensive Income – 270  
Consolidated Balance Sheet – 271  
Consolidated Statement of  
Changes in Equity – 272  
Consolidated Statement of Cash Flows – 274

Notes to the  
Consolidated Financial Statements – 275  
Notes to the  
Consolidated Income Statement – 309  
Notes to the Consolidated Balance Sheet – 315  
Additional Notes – 382  
[Confirmations –441](#)

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

Consolidated Statement of Income – 269  
Consolidated Statement of  
Comprehensive Income – 270  
Consolidated Balance Sheet – 271  
Consolidated Statement of  
Changes in Equity – 272  
Consolidated Statement of Cash Flows – 274

Notes to the  
Consolidated Financial Statements – 275  
Notes to the  
Consolidated Income Statement – 309  
Notes to the Consolidated Balance Sheet – 315  
Additional Notes – 382  
[Confirmations –441](#)

[Page intentionally left blank for SEC filing purposes]

# 3 -

Corporate Governance Statement according to Sections 289a and 315 (5) of the German Commercial Code/  
Corporate Governance Report

445	Management Board and Supervisory Board
460	Reporting and Transparency
461	Related Party Transactions
461	Auditing and Controlling
464	Compliance with the German Corporate Governance Code

All information presented in this Corporate Governance Statement according to §§ 289a, 315 (5) German Commercial Code / Corporate Governance Report is shown as of February 17, 2017.

## Management Board and Supervisory Board

### Management Board

The Management Board of Deutsche Bank AG is responsible for the management of the company in accordance with the law, the Articles of Association of Deutsche Bank AG and the Terms of Reference for the Management Board with the objective of creating sustainable value in the interests of the company. The members of the Management Board are collectively responsible for managing the bank's business. The Management Board, as the Group Management Board, manages the Deutsche Bank Group in accordance with uniform guidelines; it exercises general control over all Group companies.

The Management Board decides on all matters prescribed by law or the Articles of Association and ensures compliance with the legal requirements and internal guidelines (compliance). It also takes the necessary measures to ensure that adequate internal guidelines are developed and implemented. The Management Board's responsibilities include, in particular, the bank's strategic management, the allocation of resources, financial accounting and reporting, control and risk management, as well as a properly functioning business organization and corporate control. The Management Board decides on the appointments to the senior management level below the Management Board. In appointing people to management functions in the Group, the Management Board takes diversity into account and strives, in particular, to achieve an appropriate representation of women.

The Management Board works closely together with Supervisory Board in a cooperative relationship trust and for the benefit of the company. The Management Board reports to the Supervisory Board at a minimum within the scope prescribed by law or administrative guidelines, in particular on all issues with relevance for the Group concerning strategy, the intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance.

A comprehensive presentation of the duties, responsibilities and procedures of our Management Board are specified in its Terms of Reference, the current version of which is available on our website ([www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm)).

### Personnel changes to the Management Board and the current members of the Management Board in the 2016 financial year

The following personnel changes to the Management Board took place in 2016: With effect from January 1, 2016, Garth Ritchie and Jeffrey Urwin were appointed members of the Management Board, each of them for a three-year period. With effect from August 1, 2016 Kimberly Hammonds and Werner Steinmüller were appointed members of the Management Board, each of them for a three-year period. With effect from October 1, 2016 Nicolas Moreau was appointed member of the Management Board, also for a three-year period.

Jürgen Fitschen retired from the bank's Management Board effective with the conclusion of the General Meeting on May 19, 2016. Quintin Price, who was appointed member of the Management Board with effect from January 1, 2016, for a three-year period, stepped down from the Management Board effective as of June 15, 2016.

In the following, information is provided on the current members of the Management Board. The information includes the year in which they were born, the year in which they were first appointed and the year in which their term expires as well as their current positions and area of responsibility according to the current Business Allocation Plan for the Management Board. Furthermore their other board mandates or directorships outside of Deutsche Bank Group are speci-

fied. The members of our Management Board have generally undertaken not to assume chairmanships of supervisory boards of companies outside Deutsche Bank Group.

## John Cryan

Year of birth: 1960  
First appointed: 2015  
Term expires: 2020

John Cryan became a member of our Management Board on July 1, 2015 and has been sole Chairman of our Management Board since the conclusion of the Annual General Meeting on May 19, 2016. According to the Business Allocation Plan for the Management Board he is responsible for, among other things, the areas of Communications & Corporate Social Responsibility (CSR), Group Audit, Corporate Strategy, Research and Incident & Investigation Management as well as Conflicts Office.

He was also responsible for the Non-Core Operations (NCOU) until it was closed at the end of December 2016. In May 2016 he took on global responsibility for Regional Management and is also responsible for the EMEA-region (excluding Germany and the UK).

Mr. Cryan became a member of Deutsche Bank's Supervisory Board in 2013, where he served as Chairman of the Audit Committee and member of the Risk Committee. Upon becoming Co-Chairman of the Management Board in 2015, he stepped down from the Supervisory Board. From 2012 to 2014 Mr. Cryan was President Europe, Head Africa, Head Portfolio Strategy and Head Credit Portfolio at Temasek Holdings Pte. Ltd., the Singaporean state investment company. Previously, he was Group Chief Financial Officer of UBS AG from 2008 to 2011, having worked in corporate finance and client advisory roles at UBS and SG Warburg in London, Munich and Zurich starting in 1987.

He began his career as a trainee chartered accountant at Arthur Andersen in London. He is a graduate of the University of Cambridge.

Mr. Cryan is a non-executive Director of MAN Group Plc.

## Kimberly Hammonds

Year of birth: 1967  
Appointed: 2016  
Term expires: 2019

Kimberly Hammonds became a member of our Management Board on August 1, 2016. She is our Chief Operating Officer & Group Chief Information Officer and is responsible for Technology and Operations, Information Security, Data Management, Digital Transformation and Corporate Services.

Kimberly Hammonds joined Deutsche Bank in 2013 as a Global Co-Head of Group Technology & Operations. She was with Boeing from 2008 to 2013, most recently as Chief Information Officer (CIO). Before working for Boeing, she held a number of management positions at Dell and Ford Motor Company, in product engineering, manufacturing, marketing and information technology leadership.

She has an MBA from Western Michigan University and a degree in mechanical engineering from the University of Michigan, USA.

Ms. Hammonds is a member of the Board of Directors of Red Hat Inc., USA.

## Stuart Lewis

Year of birth: 1965  
First appointed: 2012  
Term expires: 2020

Stuart Lewis became a member of our Management Board on June 1, 2012. He is our Chief Risk Officer and is responsible for, among other things, the functions managing Credit Risk, Operational Risk, Market Risk and Liquidity Risk as well as for further Risk-Infrastructure units.

He joined Deutsche Bank in 1996. Prior to assuming his current role, Mr. Lewis was Deputy Chief Risk Officer and subsequently Chief Risk Officer of Corporate & Investment Banking from 2010 to 2012. Between 2006 and 2010 he was Chief Credit Officer.

Before joining Deutsche Bank in 1996, he worked at Credit Suisse and Continental Illinois National Bank in London. He studied at the University of Dundee, where he obtained an LLB (Hons), and he holds an LLM from the London School of Economics. He also attended the College of Law, Guildford.

Mr. Lewis was a non-executive member of the Board of Directors of the London Stock Exchange until April 27, 2016.

## Sylvie Matherat

Year of birth: 1962  
First appointed: 2015  
Term expires: 2018

Sylvie Matherat became a member of our Management Board on November 1, 2015. She is our Chief Regulatory Officer and is responsible for, the functions Compliance, Anti-Financial Crime (AFC), Regulatory Affairs, and Government & Public Affairs.

Ms. Matherat joined Deutsche Bank from Banque de France where she was Deputy Director General and responsible for regulation and financial stability issues, payment and settlement infrastructures, banking services, and the Target 2 Securities project. Ms. Matherat previously held various positions at the Banking Supervisory Authority and in the private sector.

She studied public law and finance at the Institut d'Études Politiques de Paris, France, and holds a Master's degree in law and political sciences. In 2014 she was awarded the Légion d'Honneur.

Ms. Matherat does not have any external directorships subject to disclosure.

## Nicolas Moreau

Year of birth: 1965  
First appointed: 2016  
Term expires: 2019

Nicolas Moreau became a member of our Management Board on October 1, 2016. He is our Head of Deutsche Asset Management.

Mr. Moreau was Chairman and CEO of AXA France and a member of the AXA Group Management Committee, as well as Vice Chairman of the Group Investment Committee. Mr. Moreau spent 25 years with the AXA Group, where he held various positions including CEO of AXA Investment Managers and CEO of AXA UK & Ireland.



He studied at the École Polytechnique in Paris, France, and holds a Master's degree in engineering. Mr. Moreau is also a qualified actuary. In 2015 he was awarded the Légion d'Honneur.

Mr. Moreau does not have any external directorships subject to disclosure.

## Garth Ritchie

Year of birth: 1968

First appointed: 2016

Term expires: 2018

Garth Ritchie became a member of our Management Board on January 1, 2016. He is Head of our Global Markets business division and is Regional CEO for the UK & Ireland.

Mr. Ritchie joined Deutsche Bank in 1996 and became Head of Equities in the Corporate Banking & Securities Business Division in 2010. He held various positions in trading and derivatives for over two decades.

Prior to joining Deutsche Bank, Mr. Ritchie held positions at Fergusson Brothers and First National Bank of South Africa.

He holds a Bachelor of Commerce in Finance and Economics from the University of Port Elizabeth (South Africa).

Mr. Ritchie does not have any external directorships subject to disclosure.

## Karl von Rohr

Year of birth: 1965

First appointed: 2015

Term expires: 2018

Karl von Rohr became a member of our Management Board on November 1, 2015. He is our Chief Administrative Officer and is responsible for the functions Legal, Global Governance and Human Resources. In 2016, he also became responsible for the coordination of the Regional Management COO Organization.

Mr. von Rohr joined Deutsche Bank in 1997. From 2013 to 2015 he was Global Chief Operating Officer, Regional Management. Prior to this, he was Head of Human Resources for Deutsche Bank in Germany and member of the Management Board of Deutsche Bank Privat- und Geschäftskunden AG. During his time at Deutsche Bank, he has held various senior management positions in other divisions in Germany and Belgium.

He studied law at the universities of Bonn (Germany), Kiel (Germany) and Lausanne (Switzerland) as well as Cornell University (U.S.A.).

Mr. von Rohr has been a member of the following Supervisory Boards since June 24, 2016: BVV Versicherungsverein des Bankgewerbes a.G. and BVV Versorgungskasse e.V..

## Dr. Marcus Schenck

Year of birth: 1965  
First appointed: 2015  
Term expires: 2018

Dr. Marcus Schenck became a member of our Management Board on May 21, 2015. He is our Chief Financial Officer and is responsible for, among other things, the functions Finance, Group Tax and Group Treasury as well as Corporate M&A and Corporate Investments since January 2017.

In January 2015, Dr. Schenck joined Deutsche Bank from Goldman Sachs International, where he was Partner and Head of Investment Banking Services for Europe, Middle East & Africa. Additionally, he was a member of the Operating Committee of the Investment Banking Division of Goldman Sachs. From 2006 to 2013, Dr. Schenck was Chief Financial Officer and a member of the Management Board of German energy supplier E.ON SE. From 1997 to 2006, he held a number of senior positions at Goldman Sachs in Frankfurt. Prior to that, he was a consultant at McKinsey & Company.

He holds a “Diplom-Volkswirt” degree from the University of Bonn and a PhD in Economics from the University of Cologne.

Dr. Schenck does not have any external directorships subject to disclosure.

## Christian Sewing

Year of birth: 1970  
First appointed: 2015  
Term expires: 2017

Christian Sewing became a member of our Management Board on January 1, 2015. Since January 2016, he has been our Head of Private, Wealth & Commercial Clients as well as Regional CEO Germany. From January to June 2015, he was responsible on the Management Board for Legal, Incident Management Group and Group Audit, and thereafter he took on responsibility for Private & Business Clients.

Prior to assuming his role on our Management Board, Mr. Sewing was Global Head of Group Audit and held a number of positions before that in Risk, including Deputy Chief Risk Officer (from 2012 to 2013) and Chief Credit Officer of Deutsche Bank (from 2010 to 2012).

From 2005 until 2007, Mr. Sewing was a member of the Management Board of Deutsche Genossenschafts-Hypothekenbank.

Before graduating with a diploma from the Bankakademie Bielefeld and Hamburg, Mr. Sewing completed a bank apprenticeship at Deutsche Bank in 1989.

Mr. Sewing does not have any external directorships subject to disclosure.

## Werner Steinmüller

Year of birth: 1954  
First appointed: 2016  
Term expires: 2019

Werner Steinmüller became a member of our Management Board on August 1, 2016. He is our Regional CEO Asia Pacific.

Mr. Steinmüller joined Deutsche Bank in 1991. He was Head of Global Transaction Banking from 2004 to 2016, Chief Operating Officer (COO) of Global Transaction Banking from 2003 to 2004, Head of the Global Banking Division Europe from 1998 to 2003, and Co-Head of Corporate Finance Germany from 1996 to 1998.

From 1979 to 1991 worked at Citibank.

He holds a Diploma in Business Administration and Mechanical Engineering from TU Darmstadt.

Mr. Steinmüller does not have any external directorships subject to disclosure.

## Jeffrey Urwin

Year of birth: 1956  
First appointed: 2016  
Term expires: 2018

Jeffrey Urwin became a member of our Management Board on January 1, 2016. He is our Head of Corporate & Investment Banking and is the Management Board member responsible for the Americas.

Mr. Urwin joined Deutsche Bank in 2015 as Co-Head of Corporate Banking & Securities and Head of Corporate Finance.

He joined from JP Morgan, where he most recently served as Global Co-Head of Treasury Services, Corporate Banking and Investment Banking. During his career at JP Morgan, he was Chairman and CEO of JP Morgan Asia, Head of Global Investment Banking, Co-Head of North American Investment Banking, and Head of Americas Investment Banking Coverage. He joined JP Morgan following its acquisition of Bear Stearns Inc.

He holds an LLB from the University of Birmingham (UK) and is a Barrister at Law.

Mr. Urwin does not have any external directorships subject to disclosure.

## Supervisory Board

The Supervisory Board of Deutsche Bank AG appoints, supervises and advises the Management Board and is directly involved in decisions of fundamental importance to the bank. It works together closely with the Management Board in a cooperative relationship of trust and for the benefit of the company. The Supervisory Board decides on the appointment and dismissal of members of the Management Board including long-term succession planning for the Management Board based on the recommendations of the Chairman's Committee while taking into account the recommendations of the Nomination Committee. Based on the recommendation of the Compensation Control Committee, the Supervisory Board determines the total compensation of the individual members of the Management Board, resolves on the compensation system for the Management Board and reviews it regularly.

The Supervisory Board receives reports from the Management Board at least within the scope prescribed by law or administrative guidelines, in particular on all issues of relevance for the Group concerning strategy, intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance. The Supervisory Board is also informed regularly, and in the case of severe deficiencies without undue delay, of any serious deficiencies identified by Group Audit and of any substantial deficiencies which have not yet been rectified. The Chairman of the Supervisory Board is informed accordingly of any serious findings against the members of the Management Board. In addition to the already existing reporting principles, the Supervisory Board, in consultation with the Management Board, adopted an Information Regime with detailed specifications regarding the Management Board's reporting to the Supervisory Board as well as rules relating to enquiries addressed by the Supervisory Board to the Management Board.

The Chairman of the Supervisory Board plays a crucial role in the proper functioning of the Supervisory Board and has a leadership role in this. He has the authority to issue internal guidelines and principles concerning the Supervisory Board's internal organization and communications, the coordination of the work within the Supervisory Board and the Supervisory Board's interaction with the Management Board. Between meetings, the Chairman of the Supervisory Board, and, if expedient, the chairpersons of the Supervisory Board committees, maintain regular contact with the Management Board, especially with the Chairman of the Management Board, and deliberate with him on issues of Deutsche Bank Group's strategy, planning, the development of its business, its risk situation, its risk management, governance, compliance and material litigation cases. The Chairman of the Supervisory Board and – within their respective functional responsibility – the chairpersons of the Supervisory Board committees are informed without delay by the Chairman of the Management Board about important events of material significance for the assessment of the situation, development and management of Deutsche Bank Group. The Chairman of the Supervisory Board engages in discussions with investors on Supervisory Board-related topics and regularly informs the Supervisory Board of the substance of such discussions.

The types of business that require the approval of the Supervisory Board to be transacted are specified in Section 13 of our Articles of Association. The Supervisory Board meets, if required, without the Management Board. After due consideration and insofar as materially appropriate, the Supervisory Board, or any of its committees, may, in order to perform their tasks, consult auditors, legal advisors and other internal or external advisors. In performing their tasks, the Chairman of the Supervisory Board, the chairpersons of the standing committees and the Supervisory Board members are supported by the Office of the Supervisory Board, which is independent of the Management Board.

In 2016, a total of 82 meetings of the Supervisory Board and its committees took place. As in previous years, joint meetings were held on topics of relevance for several committees.

The duties, procedures and committees of the Supervisory Board are specified in its Terms of Reference. The current version is available on the Deutsche Bank website ([www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm)).

## Members of the Supervisory Board

The Supervisory Board of Deutsche Bank AG has 20 members. In accordance with the German Co-Determination Act (Mitbestimmungsgesetz), it comprises an equal number of shareholder representatives and employee representatives.

The members representing our shareholders were elected at the Annual General Meeting on May 23, 2013, except for Dr. Paul Achleitner, Peter Löscher and Professor Dr. Klaus Rüdiger Trützschler, who were elected at the Annual General Meeting on May 31, 2012. Louise M. Parent was elected at the Annual General Meeting on May 21, 2015, and Katherine Garrett-Cox as well as Richard Meddings were both elected by the Annual General Meeting on May 19, 2016. On August 23, 2016, Professor Dr. Stefan Simon was appointed member of the Supervisory Board by the court until the conclusion of the Annual General Meeting 2017. He replaced Georg Thoma, who left the Supervisory Board as a shareholder representative on May 28, 2016.

The election of employee representatives took place on April 16, 2013, except for Jan Duscheck, who was appointed member of the Supervisory Board by the court on August 2, 2016, until the next election of the employee representa-

tives. He replaced Rudolf Stockem, who left the Supervisory Board on July 31, 2016. Alfred Herling stepped down as an employee representative from the Supervisory Board on December 31, 2016. Until then, he was Deputy Chairman of the Supervisory Board. For the remainder of his term of office on the Supervisory Board, he is being replaced by the substitute member elected to take his place, Stefan Rudschäfski, whom the Supervisory Board elected Deputy Chairman of the Supervisory Board with effect from January 1, 2017.

The following table shows information on the current members of our Supervisory Board. The information includes the years in which the members were born, the years in which they were first elected or appointed, the years when their terms expire, their principal occupation and their membership on other companies' supervisory boards, other nonexecutive directorships and other positions. Representatives of the employees are indicated with an asterisk (\*).

Member	Principal occupation	Supervisory board memberships and other directorships
<b>Dr. Paul Achleitner</b> Year of birth: 1956 First elected: 2012 Term expires: 2017	Chairman of the Supervisory Board of Deutsche Bank AG, Frankfurt	Bayer AG; Daimler AG; Henkel AG & Co. KGaA (member of the Shareholders' Committee)
<b>Wolfgang Böhr*</b> Year of birth: 1963 Promoted to the post as Alternate Member: 2015 Term expires: 2018	Chairman of the Staff Council of Deutsche Bank, Düsseldorf; Member of the Group Staff Council of Deutsche Bank; Member of the General Staff Council of Deutsche Bank	Betriebskrankenkasse Deutsche Bank AG (member of the Advisory Board)
<b>Frank Bsirske*</b> Year of birth: 1952 First elected: 2013 Term expires: 2018	Chairman of the trade union ver.di (Vereinte Dienstleistungsgewerkschaft), Berlin	RWE AG (Deputy Chairman); Deutsche Postbank AG (Deputy Chairman); IBM Central Holding GmbH; Kreditanstalt für Wiederaufbau (KfW) (member of the Board of Supervisory Directors); innogy SE (Deputy Chairman) (since July 2016)
<b>Dina Dublon</b> Year of birth: 1953 First elected: 2013 Term expires: 2018		Accenture Plc (until February 2017); PepsiCo Inc.
<b>Jan Duscheck*</b> Year of birth: 1984 Appointment by court: 2016 Term expires: 2018	Head of national working group Banking, trade union ver.di (Vereinte Dienstleistungsgewerkschaft), Berlin	No memberships or directorships subject to disclosure
<b>Katherine Garrett-Cox</b> Year of birth: 1967 First elected: 2011 Term expires: 2021	Chief Executive Officer of Alliance Trust Plc (until February 2016), Dundee	Alliance Trust Savings Ltd. (Executive Chairperson) (until January 2016); Alliance Trust Investments Ltd. (Chief Executive) (until February 2016)
<b>Timo Heider*</b> Year of birth: 1975 First elected: 2013 Term expires: 2018	Chairman of the Group Staff Council of Deutsche Postbank AG; Chairman of the General Staff Council of BHW Kreditservice GmbH; Chairman of the General Staff Council of BHW Bausparkasse AG/ Postbank Finanzberatung AG; Member of the Group Staff Council of Deutsche Bank; Member of the European Staff Council of Deutsche Bank	Deutsche Postbank AG; BHW Bausparkasse AG (Deputy Chairman); Pensionskasse der BHW Bausparkasse AG VVa.G. (Deputy Chairman)
<b>Sabine Irrgang*</b> Year of birth: 1962 First elected: 2013 Term expires: 2018	Head of Human Resources Baden-Württemberg, Deutsche Bank AG	No memberships or directorships subject to disclosure
<b>Professor Dr. Henning Kagermann</b> Year of birth: 1947 First elected: 2000 Term expires: 2018	President of acatech – German Academy of Science and Engineering, Munich	Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft; Deutsche Post AG; BMW Bayerische Motoren Werke AG
<b>Martina Klee*</b> Year of birth: 1962 First elected: 2008 Term expires: 2018	Chairperson of the Staff Council Group COO Eschborn/Frankfurt of Deutschen Bank	Sterbekasse für die Angestellten der Deutsche Bank VVa.G.

Member	Principal occupation	Supervisory board memberships and other directorships
<b>Peter Löscher</b> Year of birth: 1957 First elected: 2012 Term expires: 2017	Chairman of the Supervisory Board of OMV AG, Vienna (since May 2016)	Renova Management AG (Chief Executive Officer) (until April 2016); TBG AG (until April 2016); OMV AG (Chairman) (since May 2016); Sulzer AG (Chairman of the Board of Directors); Telefonica S.A. (since April 2016)
<b>Henriette Mark*</b> Year of birth: 1957 First elected: 2003 Term expires: 2018	Chairperson of the Combined Staff Council Munich and Southern Bavaria of Deutsche Bank; Member of the Group Staff Council of Deutsche Bank; Member of the General Staff Council of Deutsche Bank	No memberships or directorships subject to disclosure
<b>Richard Meddings</b> Year of birth: 1958 Appointment by court: 2015 Term expires: 2021		HM Treasury Board; Legal & General Group Plc
<b>Louise M. Parent</b> Year of birth: 1950 Appointment by court: 2014 Term expires: 2018	Of Counsel, Cleary Gottlieb Steen & Hamilton LLP, New York	Zoetis Inc.
<b>Gabriele Platscher*</b> Year of birth: 1957 First elected: 2003 Term expires: 2018	Chairperson of the Combined Staff Council Braunschweig/Hildesheim of Deutsche Bank	BVV Versicherungsverein des Bankgewerbes a.G. (Deputy Chairperson); BVV Versorgungskasse des Bankgewerbes e.V. (Deputy Chairperson); BVV Pensionsfonds des Bankgewerbes AG (Deputy Chairperson)
<b>Bernd Rose*</b> Year of birth: 1967 First elected: 2013 Term expires: 2018	Chairman of the General Staff Council of Postbank Filialvertrieb AG; Member of the General Staff Council of Deutsche Postbank; Member of the General Staff Council of Deutsche Bank; Member of the European Staff Council of Deutsche Bank	Deutsche Postbank AG; Postbank Filialvertrieb AG; ver.di Vermögensverwaltungsgesellschaft (Deputy Chairman)
<b>Stefan Rudschäfski*</b> Year of birth: 1965 Promoted to the post as Alternate Member: 2017 Term expires: 2018	Deputy Chairman of the Supervisory Board of Deutsche Bank AG (since January 2017); Deputy Chairman of the General Staff Council of Deutsche Bank; Deputy Chairman of the Group Staff Council of Deutsche Bank; Chairman of the Staff Council of Deutsche Bank, Hamburg	Betriebskrankenkasse Deutsche Bank AG (Member of the Advisory Board)
<b>Prof. Dr. Stefan Simon</b> Year of birth: 1969 Appointment by court: 2016 Term expires: 2017	Managing Partner of SIMON GmbH, Cologne	Member of the Advisory Council of Leop. Krawinkel GmbH & Co. KG, Bergneustadt
<b>Dr. Johannes Teyssen</b> Year of birth: 1959 First elected: 2008 Term expires: 2018	Chairman of the Management Board of E.ON SE, Düsseldorf	Uniper SE (Deputy Chairman) (since April 2016)
<b>Professor Dr. Klaus Rüdiger Trützschler</b> Year of birth: 1948 First elected: 2012 Term expires: 2017		Sartorius AG; Wuppermann AG (Chairman); Zwiessel Kristallglas AG (Chairman); Wilh. Werhahn KG

\* Employees representatives.

## Objectives for the composition of the Supervisory Board and status of implementation

In accordance with the German Banking Act, members of the Supervisory Board must be reliable, must have the expertise required to perform their control function and to assess and monitor the businesses the company operates, and must commit sufficient time to the performance of their tasks. While taking these requirements into account in accordance with Section 5.4.1 of the German Corporate Governance Code, the Supervisory Board established the following objectives for its composition in October 2010, which were last amended in February 2017.

The Supervisory Board of Deutsche Bank AG must be composed in such a way that its members as a whole possess the knowledge, ability and expert experience to properly complete its tasks and the members in their entirety of the Supervisory Board and the Audit Committee must be familiar with the banking sector. In particular, the Supervisory Board members should have sufficient time to perform their mandates. The composition of the Supervisory Board should ensure the Supervisory Board's qualified control of and advice for the Management Board of an internationally operating, broadly positioned bank and should preserve the reputation of Deutsche Bank Group among the public. In this regard, in particular, attention should be placed on the integrity, personality, willingness to perform, professionalism and independence of the individuals proposed for election. The objective is for the Supervisory Board as a whole to have all of the knowledge and experience considered to be essential while taking into account the activities of Deutsche Bank Group.

Furthermore, the Supervisory Board shall have an adequate number of independent members and shall not have more than two former members of the Management Board of Deutsche Bank AG. Under the premise that the performance of the Supervisory Board mandate in itself by the representatives of the employees cannot be reason to doubt fulfillment of the independence criteria according to Section 5.4.2 of the German Corporate Governance Code, the Supervisory Board shall have a total of at least sixteen members that are independent within the meaning of the Code. In any event, the Supervisory Board shall be composed such that the number of independent members, within the meaning of Section 5.4.2, among the shareholder representatives will be at least six. The members of the Supervisory Board may not exercise functions on a management body of, or perform advisory duties, at major competitors. Important and not just temporary conflicts of interest with respect to a member of the Supervisory Board should lead to a termination of the mandate. Members of the Supervisory Board may not hold more than the allowed number of supervisory board mandates according to Section 25d of the German Banking Act (KWG) or mandates in supervisory bodies of companies which have similar requirements.

There is a regular maximum age limit of 70. In well-founded, individual cases, a Supervisory Board member may be elected or appointed for a period that extends at the latest until the end of the fourth Annual General Meeting that takes place after he or she has reached the age of 70. This age limit was taken into account in the election proposals to the recent General Meetings and shall also be taken into account for the next Supervisory Board elections or subsequent appointments for Supervisory Board positions that become vacant. In October 2015, the Supervisory Board resolved that for members of the Supervisory Board to be elected or appointed in future, the length of each individual Supervisory Board membership shall not, as a rule, exceed 15 years.

The Supervisory Board respects diversity when proposing members for appointment to the Supervisory Board. In light of the international operations of Deutsche Bank, care should be taken that the Supervisory Board has an appropriate number of members with long-term international experience. Currently, the professional careers and private lives of four members of the Supervisory Board are centered outside Germany. Furthermore, all of the shareholder representatives on the Supervisory Board have several years of international experience from their current or former activities as management board members or CEOs or a comparable executive function of corporations or organizations with international operations. In these two ways, the Supervisory Board believes the international activities of the company are sufficiently taken into account. The objective is to retain the currently existing international profile.

For the election proposals to the General Meeting, the Supervisory Board takes into account the recommendations of the Nomination Committee and the legal requirements according to which the Supervisory Board shall be composed of at least 30 % women and at least 30 % men. Special importance was already attached to an appropriate consideration of women in the selection process for the Supervisory Board elections in 2008. In reviewing potential candidates for a new election or subsequent appointments to Supervisory Board positions that have become vacant, qualified women shall be included in the selection process and shall be appropriately considered in the election proposals. For many years now, more than 30 % of the Supervisory Board members have been women and, since 2013, 30 % of the shareholder representatives have been women. Currently, seven Supervisory Board members are women, i.e. 35 % of all members. The Supervisory Board strives to maintain this number. It should be taken into account that the Supervisory Board can only influence the composition of the Supervisory Board through its election proposals to the General Meeting.



The Supervisory Board believes that it complies with the specified concrete objectives regarding its composition.

In accordance with Section 5.4.2 of the German Corporate Governance Code, the Supervisory Board determined that it has what it considers to be an adequate number of independent members.

Some members of the Supervisory Board are, or were last year, in high-ranking positions at other companies that Deutsche Bank has business relations with. Business transactions with these companies are conducted under the same conditions as those between unrelated third parties. These transactions, in our opinion, do not affect the independence of the Supervisory Board members involved.

## Standing Committees

The Supervisory Board has established the following seven standing committees. To the extent required, the committees coordinate their work and consult each other on an ad hoc basis. The committee chairpersons report regularly to the Supervisory Board on the work of the committees. The Report of the Supervisory Board in the Annual Report 2016 provides information on the concrete work of the committees over the preceding year.

**Chairman's Committee:** It is responsible for, in particular: preparing the meetings of the Supervisory Board and handling current business between meetings of the Supervisory Board; preparing for decisions by the Supervisory Board on the appointment and dismissal of members of the Management Board, including long-term succession planning for the Management Board, while taking the recommendations of the Nomination Committee into account; concluding, amending and terminating employment and pension contracts in consideration of the plenary Supervisory Board's sole authority to decide on the compensation of the members of the Management Board; taking note of and, where necessary, expressing an opinion on contracts and/or amendments to contracts for a General Manager (*Generalbevollmächtigter*) of Deutsche Bank AG that is designated as an intended member of the Management Board; handling other contractual business with active and former members of the Management Board pursuant to Section 112 of the German Stock Corporation Act; and approving Management Board members' mandates, honorary offices or special tasks outside of Deutsche Bank Group. The Chairman's Committee is also responsible for: approving the hand-over of confidential internal data concerning a Management Board member in consultation with the Chairman of the Management Board and/or the Chief Risk Officer, unless they have a conflict of interests; approving contracts with Supervisory Board members pursuant to Section 114 of the German Stock Corporation Act; preparing for decisions of the Supervisory Board in the field of corporate governance, deciding in the Supervisory Board's stead on an adjustment of the annual Declaration of Conformity to changed actual circumstances and verifying compliance with the Declaration of Conformity. Its tasks also include: taking note of and, where necessary, expressing an opinion on the Supervisory Board's and its committees' costs for consultations with auditors, experts, legal advisors and other external advisors; as well as preparing recommendations for decisions of the Supervisory Board on pursuing claims for damages or taking other measures against incumbent or former members of the Management Board. As and when necessary, the Chairman's Committee draws on the expertise of the Chair of the Integrity Committee.

The Chairman's Committee held 23 meetings in 2016, thereof one jointly with the Compensation Control Committee.

The current members of the Chairman's Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann and Stefan Rudschäfski.



**Nomination Committee:** It is responsible for, in particular, supporting the Supervisory Board in identifying candidates to fill a position on the bank's Management Board. In doing so, the Nomination Committee shall take into account the balance and diversity of the knowledge, skills and experience of all members of the Management Board, prepare a job description with a candidate profile, and state the time commitment associated with the tasks. Furthermore, it is responsible in particular for drawing up an objective to promote the representation of the under-represented gender on the Supervisory Board as well as a strategy for achieving this and the regular assessment, to be performed at least once a year, of the structure, size, composition and performance of the Management Board and of the Supervisory Board and making recommendations regarding this to the Supervisory Board. The Nomination Committee supports the Supervisory Board in the regular assessment, to be performed at least once a year, of the knowledge, skills and experience of the individual members of the Management Board and Supervisory Board as well as of the respective body collectively, and in reviewing the Management Board's principles for selecting and appointing persons to the upper management levels and the recommendations made to the Management Board in this respect. The shareholder representatives on the Nomination Committee prepare the Supervisory Board's proposals for the election or appointment of new shareholder representatives to the Supervisory Board. In this context, they take into account the criteria specified by the Supervisory Board for its composition as well as the balance and diversity of the knowledge, skills and experience of all members of the Supervisory Board, prepare a job description with a candidate profile, and state the time commitment associated with the tasks.

The Nomination Committee held six meetings in 2016.

The current members of the Nomination Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann, Stefan Rudschäfski and Dr. Johannes Teyssen.

**Audit Committee:** It supports the Supervisory Board in particular in monitoring the financial accounting process, and it can submit recommendations or suggestions to the Supervisory Board on ensuring the integrity of the financial reporting process. Furthermore, the Audit Committee supports the Supervisory Board in monitoring the effectiveness of the risk management system, particularly of the internal control system and the internal audit system, the auditing of the financial statements, especially with regard to the auditor's independence and the additional services provided by the auditor, and the Management Board's prompt remediation – through suitable measures – of the deficiencies identified by the auditor and bank-internal control functions based on internal and external audits, in particular relating to weaknesses in risk controls, as well as non-compliance with policies, laws and regulatory requirements. The Committee is entitled to inspect all business documents of the bank, including the business information stored on data carriers. The Audit Committee pre-reviews the documentation relating to the annual and consolidated financial statements and discusses the audit reports with the auditor. It prepares the decisions of the Supervisory Board on establishing the annual financial statements and the approval of the consolidated financial statements and discusses important changes to the audit and accounting methods. The Audit Committee also discusses the quarterly financial statements and the report on the limited review of the quarterly financial statements with the Management Board and the auditor prior to their publication. Furthermore, the Audit Committee submits proposals to the Supervisory Board for the appointment of the auditor and prepares the proposal of the Supervisory Board to the General Meeting for the election of the auditor. The Audit Committee advises the Supervisory Board on issuing the audit mandate to the auditor elected by the General Meeting, submits proposals to the Supervisory Board for the auditor's remuneration and can specify areas of focus for the audit. It supports the Supervisory Board in monitoring the independence, qualifications and efficiency of the auditor as well as the rotation of the members of the audit team. Mandates for non-audit-related services given to the auditor or to companies to which the auditor is related in legal, economic or personnel terms need the prior consent of the Audit Committee (in this context, see also the Principal Accountant Fees and Services section starting on page 462 of the Corporate Governance Statement/Corporate Governance Report). The Audit Committee establishes policies for the employment of staff – including former staff – of the auditor by the company. It arranges to be informed regularly about the work done by Group Audit, the effectiveness of the internal audit system and in particular about the focal areas of its auditing activity and on the results of its audits. The Management Board informs the Audit Committee about special

audits, substantial complaints and other exceptional measures on the part of German and foreign bank regulatory authorities. The Committee regularly obtains reports on the receipt and handling of complaints from employees of the bank and its subsidiaries, from shareholders of Deutsche Bank AG and from third parties. In particular complaints concerning accounting, internal accounting controls, auditing and other financial reporting matters must be submitted to the Committee without undue delay. Reports concerning compliance matters are presented at the meetings of the Committee on a regular basis. The Chairman of the Audit Committee is entitled, in addition to the Chairman of the Supervisory Board, to obtain information directly from the Head of Compliance. The Audit Committee is responsible for acknowledging communications about significant reductions in the Compliance budget and for taking receipt of and handling the report by the Head of Compliance on the appropriateness and effectiveness of the principles, methods and procedures in accordance with Section 33 (1) sentence 2 No. 5 of the German Securities Trading Act (WpHG) (Compliance Report), which is made at least once a year. Furthermore, the Committee is entitled to obtain, through its Chairman, information in connection with its tasks from the auditor, the Management Board, the Head of Group Audit and – with the prior consent of the Management Board – senior managers of the bank reporting directly to the Management Board.

The Audit Committee held fourteen meetings in 2016, thereof three jointly with the Risk Committee and one jointly with the Integrity Committee.

The current members of the Audit Committee are Richard Meddings (Chairman), Dr. Paul Achleitner, Katherine Garrett-Cox, Henriette Mark, Gabriele Platscher, Bernd Rose and Professor Dr. Klaus Rüdiger Trützschler.

**Risk Committee:** It advises the Supervisory Board on an overall risk appetite and risk strategy, and monitors the implementation of the stated risk appetite and risk strategy by the senior management level. The Risk Committee monitors the material aspects of the rating and valuation processes. In undertaking this responsibility, it receives reports from the Management Board about the operations of the bank's rating systems and about material changes or exceptions from established policies that will materially impact the operations of the bank's rating systems. The Risk Committee receives reports from the Management Board which are appropriate to monitor whether the conditions in the client business are in line with the bank's business model and risk structure. If this is not the case, the Risk Committee requests proposals from the Management Board on how the terms and conditions in the client business could be structured to bring them into line with the bank's business model and risk structure, and monitors their implementation. The Risk Committee examines whether the incentives set by the compensation system take into consideration the company's risk, capital and liquidity structure as well as the likelihood and timing of earnings. The Risk Committee also performs all of the tasks assigned to it by law or regulatory authorities. It handles loans which require a resolution by the Supervisory Board pursuant to law or our Articles of Association. In this context, it approves, among other things, the acquisition of participations as defined by Section 13 (1) d) of the Articles of Association of Deutsche Bank AG, insofar as the value of the participation does not exceed 3 % of liable capital and the participation will probably not remain in the bank's full or partial possession for more than twelve months. If this period is exceeded, the Chairperson of the Committee informs the Supervisory Board without delay and obtains its approval. At the meetings of the Risk Committee, the Management Board reports on credit, market, liquidity, operational, litigation and reputational risks. The Management Board also reports on risk strategy, credit portfolios, loans requiring Supervisory Board approval pursuant to law or our Articles of Association, questions of capital resources and matters of special importance due to the risks they entail (for additional information on the disclosure of the risk management objectives and policies for individual risk categories, please see the Risk Report starting on page 88 of the Annual Report).

The Risk Committee held fourteen meetings in 2016, including four jointly with the Compensation Control Committee, three jointly with the Audit Committee and one jointly with the Integrity Committee.

The current members of the Risk Committee are Dina Dublon (Chairperson), Dr. Paul Achleitner, Wolfgang Böhr, Richard Meddings and Louise M. Parent.

**Integrity Committee:** It continually advises and monitors the Management Board with regard to whether management ensures the economically sound, sustainable development of the company while observing the principles of sound, responsible management, fulfilling the company's social responsibilities and protecting the natural resources of the environment (environmental, social and governance (ESG) issues), and to whether the business management is aligned to these values with the objective of a holistic corporate culture. The Integrity Committee monitors the Management Board's measures that ensure the company's compliance with legal requirements, authorities' regulations and the company's own in-house policies (preventive compliance control). It regularly reviews the Bank's Code of Business Conduct and Ethics to foster conduct on the part of company employees that is exemplary in every way, both within and outside the company, and that such conduct is not just aligned to the formal compliance with statutory requirements. It supports on request the Risk Committee in monitoring and analyzing the legal and reputational risks that are material to the bank. For this purpose, it advises the Management Board on how to generate awareness of the importance of such risks (e.g. in the Bank's Code of Business Conduct and Ethics). It supports on request the preparation of the Chairman's Committee's recommendations for Supervisory Board decisions on pursuing recourse claims or taking other measures against current or former members of the Management Board and these are presented by its Chairperson to the Chairman's Committee. The Committee maintains and monitors the list, approved by the Supervisory Board, of the litigation cases that are being closely monitored by the Supervisory Board.

The Integrity Committee held twelve meetings in 2016, including one jointly with the Audit Committee and one jointly with the Risk Committee.

The current members of the Integrity Committee are Louise M. Parent (Chairperson), Dr. Johannes Teyssen (Vice Chairman), Dr. Paul Achleitner, Sabine Irrgang, Timo Heider, Martina Klee and Peter Löscher.

**Compensation Control Committee:** It supports the Supervisory Board in the appropriate structuring of the compensation systems for the members of the Management Board. It also monitors the appropriate structure of the compensation systems for the Management Board members and employees and, in particular, the appropriate structure of the compensation for the heads of the risk control function and compliance function and for the employees who have a material influence on the bank's overall risk profile. The Compensation Control Committee supports the Supervisory Board in monitoring the appropriate structure of the compensation systems for the company's employees and assesses the effects of the compensation systems on risk, capital and liquidity management, while ensuring that the compensation systems are aligned to the business strategy focused on the bank's sustainable development, to the risk strategies derived from this and to the compensation strategies at the company and Group levels. It prepares the Supervisory Board's resolutions on the compensation of the Management Board, considering, in particular, the effects of the resolutions on the company's risks and risk management. The long-term interests of shareholders, investors and other stakeholders as well as the public interest are also taken into account. It also prepares the Supervisory Board's resolutions on setting the total amount of variable compensation for the members of the Management Board in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) and on setting the appropriate compensation parameters, targets for contributions to performance, payment and deferral periods as well as the conditions for a full forfeiture or partial reduction of variable compensation. It also checks regularly, at least annually, whether the adopted specifications are still appropriate. Furthermore, it checks, as part of its support to the Supervisory Board in monitoring the appropriate structure of the compensation systems for employees, regularly, but at least annually, in particular, whether the total amount of variable compensation has been set in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) and whether the specified principles to assess the compensation parameters, contributions to performance as well as the payment and deferral periods, including the conditions for a full forfeiture or partial reduction of the variable compensation, are appropriate. In addition, it supports the Supervisory Board in monitoring whether the internal controls and other relevant areas are properly involved in the structuring of the compensation systems. The Committee is authorized to obtain, via its Chairperson, information relating to the Committee tasks from the head of the internal audit department and from the heads of the organizational units responsible for structuring the compensation systems.

The Compensation Control Committee held twelve meetings in 2016, including four jointly with the Risk Committee and one jointly with the Chairman's Committee.

The current members of the Compensation Control Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann and Stefan Rudschäfski.

**Mediation Committee:** In addition to these six standing committees, the Mediation Committee, which is required by German law, makes proposals to the Supervisory Board on the appointment or dismissal of members of the Management Board in cases where the Supervisory Board is unable to reach a two-thirds majority decision with respect to the appointment or dismissal. The Mediation Committee only meets if necessary.

The Mediation Committee did not hold any meetings in 2016.

The current members of the Mediation Committee are Dr. Paul Achleitner (Chairman), Wolfgang Böhr, Professor Dr. Henning Kagermann and Stefan Rudschäfski.

Further details regarding the Chairman's Committee, the Nomination Committee, the Audit Committee, the Risk Committee, the Integrity Committee and the Compensation Control Committee are regulated in separate Terms of Reference. The current versions are available on our website, along with the Terms of Reference for the Supervisory Board (see: [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm)).

## Share Plans

For information on our employee share programs, please refer to the additional Note 36 "Employee Benefits" to the Consolidated Financial Statements.

# Reporting and Transparency

## Directors' Share Ownership

**Management Board.** For information on the share ownership of the Management Board, please refer to our detailed Compensation Report in the Management Report.

**Supervisory Board.** The members of our Supervisory Board held the following numbers of our shares and share awards under our employee share plans.

Members of the Supervisory Board	Number of shares	Number of share awards
Dr. Paul Achleitner	0	0
Wolfgang Böhr	0	0
Frank Bsirske	0	0
Dina Dublon	0	0
Jan Duschek	0	0
Katherine Garrett-Cox	0	0
Timo Heider	0	0
Sabine Irrgang	773	10
Professor Dr. Henning Kagermann	0	0
Martina Klee	1,479	10
Peter Löscher	0	0
Henriette Mark	1,016	0
Richard Meddings	0	0
Louise Parent	0	0
Gabriele Platscher	1,103	10
Bernd Rose	0	0
Stefan Rudschäfski	482	10
Professor Dr. Stefan Simon	0	0
Dr. Johannes Teyssen	0	0
Professor Dr. Klaus Rüdiger Trützschler	2,950	0
<b>Total</b>	<b>7,803</b>	<b>40</b>

The members of the Supervisory Board held 7,803 shares, amounting to less than 0.01 % of our shares as of February 17, 2017.

As listed in the "Number of share awards" column in the table, the members who are employees of Deutsche Bank hold matching awards granted under the Global Share Purchase Plan, which are scheduled to be delivered to them on November 1, 2017.

As described in the "Management Report: Compensation Report: Compensation System for Supervisory Board Members", 25 % of each member's compensation for services as a member of the Supervisory Board for a given prior year is, rather than being paid in cash, converted into notional shares of Deutsche Bank in February of the following year. The cash value of the notional shares is paid to the member in February of the year following his departure from the Supervisory Board or the expiration of his term of office, based on the market price of the Deutsche Bank share near the payment date. The table in the section specified above shows the number of notional shares that were credited in February 2017 to members of the Supervisory Board as part of their 2016 compensation.

## Related Party Transactions

For information on related party transactions please refer to Note 39 “Related Party Transactions”.

## Auditing and Controlling

### Audit Committee Financial Expert

The Supervisory Board determined that Dr. Paul Achleitner, Katherine Garrett-Cox, Richard Meddings and Professor Dr. Klaus Rüdiger Trützschler, who are members of its Audit Committee, are “audit committee financial experts”, as such term is defined by the implementation rules of the U.S. Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. These audit committee financial experts are “independent” of the bank, as defined in Rule 10A-3 under the U.S. Securities Exchange Act of 1934. In accordance with the provisions of Sections 107 (4) and 100 (5) of the German Stock Corporation Act (AktG) as well as Section 25d (9) of the German Banking Act (KWG), they have the required expert knowledge in financial accounting and auditing.

### Compensation Control Committee Compensation Expert

Pursuant to Section 25d (12) of the German Banking Act (KWG), at least one member of the Compensation Control Committee must have sufficient expertise and professional experience in the field of risk management and risk controlling, in particular, with regard to the mechanisms to align compensation systems to the company's overall risk appetite and strategy and the bank's capital base. The Supervisory Board determined that Dr. Paul Achleitner and Professor Dr. Henning Kagermann, members of the Compensation Control Committee, fulfill the requirements of Section 25d (12) of the German Banking Act (KWG) and therefore have the required expertise and professional experience in risk management and risk controlling.

For a description of the experience of the Supervisory Board members mentioned in the two foregoing paragraphs, please see “Management Report: Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Supervisory Board” on pages 450 to 455 of the Annual Report.

## Values and leadership principles of Deutsche Bank AG and Deutsche Bank Group

### Code of Business Conduct and Ethics

Deutsche Bank AG's and Deutsche Bank Group's Code of Business Conduct and Ethics describes the values and minimum standards for ethical business conduct that we expect all of our employees to follow. These values and standards govern employee interactions with our clients, competitors, business partners, government and regulatory authorities, and shareholders, as well as with other employees. The Code contains a voluntary commitment from the Management Board. It reflects our values and beliefs. In addition, it forms the cornerstone of our policies, which provide guidance on compliance with applicable laws and regulations.

In accordance with Section 406 of the Sarbanes-Oxley Act of 2002, we adopted a code of ethics of Deutsche Bank AG and Deutsche Bank Group with special obligations that apply to our “Senior Financial Officers”, which currently consist of Deutsche Bank’s Chairman of the Management Board, Chief Financial Officer, Group Controller as well as certain other Senior Financial Officers. There were no amendments or waivers to this code of ethics in 2016.

The current versions of the codes of ethics of Deutsche Bank AG and Deutsche Bank Group are available from Deutsche Bank’s website: [www.db.com/ir/en/documents.htm](http://www.db.com/ir/en/documents.htm).

## Corporate Governance at Deutsche Bank AG and Deutsche Bank Group

In the 2016 financial year, Deutsche Bank introduced the Global Governance function in order to further define, implement and monitor the corporate governance framework of Deutsche Bank AG and Deutsche Bank Group developed by the “House of Governance” initiative. Global Governance addresses corporate governance issues within Deutsche Bank AG and Deutsche Bank Group, while focusing on clear organizational structures aligned to the principles of good corporate governance.

Deutsche Bank AG and Deutsche Bank Group are committed to ensuring a corporate governance framework in accordance with international standards and statutory provisions. In order to support this objective, Deutsche Bank AG and Deutsche Bank Group have instituted clear and comprehensive corporate governance principles, which are documented in the bank’s Corporate Governance Fundamentals.

The principles can be grouped into four categories:

- Fundamental principles that guide the Management Board and its delegated representatives in their actions and decisions.
- Principles for the interaction founded on trust between the Management Board, Supervisory Board and key external stakeholders, in particular regulatory authorities.
- Principles for internal governance systems as the basis for operating structures and for delegating authorities and responsibilities within Deutsche Bank AG and Deutsche Bank Group.
- Core organizational principles that create the framework for the organization of Deutsche Bank Group.

The Management Board and senior management support the Corporate Governance Fundamentals and have made a commitment to work toward their full implementation.

## Principal Accountant Fees and Services

In accordance with German law, our principal accountant is appointed at our Annual General Meeting based on a recommendation of our Supervisory Board. The Audit Committee of our Supervisory Board prepares such a recommendation. Subsequent to the principal accountant’s appointment, the Audit Committee awards the contract and in its sole authority approves the terms and scope of the audit and all audit engagement fees as well as monitors the principal accountant’s independence. KPMG AG Wirtschaftsprüfungsgesellschaft was our principal accountant for the 2015 and 2016 fiscal years, respectively.



The table set forth below contains the aggregate fees billed for each of the last two fiscal years by KPMG AG Wirtschaftsprüfungsgesellschaft and the worldwide member firms of KPMG International in each of the following categories: (1) Audit fees, which are fees for professional services for the audit of our annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for those fiscal years, (2) Audit-related fees, which are fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported as Audit fees, (3) Tax-related fees, which are fees for professional services rendered for tax compliance, tax consulting and tax planning, and (4) All other fees, which are fees for products and services other than Audit fees, Audit-related fees and Tax-related fees. These amounts include expenses and exclude Value Added Tax (VAT).

Fee category in € m.	2016	2015
Audit fees	49	51
Audit-related fees	26	19
Tax-related fees	6	5
All other fees	1	1
<b>Total fees<sup>1</sup></b>	<b>82</b>	<b>76</b>

The Audit fees figure excludes the audit fees for Postbank and its subsidiaries, as they are not audited by KPMG. The Audit-related fees include fees for accounting advisory, due diligence relating to actual or contemplated acquisitions and dispositions, attestation engagements and other agreed-upon procedure engagements. Our Tax-related fees include fees for services relating to the preparation and review of tax returns and related compliance assistance and advice, tax consultation and advice relating to Group tax planning strategies and initiatives and assistance with assessing compliance with tax regulations. All other fees were incurred for project-related advisory services.

United States law and regulations, and our own policies, generally require that all engagements of our principal accountant be pre-approved by our Audit Committee or pursuant to policies and procedures adopted by it. Our Audit Committee has adopted the following policies and procedures for consideration and approval of requests to engage our principal accountant to perform non-audit services. Engagement requests must in the first instance be submitted to the Accounting Engagement Team. If the request relates to services that would impair the independence of our principal accountant, the request must be rejected. Our Audit Committee has given its pre-approval for specified assurance, financial advisory and tax services, provided the expected fees for any such service do not exceed €1 million. If the engagement request relates to such specified pre-approved services, it may be approved by the Accounting Engagement Team and must thereafter be reported to the Audit Committee. If the engagement request relates neither to prohibited non-audit services nor to pre-approved non-audit services, it must be forwarded to the Audit Committee for consideration. In addition, to facilitate the consideration of engagement requests between its meetings, the Audit Committee has delegated approval authority to several of its members who are “independent” as defined by the Securities and Exchange Commission and the New York Stock Exchange. Such members are required to report any approvals made by them to the Audit Committee at its next meeting.

Additionally, United States law and regulations permit the pre-approval requirement to be waived with respect to engagements for non-audit services aggregating to no more than five percent of the total amount of revenues we paid to our principal accountant, if such engagements were not recognized by us at the time of engagement and were promptly brought to the attention of our Audit Committee or a designated member thereof and approved prior to the completion of the audit. In 2015 and 2016, the percentage of the total amount of revenues we paid to our principal accountant for non-audit services that was subject to such a waiver was less than 5 % for each year.



[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

# 4.

## Supplementary Information

467	Non-GAAP Financial Measures
473	Declaration of Backing
475	Imprint / Publications

## Non-GAAP Financial Measures

This document and other documents the Group has published or may publish contain non-GAAP financial measures. Non-GAAP financial measures are measures of the Group's historical or future performance, financial position or cash flows that contain adjustments that exclude or include amounts that are included or excluded, as the case may be, from the most directly comparable measure calculated and presented in accordance with IFRS in the Group's financial statements.

### Return on Equity Ratios

The Group reports a post tax return on average shareholders' equity and a post-tax return on average tangible shareholders' equity, each of which is a non-GAAP financial measure.

The post-tax returns on average shareholders' equity and average tangible shareholders' equity are calculated as net income (loss) attributable to Deutsche Bank shareholders as a percentage of average shareholders' equity and average tangible shareholders' equity, respectively.

Net income (loss) attributable to Deutsche Bank shareholders is a non-GAAP financial measure and is defined as net income (loss) excluding post-tax income (loss) attributable to noncontrolling interests. For the Group, it reflects the reported effective tax rate, which was (67) % for the full year 2016, (11) % for 2015 and 46 % for 2014. For the segments, the applied tax rate was 35 % for all respective periods.

At the Group level, tangible shareholders' equity is shareholders' equity as reported in the Consolidated Balance Sheet excluding goodwill and other intangible assets. Tangible shareholders' equity for the segments is calculated by deducting goodwill and other intangible assets from shareholders' equity as allocated to the segments, as described in Note 4 "Business Segments and Related Information" to the consolidated financial statements within the section "Measurement of Segment Profit and Loss". Shareholders' equity and tangible shareholders' equity are presented on an average basis.

The Group believes that a presentation of average tangible shareholders' equity makes comparisons to its competitors easier, and refers to this measure in the return on equity ratios presented by the Group. However, average tangible shareholders' equity is not a measure provided for in IFRS, and the Group's ratios based on this measure should not be compared to other companies' ratios without considering differences in the calculations.

The reconciliation of the aforementioned ratios is set forth in the table below:

								2016
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
Income (loss) before income taxes (IBIT)	16	1,691	1,068	(204)	367	(3,207)	(541)	(810)
Income tax expense	0	0	0	0	0	0	0	(546)
Net Income (loss)	11	1,106	698	(133)	240	(2,097)	(1,180)	(1,356)
Net income (loss) attributable to noncontrolling interests	0	0	0	0	0	0	(45)	(45)
Net Income attributable to DB shareholders and additional equity components	11	1,106	698	(133)	240	(2,097)	(1,226)	(1,402)
Average shareholders' equity	24,695	12,076	9,008	6,221	6,006	4,037	38	62,082
Add (deduct): Average goodwill and other intangible assets	(1,805)	(1,199)	(1,611)	(4,599)	(329)	(448)	114	(9,876)
Average tangible shareholders' equity	22,890	10,877	7,397	1,622	5,677	3,590	152	52,206
Post-tax return on average shareholders' equity	0 %	9 %	8 %	(2) %	4 %	N/M	N/M	(2) %
Post-tax return on average tangible shareholders' equity <sup>1</sup>	0 %	10 %	9 %	(8) %	4 %	N/M	N/M	(3) %

<sup>1</sup> The post-tax return on average shareholders' equity and average tangible shareholders' equity, at the Group level reflects the reported effective tax rate for the Group.

								2015
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
Income (loss) before income taxes (IBIT)	(1,817)	1,439	(774)	684	(2,596)	(2,264)	(770)	(6,097)
Income tax expense	0	0	0	0	0	0	0	(675)
Net Income (loss)	(1,174)	930	(500)	442	(1,677)	(1,463)	(3,331)	(6,772)
Net income (loss) attributable to noncontrolling interests	0	0	0	0	0	0	(21)	(21)
<b>Net Income attributable to DB shareholders and additional equity components</b>	<b>(1,174)</b>	<b>930</b>	<b>(500)</b>	<b>442</b>	<b>(1,677)</b>	<b>(1,463)</b>	<b>(3,353)</b>	<b>(6,794)</b>
Average shareholders' equity	24,675	12,483	10,265	5,719	7,798	6,755	1,361	69,055
Add (deduct): Average goodwill and other intangible assets	(2,160)	(1,336)	(2,301)	(4,797)	(2,247)	(585)	(482)	(13,909)
<b>Average tangible shareholders' equity</b>	<b>22,515</b>	<b>11,146</b>	<b>7,964</b>	<b>922</b>	<b>5,551</b>	<b>6,170</b>	<b>879</b>	<b>55,146</b>
Post-tax return on average shareholders' equity	(5) %	7 %	(5) %	8 %	(22) %	N/M	N/M	(10) %
Post-tax return on average tangible shareholders' equity <sup>1</sup>	(5) %	8 %	(6) %	48 %	(30) %	N/M	N/M	(12) %

<sup>1</sup> The post-tax return on average shareholders' equity and average tangible shareholders' equity, at the Group level reflects the reported effective tax rate for the Group.

	2014							
in € m. (unless stated otherwise)	Global Markets	Corporate & Investment Banking	Private, Wealth and Commercial Clients	Deutsche Asset Management	Postbank	Non-Core Operations Unit	Consoli- dation & Adjust- ments and Other	Total
Income (loss) before income taxes (IBIT)	1,843	2,306	1,070	674	(123)	(2,419)	(236)	3,116
Income tax expense	0	0	0	0	0	0	0	(1,425)
Net Income (loss)	1,198	1,499	696	438	(80)	(1,572)	(488)	1,691
Net income (loss) attributable to noncontrolling interests	0	0	0	0	0	0	(28)	(28)
<b>Net Income attributable to DB shareholders and additional equity components</b>	<b>1,198</b>	<b>1,499</b>	<b>696</b>	<b>438</b>	<b>(80)</b>	<b>(1,572)</b>	<b>(516)</b>	<b>1,663</b>
Average shareholders' equity	20,569	10,512	9,183	5,144	8,134	7,724	143	61,410
Add (deduct): Average goodwill and other intangible assets	(1,880)	(1,093)	(2,094)	(4,485)	(2,808)	(600)	(1,339)	(14,299)
<b>Average tangible shareholders' equity</b>	<b>18,690</b>	<b>9,419</b>	<b>7,089</b>	<b>658</b>	<b>5,326</b>	<b>7,124</b>	<b>(1,196)</b>	<b>47,111</b>
Post-tax return on average shareholders' equity	6 %	14 %	8 %	9 %	(1) %	N/M	N/M	3 %
Post-tax return on average tangible shareholders' equity <sup>1</sup>	6 %	16 %	10 %	67 %	(2) %	N/M	N/M	4 %

<sup>1</sup> The post-tax return on average shareholders' equity and average tangible shareholders' equity, at the Group level reflects the reported effective tax rate for the Group.

## Adjusted Costs

Adjusted costs is one of the key performance indicators outlined in the targets originally announced in October 2015. Adjusted costs is a non-GAAP financial measure most directly comparable to the IFRS financial measure noninterest expenses. Adjusted costs is calculated by adjusting noninterest expenses under IFRS for (i) impairment of goodwill and other intangible assets, (ii) litigation, (iii) policyholder benefits and claims and (iv) restructuring and severances. Policyholder benefits and claims arose from the Abbey Life Assurance business which was sold in late 2016 and so will not occur in future periods. The Group believes that a presentation of noninterest expenses excluding the impact of these items provides a more meaningful depiction of the costs associated with our operating businesses.

Group, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>29,442</b>	<b>38,667</b>
Impairment of Goodwill and other intangible Assets	1,256	5,776
Litigation	2,397	5,218
Policyholder benefits and claims	374	256
Restructuring and Severance	681	965
<b>Adjusted costs</b>	<b>24,734</b>	<b>26,451</b>

Global Markets, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>9,084</b>	<b>12,599</b>
Impairment of Goodwill and other intangible Assets	285	1,568
Litigation	591	2,603
Policyholder benefits and claims	-	-
Restructuring and Severance	191	166
<b>Adjusted costs</b>	<b>8,017</b>	<b>8,262</b>

Corporate & Investment Bank, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>5,119</b>	<b>6,266</b>
Impairment of Goodwill and other intangible Assets	-	600
Litigation	17	329
Policyholder benefits and claims	-	-
Restructuring and Severance	192	88
<b>Adjusted costs</b>	<b>4,910</b>	<b>5,249</b>

Private, Wealth and Commercial Clients, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>6,394</b>	<b>7,983</b>
Impairment of Goodwill and other intangible Assets	-	1,011
Litigation	(1)	41
Policyholder benefits and claims	-	-
Restructuring and Severance	177	595
<b>Adjusted costs</b>	<b>6,219</b>	<b>6,336</b>

Deutsche Asset Management, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>3,223</b>	<b>2,336</b>
Impairment of Goodwill and other intangible Assets	1,021	-
Litigation	(0)	1
Policyholder benefits and claims	374	256
Restructuring and Severance	69	8
<b>Adjusted costs</b>	<b>1,759</b>	<b>2,071</b>

Postbank, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>2,815</b>	<b>5,497</b>
Impairment of Goodwill and other intangible Assets	-	2,597
Litigation	58	14
Policyholder benefits and claims	-	-
Restructuring and Severance	29	83
<b>Adjusted costs</b>	<b>2,729</b>	<b>2,802</b>

Non-Core Operations Unit, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>2,701</b>	<b>3,006</b>
Impairment of Goodwill and other intangible Assets	(49)	-
Litigation	1,750	1,849
Policyholder benefits and claims	-	-
Restructuring and Severance	23	25
<b>Adjusted costs</b>	<b>977</b>	<b>1,132</b>

Consolidation & Adjustments and Other, in € m.	Dec 31, 2016	Dec 31, 2015
<b>Noninterest expenses</b>	<b>106</b>	<b>980</b>
Impairment of Goodwill and other intangible Assets	-	-
Litigation	(18)	380
Policyholder benefits and claims	-	-
Restructuring and Severance	1	-
<b>Adjusted costs</b>	<b>123</b>	<b>600</b>

## Book Value and Tangible Book Value per Basic Share Outstanding

Book value per basic share outstanding and tangible book value per basic share outstanding are non-GAAP financial measures that are used and relied upon by investors and industry analysts as capital adequacy metrics. Book value per basic share outstanding represents the Bank's total shareholders' equity divided by the number of basic shares outstanding at period-end. Tangible book value represents the Bank's total shareholders' equity less goodwill and other intangible assets. Tangible book value per basic share outstanding is computed by dividing tangible book value by period-end basic shares outstanding.

### Tangible Book Value

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Total shareholders' equity (Book value)</b>	<b>59,833</b>	<b>62,678</b>	<b>68,351</b>	<b>(2,845)</b>	<b>(5)</b>	<b>(5,673)</b>	<b>(8)</b>
Goodwill and other intangible assets	(8,982)	(10,078)	(14,951)	1,096	(11)	4,873	(33)
<b>Tangible shareholders' equity (Tangible book value)</b>	<b>50,851</b>	<b>52,600</b>	<b>53,400</b>	<b>(1,749)</b>	<b>(3)</b>	<b>(800)</b>	<b>(1)</b>

### Basic Shares Outstanding

in € m. (unless stated otherwise)	2016	2015	2014	2016 increase (decrease) from 2015		2015 increase (decrease) from 2014	
				in € m.	in %	in € m.	in %
<b>Number of shares</b>	<b>1,379.3</b>	<b>1,379.3</b>	<b>1,379.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Shares outstanding:							
Treasury shares	(0.2)	(0.4)	(0.3)	0.2	(45.8)	(0.1)	44.1
Vested share awards	20.8	8.9	6.8	11.9	133.7	2.1	31.6
<b>Basic shares outstanding</b>	<b>1,399.9</b>	<b>1,387.8</b>	<b>1,385.8</b>	<b>12.1</b>	<b>0.9</b>	<b>2.0</b>	<b>0.1</b>
<b>Book value per basic share outstanding in €</b>	<b>42.74</b>	<b>45.16</b>	<b>49.32</b>	<b>(2.42)</b>	<b>(5.4)</b>	<b>(4.16)</b>	<b>(8.4)</b>
<b>Tangible book value per basic share outstanding in €</b>	<b>36.33</b>	<b>37.90</b>	<b>38.53</b>	<b>(1.57)</b>	<b>(4.1)</b>	<b>(0.63)</b>	<b>(1.6)</b>

## Fully loaded CRR/CRD 4 Measures

Our regulatory assets, exposures, risk-weighted assets, capital and ratios thereof are calculated for regulatory purposes and are set forth throughout this document under CRR/CRD 4. CRR/CRD 4 provides for "transitional" (or "phase-in") rules, under which capital instruments that are no longer eligible under the new rules are permitted to be phased out as the new rules on regulatory adjustments are phased in, as well as regarding the risk weighting of certain categories of assets. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. The transitional rules relate, e.g., to the risk weighting of certain categories of assets. Unless otherwise noted, our CRR/CRD 4 solvency measures as of December 31, 2016, December 31, 2015 and December 31, 2014 set forth in this document reflect these transitional rules.

We also set forth in this document such CRR/CRD 4 measures on a "fully loaded" basis, reflecting full application of the final CRR/CRD 4 framework without consideration of the transitional provisions under CRR/CRD 4, except as described below.



The transitional rules include rules permitting the grandfathering of equity investments at a risk-weight of 100 % instead of a risk weight between 190 % and 370 % determined based on Article 155 CRR that would apply under the CRR/CRD 4 fully loaded rules. Despite the grandfathering rule for equity investments not applying under the full application of the final CRR/CRD 4 framework, we continue to apply it in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions, based on our intention to mitigate the impact of the expiration of the grandfathering rule through sales of the underlying assets or other measures prior to its expiration at end of 2017. We are closely monitoring the market and potential impacts from illiquid markets or other similar difficulties which could make it unfeasible to exit these positions.

As of December 31, 2016, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA consisted of 15 transactions amounting to €220 million in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been no more than €816 million, and thus our Group fully loaded RWA would have been no more than €358.1 billion as of December 31, 2016, rather than the Group fully loaded RWA of €357.5 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2016 using fully loaded RWAs without application of the grandfathering rule, such capital ratios would have remained unchanged (due to rounding) at the 11.8 %, 13.1 % and 16.6 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

As of December 31, 2015, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA amounted to €1.5 billion in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been no more than €5.4 billion, and thus our Group fully loaded RWA would have been no more than €400.7 billion as of December 31, 2015, rather than the Group fully loaded RWA of €396.7 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2015 using fully loaded RWAs without application of the grandfathering rule, such capital ratios would have been 11.0 %, 12.1 % and 15.2 %, respectively, instead of the 11.1 %, 12.3 % and 15.4 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

As the final implementation of CRR/CRD 4 may differ from our expectations, and our competitors' assumptions and estimates regarding such implementation may vary, our fully loaded CRR/CRD 4 measures may not be comparable with similarly labeled measures used by our competitors.

We believe that these fully loaded CRR/CRD 4 calculations provide useful information to investors as they reflect our progress against the new regulatory capital standards and as many of our competitors have been describing CRR/CRD 4 calculations on a fully loaded basis.

For descriptions of these fully loaded CRR/CRD 4 measures and the differences from the most directly comparable measures under the CRR/CRD 4 transitional rules, please refer to "Management Report: Risk Report: Risk and Capital Performance: Capital and Leverage Ratio", in particular the subsections thereof entitled "Development of Regulatory Capital", "Development of Risk-Weighted Assets" and "Leverage Ratio".

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]

[Page intentionally left blank for SEC filing purposes]



# Supplemental Financial Information (Unaudited)

## Industry Guide 3 Information

Amounts for 2016, 2015, 2014, 2013 and 2012 are prepared in accordance with IFRS, which is consistent with the Group's Financial Statements.

### Financial Condition

#### Average balance sheet based upon month-end balances

Average balance sheet and interest and similar income

in € m. (unless stated otherwise)	2016			2015			2014		
	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate
<b>Assets:<sup>1</sup></b>									
Interest-earning deposits with banks: <sup>5</sup>									
In German offices <sup>2</sup>	35,145	(55)	(0.16) %	12,007	(17)	(0.14) %	9,360	34	0.36 %
In Non-German offices <sup>2</sup>	81,139	613	0.76 %	57,377	516	0.90 %	79,336	649	0.82 %
<b>Total interest-earning deposits with banks</b>	<b>116,284</b>	<b>558</b>	<b>0.48 %</b>	<b>69,384</b>	<b>499</b>	<b>0.72 %</b>	<b>88,696</b>	<b>683</b>	<b>0.77 %</b>
Central bank funds sold and securities purchased under resale agreements: <sup>5</sup>									
In German offices	10,701	(28)	(0.26) %	8,713	(9)	(0.10) %	14,502	39	0.27 %
In Non-German offices	10,995	349	3.17 %	16,125	386	2.39 %	13,243	369	2.79 %
<b>Total central bank funds sold and securities purchased under resale agreements</b>	<b>21,697</b>	<b>321</b>	<b>1.48 %</b>	<b>24,838</b>	<b>377</b>	<b>1.52 %</b>	<b>27,745</b>	<b>408</b>	<b>1.47 %</b>
Securities borrowed: <sup>5</sup>									
In German offices	116	0	(0.20) %	116	0	(0.19) %	154	0	0.00 %
In Non-German offices <sup>2</sup>	29,415	(202)	(0.69) %	31,494	(368)	(1.17) %	24,563	(313)	(1.27) %
<b>Total securities borrowed</b>	<b>29,531</b>	<b>(202)</b>	<b>(0.69) %</b>	<b>31,610</b>	<b>(368)</b>	<b>(1.17) %</b>	<b>24,717</b>	<b>(313)</b>	<b>(1.27) %</b>
Interest-earning financial assets at fair value through profit or loss:									
In German offices	19,595	432	2.21 %	23,907	630	2.64 %	29,780	633	2.13 %
In Non-German offices	273,047	8,834	3.24 %	302,528	9,866	3.26 %	365,298	9,172	2.51 %
<b>Total interest-earning financial assets at fair value through profit or loss</b>	<b>292,642</b>	<b>9,266</b>	<b>3.17 %</b>	<b>326,435</b>	<b>10,496</b>	<b>3.22 %</b>	<b>395,078</b>	<b>9,805</b>	<b>2.48 %</b>
Financial assets available for sale:									
In German offices	18,928	247	1.31 %	21,820	367	1.68 %	21,043	551	2.62 %
In Non-German offices	50,523	1,271	2.52 %	49,708	1,225	2.46 %	34,448	886	2.57 %
<b>Total financial assets available for sale</b>	<b>69,450</b>	<b>1,518</b>	<b>2.19 %</b>	<b>71,528</b>	<b>1,592</b>	<b>2.23 %</b>	<b>55,491</b>	<b>1,437</b>	<b>2.59 %</b>
Loans: <sup>3</sup>									
In German offices	215,512	6,200	2.88 %	216,398	6,448	2.98 %	216,371	6,546	3.03 %
In Non-German offices	212,204	6,109	2.88 %	212,904	5,771	2.71 %	176,676	5,274	2.98 %
<b>Total loans</b>	<b>427,716</b>	<b>12,309</b>	<b>2.88 %</b>	<b>429,302</b>	<b>12,219</b>	<b>2.85 %</b>	<b>393,047</b>	<b>11,820</b>	<b>3.01 %</b>
Securities held to maturity <sup>8</sup>									
In German offices	0	0	0.00 %	0	0	0.00 %	0	0	0.00 %
In Non-German offices	2,977	67	2.20 %	0	0	0.00 %	0	0	0.00 %
<b>Total securities held to maturity</b>	<b>2,977</b>	<b>67</b>	<b>2.20 %</b>	<b>0</b>	<b>0</b>	<b>0.00 %</b>	<b>0</b>	<b>0</b>	<b>0.00 %</b>
<b>Total other interest-earning assets</b>	<b>72,876</b>	<b>862</b>	<b>1.18 %</b>	<b>78,730</b>	<b>1,152</b>	<b>1.46 %</b>	<b>56,134</b>	<b>1,161</b>	<b>2.07 %</b>
<b>Total interest-earning assets</b>	<b>1,033,172</b>	<b>24,699</b>	<b>2.39 %</b>	<b>1,031,827</b>	<b>25,967</b>	<b>2.52 %</b>	<b>1,040,908</b>	<b>25,001</b>	<b>2.40 %</b>
Cash and due from banks	22,865			22,513			18,111		
Noninterest-earning financial assets at fair value through profit or loss:									
In German offices	276,265			298,011			258,290		
In Non-German offices	289,788			328,502			278,504		
All other assets	109,091			114,036			133,972		
Allowance for credit losses	(4,639)			(5,115)			(5,288)		
<b>Total assets</b>	<b>1,726,541</b>			<b>1,789,774</b>			<b>1,724,497</b>		
% of assets attributable to Non-German offices	65 %			67 %			66 %		

Average balance sheet and interest expense in € m. (unless stated otherwise)	2016			2015			2014		
	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate
<b>Liabilities and equity:</b> <sup>1</sup>									
<b>Interest-bearing deposits:</b> <sup>4</sup>									
In German offices: <sup>6</sup>									
Time deposits	68,924	379	0.55 %	68,412	370	0.54 %	52,004	411	0.79 %
Savings deposits	91,328	591	0.65 %	98,372	866	0.88 %	100,555	928	0.92 %
Demand deposits	40,619	53	0.13 %	42,156	34	0.08 %	38,963	74	0.19 %
Total in German offices	200,871	1,023	0.51 %	208,940	1,270	0.60 %	191,522	1,413	0.74 %
In Non-German offices:									
Time deposits	55,809	1,196	2.14 %	60,913	1,102	1.81 %	77,660	998	1.29 %
Savings deposits	1,939	15	0.78 %	4,565	22	0.47 %	2,723	23	0.85 %
Demand deposits	107,687	331	0.31 %	114,640	370	0.32 %	101,883	776	0.76 %
Total in Non-German offices	165,436	1,542	0.93 %	180,118	1,494	0.83 %	182,266	1,797	0.99 %
<b>Total interest-bearing deposits</b>	<b>366,306</b>	<b>2,565</b>	<b>0.70 %</b>	<b>389,058</b>	<b>2,764</b>	<b>0.71 %</b>	<b>373,788</b>	<b>3,210</b>	<b>0.86 %</b>
Central bank funds purchased and securities sold under repurchase agreements: <sup>5</sup>									
In German offices	772	(15)	(1.94) %	59	(11)	(18.37) %	185	8	4.02 %
In Non-German offices	18,367	245	1.34 %	10,482	164	1.56 %	24,381	152	0.62 %
<b>Total central bank funds purchased and securities sold under repurchase agreements</b>	<b>19,140</b>	<b>230</b>	<b>1.20 %</b>	<b>10,541</b>	<b>153</b>	<b>1.45 %</b>	<b>24,566</b>	<b>160</b>	<b>0.65 %</b>
Securities loaned: <sup>5</sup>									
In German offices <sup>2</sup>	5	0	(0.11) %	9	0	(0.17) %	21	0	(1.52) %
In Non-German offices <sup>2</sup>	4,117	(32)	(0.77) %	3,006	(45)	(1.50) %	3,813	(157)	(4.10) %
<b>Total securities loaned</b>	<b>4,122</b>	<b>(32)</b>	<b>(0.77) %</b>	<b>3,015</b>	<b>(45)</b>	<b>(1.50) %</b>	<b>3,834</b>	<b>(157)</b>	<b>(4.09) %</b>
Interest-bearing financial liabilities at fair value through profit or loss: <sup>7</sup>									
In German offices	10,953	150	1.37 %	8,197	134	1.63 %	13,714	259	1.89 %
In Non-German offices	116,157	4,471	3.85 %	96,594	4,400	4.56 %	150,011	4,005	2.67 %
<b>Total interest-bearing financial liabilities at fair value through profit or loss</b>	<b>127,110</b>	<b>4,621</b>	<b>3.64 %</b>	<b>104,791</b>	<b>4,534</b>	<b>4.33 %</b>	<b>163,725</b>	<b>4,264</b>	<b>2.60 %</b>
Other short-term borrowings:									
In German offices	483	14	2.87 %	547	9	1.66 %	1,077	15	1.41 %
In Non-German offices	23,557	165	0.70 %	33,778	220	0.65 %	53,003	199	0.38 %
<b>Total other short-term borrowings</b>	<b>24,040</b>	<b>179</b>	<b>0.74 %</b>	<b>34,325</b>	<b>229</b>	<b>0.67 %</b>	<b>54,080</b>	<b>214</b>	<b>0.40 %</b>
Long-term debt and trust preferred securities: <sup>5</sup>									
In German offices	102,711	1,177	1.15 %	89,180	771	0.87 %	74,490	1,190	1.60 %
In Non-German offices	64,418	1,018	1.58 %	76,469	1,277	1.67 %	75,680	1,477	1.95 %
<b>Total long-term debt and trust preferred securities</b>	<b>167,129</b>	<b>2,195</b>	<b>1.31 %</b>	<b>165,649</b>	<b>2,048</b>	<b>1.24 %</b>	<b>150,170</b>	<b>2,667</b>	<b>1.78 %</b>
<b>Total other interest-bearing liabilities</b> <sup>5</sup>	<b>104,731</b>	<b>233</b>	<b>0.22 %</b>	<b>109,414</b>	<b>403</b>	<b>0.37 %</b>	<b>84,942</b>	<b>371</b>	<b>0.44 %</b>
<b>Total interest-bearing liabilities</b>	<b>812,578</b>	<b>9,992</b>	<b>1.23 %</b>	<b>816,793</b>	<b>10,086</b>	<b>1.24 %</b>	<b>855,105</b>	<b>10,729</b>	<b>1.25 %</b>

<sup>1</sup> The allocation of the assets and liabilities between German and Non-German offices is based on the location of the entity which carries the respective asset or liability.

<sup>2</sup> Interest-earning deposits with banks include interest earning deposits with central bank and interest earning deposits with bank w/o central bank.

<sup>3</sup> Categories of loans include impaired loans.

<sup>4</sup> Interest-bearing deposits figures for Non German offices adjusted for 2014 and 2015 to reflect the time deposits, savings deposits and demand deposits.

<sup>5</sup> Negative interest for following positions: Figures for the interest earning & bearing positions are based on the same accounting method as prior period (the positive/negative interest income and expense have a net effect under each product), however, it will not match with the presentation of interest income and expenses in the income statement as well as in Note 5 due to the fact that the negative interest income has been taken into account under 'Other interest expenses' & negative interest expense under 'Other interest income'.

Average balance sheet and interest expense in € m. (unless stated otherwise)	2016			2015			2014		
	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate	Average balance	Interest	Average yield/rate
Noninterest-bearing deposits: <sup>6</sup>									
In German offices <sup>6</sup>	154,529			144,976			129,720		
In Non-German offices	35,853			34,960			31,246		
Noninterest-bearing financial liabilities at fair value through profit or loss:									
In German offices	240,873			265,922			233,796		
In Non-German offices	303,015			338,378			282,043		
All other noninterest-bearing liabilities	112,658			114,742			128,605		
<b>Total shareholders' equity</b>	<b>62,082</b>			<b>69,055</b>			<b>61,410</b>		
<b>Additional equity components</b>	<b>4,673</b>			<b>4,667</b>			<b>2,308</b>		
<b>Noncontrolling interests</b>	<b>280</b>			<b>281</b>			<b>264</b>		
<b>Total equity</b>	<b>67,036</b>			<b>74,003</b>			<b>63,982</b>		
<b>Total liabilities and equity</b>	<b>1,726,541</b>			<b>1,789,774</b>			<b>1,724,497</b>		
% of liabilities attributable to Non- German offices <sup>1</sup>	56 %			57 %			60 %		
Rate spread	1.16 %			1.28 %			1.14 %		
Net interest margin (Net interest income to total interest-earning assets):									
In German offices	1.48 %			1.85 %			1.64 %		
In Non-German offices	1.40 %			1.42 %			1.26 %		
<b>Total</b>	<b>1.42 %</b>			<b>1.54 %</b>			<b>1.37 %</b>		



## Analysis of changes in interest and similar income and interest expense

in € m.	2016 over 2015 due to changes in <sup>1</sup>			2015 over 2014 due to changes in <sup>1</sup>		
	Net change	Volume	Rate	Net change	Volume	Rate
<b>Interest and similar income:</b>						
Interest-earning deposits with banks:						
German offices	(38)	(36)	(2)	(50)	7	(58)
Non-German offices	97	189	(92)	(132)	(193)	61
<b>Total interest-earning deposits with banks</b>	<b>59</b>	<b>153</b>	<b>(94)</b>	<b>(182)</b>	<b>(186)</b>	<b>3</b>
Central bank funds sold and securities purchased under resale agreements:						
German offices	(19)	(2)	(16)	(48)	(11)	(37)
Non-German offices	(37)	(143)	106	16	74	(57)
<b>Total central bank funds sold and securities purchased under resale agreements</b>	<b>(56)</b>	<b>(145)</b>	<b>90</b>	<b>(32)</b>	<b>63</b>	<b>(94)</b>
Securities borrowed:						
German offices	0	0	0	0	0	0
Non-German offices	166	23	143	(55)	(83)	27
<b>Total securities borrowed</b>	<b>166</b>	<b>23</b>	<b>143</b>	<b>(55)</b>	<b>(83)</b>	<b>27</b>
Financial assets at fair value through profit or loss:						
German offices	(198)	(104)	(94)	(3)	(138)	136
Non-German offices	(1,032)	(954)	(78)	695	(1,748)	2,442
<b>Total financial assets at fair value through profit or loss</b>	<b>(1,230)</b>	<b>(1,058)</b>	<b>(172)</b>	<b>692</b>	<b>(1,886)</b>	<b>2,578</b>
Financial assets available for sale						
German offices	(120)	(45)	(76)	(183)	20	(203)
Non-German offices	46	21	26	338	377	(39)
<b>Total financial assets available for sale</b>	<b>(74)</b>	<b>(24)</b>	<b>(50)</b>	<b>155</b>	<b>397</b>	<b>(242)</b>
Loans:						
German offices	(248)	(26)	(222)	(98)	1	(99)
Non-German offices	338	(20)	357	497	1,013	(515)
<b>Total loans</b>	<b>90</b>	<b>(46)</b>	<b>135</b>	<b>399</b>	<b>1,014</b>	<b>(614)</b>
Securities held to maturity:						
German offices	0	0	0	0	0	0
Non-German offices	0	0	0	0	0	0
<b>Total Securities held to maturity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Other interest-earning assets</b>	<b>(289)</b>	<b>(81)</b>	<b>(208)</b>	<b>(10)</b>	<b>388</b>	<b>(398)</b>
<b>Total interest and similar income</b>	<b>(1,334)</b>	<b>(1,178)</b>	<b>(156)</b>	<b>967</b>	<b>(293)</b>	<b>1,260</b>
<b>Interest expense:</b>						
Interest-bearing deposits:						
German offices	(248)	(48)	(200)	(143)	121	(263)
Non-German offices	49	(128)	176	(303)	(21)	(283)
<b>Total interest-bearing deposits</b>	<b>(199)</b>	<b>(176)</b>	<b>(24)</b>	<b>(446)</b>	<b>100</b>	<b>(546)</b>
Central bank funds purchased and securities sold under repurchase agreements:						
German offices	(4)	(22)	18	(18)	(2)	(16)
Non-German offices	82	108	(27)	12	(123)	134
<b>Total central bank funds purchased and securities sold under repurchase agreements</b>	<b>77</b>	<b>86</b>	<b>(9)</b>	<b>(6)</b>	<b>(125)</b>	<b>118</b>
Securities loaned:						
German offices	0	0	0	0	0	0
Non-German offices	13	(13)	26	111	28	83
<b>Total securities loaned</b>	<b>13</b>	<b>(13)</b>	<b>26</b>	<b>111</b>	<b>28</b>	<b>83</b>
Financial liabilities at fair value through profit or loss:						
German offices	16	40	(24)	(126)	(94)	(32)
Non-German offices	71	813	(742)	396	(1,764)	2,159
<b>Total financial liabilities at fair value through profit or loss</b>	<b>87</b>	<b>853</b>	<b>(766)</b>	<b>270</b>	<b>(1,858)</b>	<b>2,127</b>
Other short-term borrowings:						
German offices	5	(1)	6	(6)	(8)	2
Non-German offices	(55)	(59)	4	21	(86)	106
<b>Total other short-term borrowings</b>	<b>(50)</b>	<b>(60)</b>	<b>10</b>	<b>15</b>	<b>(94)</b>	<b>108</b>

in € m.	2016 over 2015 due to changes in <sup>1</sup>			2015 over 2014 due to changes in <sup>1</sup>		
	Net change	Volume	Rate	Net change	Volume	Rate
Long-term debt and trust preferred securities:						
German offices	406	129	277	(418)	203	(620)
Non-German offices	(259)	(193)	(66)	(201)	15	(216)
<b>Total long-term debt and trust preferred securities</b>	<b>147</b>	<b>(64)</b>	<b>211</b>	<b>(619)</b>	<b>218</b>	<b>(836)</b>
<b>Other interest-bearing liabilities</b>	<b>(169)</b>	<b>(17)</b>	<b>(152)</b>	<b>32</b>	<b>97</b>	<b>(63)</b>
<b>Total interest expense</b>	<b>(94)</b>	<b>610</b>	<b>(704)</b>	<b>(643)</b>	<b>(1,634)</b>	<b>991</b>
<b>Net change in net interest income</b>	<b>(1,240)</b>	<b>(1,788)</b>	<b>548</b>	<b>1,610</b>	<b>1,341</b>	<b>269</b>

<sup>1</sup> Changes due to combination of volume and rate are allocated proportionally.

## Investment Portfolio (Securities Available for Sale)

### Fair values of the Group's investment portfolio

in € m.	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014
<b>Debt securities:</b>			
German government	9,405	18,042	14,370
U.S. Treasury and U.S. government agencies	7,652	2,890	235
U.S. local (municipal) governments	3,261	3,103	2,777
Other foreign governments	23,779	34,123	31,805
Corporates	6,849	8,922	8,512
Other asset-backed securities	84	588	646
Mortgage-backed securities, including obligations of U.S. federal agencies	17	28	236
Other debt securities	470	570	551
<b>Total debt securities</b>	<b>51,516</b>	<b>68,266</b>	<b>59,132</b>
<b>Equity securities:</b>			
Equity shares	1,027	1,166	1,184
Investment certificates and mutual funds	122	75	99
<b>Total equity securities</b>	<b>1,149</b>	<b>1,241</b>	<b>1,283</b>
<b>Total</b>	<b>52,665</b>	<b>69,507</b>	<b>60,415</b>

### Fair value, amortized cost and gross unrealized holding gains and losses for the Group's securities available for sale

Dec 31, 2016 in € m.	Fair value	Gross unrealized holding		Amortized cost
		Gains	Losses	
<b>Debt securities:</b>				
German government	9,405	139	54	9,320
U.S. Treasury and U.S. government agencies	7,652	4	119	7,767
U.S. local (municipal) governments	3,261	390	295	3,166
Other foreign governments	23,779	428	87	23,438
Corporates	6,849	153	(2)	6,694
Other asset-backed securities	84	0	2	86
Mortgage-backed securities, including obligations of U.S. federal agencies	17	1	0	16
Other debt securities	470	1	1	471
<b>Total debt securities</b>	<b>51,516</b>	<b>1,116</b>	<b>558</b>	<b>50,957</b>
<b>Equity securities:</b>				
Equity shares	1,027	413	4	618
Investment certificates and mutual funds	122	11	4	114
<b>Total equity securities</b>	<b>1,149</b>	<b>424</b>	<b>8</b>	<b>733</b>
<b>Total</b>	<b>52,665</b>	<b>1,540</b>	<b>565</b>	<b>51,690</b>

The following table presents the fair value, remaining maturities, approximate weighted-average yields (based on amortized cost) and total amortized cost by maturity distribution of the debt security components of the Group's investment portfolio as of December 31, 2016:

in € m.	Up to one year		More than one year and up to five years		More than five years and up to ten years		More than ten years		Total	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
German government	1,162	1.1 %	5,572	1.5 %	2,670	1.7 %	0	0.0 %	9,405	1.5 %
U.S. Treasury and U.S. government agencies	186	0.9 %	7,466	1.0 %	0	2.5 %	0	0.0 %	7,652	1.0 %
U.S. local (municipal) governments	1	2.6 %	47	0.1 %	10	0.1 %	3,203	0.1 %	3,261	0.1 %
Other foreign governments	3,311	2.9 %	13,007	1.8 %	6,623	1.7 %	839	3.2 %	23,779	2.0 %
Corporates	929	2.9 %	3,484	3.0 %	2,204	2.6 %	232	1.7 %	6,849	2.8 %
Other asset-backed securities	(16)	0.0 %	100	2.4 %	0	0.0 %	0	0.0 %	84	2.8 %
Mortgage-backed securities, including obligations of U.S. federal agencies	4	1.2 %	12	0.3 %	0	0.0 %	0	0.0 %	17	0.5 %
Other debt securities	146	2.9 %	38	2.5 %	118	2.8 %	169	3.7 %	470	3.1 %
<b>Total fair value</b>	<b>5,723</b>	<b>2.4 %</b>	<b>29,725</b>	<b>1.7 %</b>	<b>11,625</b>	<b>1.9 %</b>	<b>4,443</b>	<b>0.9 %</b>	<b>51,516</b>	<b>1.7 %</b>
<b>Total amortized cost</b>	<b>5,723</b>		<b>29,440</b>		<b>11,480</b>		<b>4,315</b>		<b>50,957</b>	

## Loans Outstanding

Analysis of the Group's loan portfolio by industry sector and by the borrower's country of domicile (in- or outside Germany)

in € m.	Dec 31, 2016	Dec 31, 2015 <sup>1</sup>	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
<b>German:</b>					
Financial intermediation	5,048	7,716	6,920	6,197	7,949
Fund management activities	984	778	296	0	0
Manufacturing	8,821	9,357	8,583	7,428	8,463
Wholesale and retail trade	5,736	5,736	4,294	4,062	4,212
Households	137,078	137,332	137,162	135,123	131,047
Commercial real estate activities	7,741	8,178	19,275	20,418	20,762
Public sector	11,059	12,846	12,725	11,417	9,729
Lease financing	383	482	723	712	244
Other	20,579	20,085	12,909	15,599	16,675
<b>Total German</b>	<b>197,430</b>	<b>202,510</b>	<b>202,888</b>	<b>200,956</b>	<b>199,081</b>
<b>Non-German:</b>					
Financial intermediation	44,569	54,023	52,666	18,903	19,900
Fund management activities	25,145	25,313	11,842	0	0
Manufacturing	20,470	18,773	17,036	13,978	14,740
Wholesale and retail trade	11,008	12,591	11,420	9,903	12,814
Households	50,791	62,674	60,817	58,393	49,927
Commercial real estate activities	19,627	14,701	16,490	13,841	24,544
Public sector	4,682	4,398	5,357	4,811	5,649
Lease financing	178	79	381	718	636
Other	39,643	38,487	31,988	60,584	74,915
<b>Total Non-German</b>	<b>216,114</b>	<b>231,039</b>	<b>207,995</b>	<b>181,130</b>	<b>203,125</b>
<b>Gross loans</b>	<b>413,544</b>	<b>433,549</b>	<b>410,883</b>	<b>382,086</b>	<b>402,206</b>
(Deferred expense)/unearned income	88	772	58	(85)	137
<b>Loan less (deferred expense)/unearned income</b>	<b>413,455</b>	<b>432,777</b>	<b>410,825</b>	<b>382,171</b>	<b>402,069</b>

<sup>1</sup> Comparatives have been restated to reflect changes in industry sectors.

Included in the category Other is Fund Management activities exposure of € 10.0 billion, and € 16.8 billion for December 31, 2013 and 2012 respectively.

## Loan Maturities and Sensitivity to Changes in Interest Rates

### Analysis of maturities of the Group's loan portfolio (excluding lease financing)

Dec 31, 2016 in € m.	Within 1 year	After one but within 5 years	After 5 years	Total
<b>German:</b>				
Financial intermediation	1,438	2,317	1,293	5,048
Fund management activities	421	212	351	984
Manufacturing	4,910	2,865	1,045	8,821
Wholesale and retail trade	3,783	1,055	898	5,736
Households (excluding mortgages)	4,118	5,754	7,631	17,503
Households – mortgages	6,489	16,014	97,072	119,575
Commercial real estate activities	1,415	2,170	4,156	7,741
Public sector	4,424	3,139	3,495	11,059
Other	6,659	6,941	6,980	20,579
<b>Total German</b>	<b>33,656</b>	<b>40,468</b>	<b>122,922</b>	<b>197,047</b>
<b>Non-German:</b>				
Financial intermediation	26,647	14,033	3,890	44,569
Fund management activities	14,375	5,586	5,183	25,145
Manufacturing	11,586	6,518	2,365	20,470
Wholesale and retail trade	7,980	2,251	777	11,008
Households (excluding mortgages)	9,767	6,438	3,384	19,590
Households – mortgages	2,629	2,776	25,796	31,201
Commercial real estate activities	5,925	10,999	2,703	19,627
Public sector	909	1,936	1,836	4,682
Other	13,752	18,792	7,099	39,643
<b>Total Non-German</b>	<b>93,570</b>	<b>69,331</b>	<b>53,034</b>	<b>215,936</b>
<b>Gross loans</b>	<b>127,227</b>	<b>109,800</b>	<b>175,957</b>	<b>412,983</b>
(Deferred expense)/unearned income	(71)	(32)	191	88
<b>Loans less (deferred expense)/unearned income</b>	<b>127,297</b>	<b>109,832</b>	<b>175,765</b>	<b>412,895</b>

### Volumes of loans in loan portfolio (excluding lease financing) with residual maturities of more than one year from that date

Dec 31, 2016 in € m.	After one but within 5 years	After 5 years	Total
Fixed rate loans	86,572	141,291	227,863
Floating or adjustable rate loans	23,228	34,665	57,893
<b>Total</b>	<b>109,800</b>	<b>175,957</b>	<b>285,756</b>

## Risk Elements

The following section provides information about certain risk elements included in the loan portfolio intended to address the requirements of SEC Industry Guide 3 while at the same time reflecting the classifications most relevant to how Deutsche Bank Group evaluates the credit quality of its loan portfolio. All potential problem loans, which are defined as loans where known information about possible credit problems of borrowers causes the Group's management to have serious doubts as to the ability of such borrowers to comply with the present loan repayment terms, are included in this disclosure of risk elements.

### Loans 90 days or more Past Due and still accruing

#### Exposure of loans carried at amortized cost which were 90 days or more past due and still accruing for the last five years

in € m.	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
German	252	278	499	745	336
Non-German	190	135	148	238	118
<b>Total loans 90 days or more past due and still accruing</b>	<b>442</b>	<b>413</b>	<b>647</b>	<b>983</b>	<b>454</b>

## Impaired Loans

### Breakdown of the Group's IFRS impaired loans by region based on the borrower's country of domicile

in € m.	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
Germany	2,639	3,004	3,499	3,261	3,615
Western Europe (excluding Germany)	3,709	4,337	4,986	5,832	5,476
Eastern Europe	179	255	259	252	344
North America	496	342	425	590	626
Central and South America	5	6	3	32	41
Asia/Pacific	355	178	174	175	233
Africa	64	26	1	1	0
Other	2	2	1	0	0
<b>Total impaired loans</b>	<b>7,447</b>	<b>8,151</b>	<b>9,348</b>	<b>10,143</b>	<b>10,335</b>

### Breakdown of the Group's IFRS impaired loans by industry sector of the borrower

in € m.	Dec 31, 2016	Dec 31, 2015 <sup>1</sup>	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
Financial intermediation	133	169	270	45	53
Fund management activities	21	33	64	93	128
Manufacturing	754	765	757	811	926
Wholesale and retail trade	707	538	591	661	554
Households	2,661	3,263	3,750	3,671	3,707
Commercial real estate activities	422	912	2,048	2,683	3,358
Public sector	19	16	54	39	0
Other <sup>2</sup>	2,731	2,456	1,815	2,139	1,609
<b>Total impaired loans</b>	<b>7,447</b>	<b>8,151</b>	<b>9,348</b>	<b>10,143</b>	<b>10,335</b>

<sup>1</sup> Comparatives have been restated to reflect changes in industry sectors.

<sup>2</sup> Thereof 'Transportation, storage and communication': Total Impaired Loans € 1.1 billion in 2016 (40 %), € 865 million (34 %) in 2015 and € 804 million (39 %) in 2014. The rest is split across various industries (of which no single one contributes 25 % or more of the total of the category 'Other').

## Interest Revenue of Impaired Loans

The following table shows the approximate effect on interest revenue of IFRS impaired loans. It shows the gross interest income that would have been recorded during the reporting period, if those loans had been current in accordance with their original terms and had been outstanding throughout the reporting period or since their origination, if Deutsche Bank Group only held them for part of the reporting period. It also shows the amount of interest income on those loans that was included in net income for the reporting period.

in € m.	2016
<b>German loans:</b>	
Gross amount of interest that would have been recorded at original rate	94
Less interest, net of reversals, recognized in interest revenue	7
Reduction of interest revenue	87
<b>Non-German loans:</b>	
Gross amount of interest that would have been recorded at original rate	80
Less interest, net of reversals, recognized in interest revenue	28
Reduction of interest revenue	52
<b>Total reduction of interest revenue</b>	<b>111</b>

## Renegotiated Loans

Loans that have been renegotiated in such a way that, for economic or legal reasons related to the borrower's financial difficulties, we granted a concession to the borrower that we would not otherwise have considered are disclosed as renegotiated loans and are a subset of forbore loans disclosed in the Asset Quality section of the Risk Report.

**Breakdown of the Group's renegotiated loans representing our troubled debt restructurings**

in € m.	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
Renegotiated loans considered nonimpaired					
German	553	520	502	383	210
Non-German	263	356	448	399	678
<b>Total renegotiated loans considered nonimpaired</b>	<b>816</b>	<b>875</b>	<b>950</b>	<b>783</b>	<b>888</b>
Renegotiated loans considered impaired					
German	661	942	1,145	709	309
Non-German	770	876	1,125	1,140	1,317
<b>Total renegotiated loans considered impaired</b>	<b>1,430</b>	<b>1,819</b>	<b>2,270</b>	<b>1,849</b>	<b>1,626</b>
Renegotiated loans					
German	1,213	1,463	1,647	1,092	519
Non-German	1,033	1,233	1,573	1,539	1,995
<b>Total renegotiated loans</b>	<b>2,246</b>	<b>2,695</b>	<b>3,220</b>	<b>2,632</b>	<b>2,514</b>

In 2016, renegotiated loans decreased by € 449 million or 17 % driven majorly by disposal and charge offs of impaired assets in Germany and UK in NCOU and CIB. It was further complemented by disposals and charge offs of non-impaired assets in non-German region in CIB and Deutsche AM.

The Group's renegotiated loans declined by € 525 million or 16 % in 2015 driven by disposals and charge offs of impaired assets in NCOU and Postbank.

2014 renegotiated loans increased by € 588 million compared to 2013. The increase in impaired renegotiated loans of € 421 million was driven by Postbank along with individually assessed items within Germany in NCOU and CIB, which was nearly offset outside Germany due to reductions mainly within NCOU. The increase in non-impaired renegotiated loans in 2014 was again driven by Postbank along with other individually assessed items in Germany.

In 2013, the level of the Group's renegotiated loans increased by € 118 million or 4.7 % to € 2.6 billion compared to prior year-end. Reductions recorded for non-impaired loans were primarily due to one commercial real estate loan to a counterparty in Western Europe (excluding Germany) which was consolidated due to the Group obtaining control over the structured entity borrowers during the second quarter of 2013. The renegotiated loans considered impaired increased due to individually assessed items in Germany in the Group's core business for which a small number of new provisions were required.

In 2012, renegotiated loans increased by € 96 million or 4 %. The key driver for the decrease in 2012 in Non-German renegotiated loans considered non-impaired was a single loan amounting to € 435 million within the Group's leveraged finance activities in Western Europe (excluding Germany) which became impaired and was partially written off. Excluding this single item, non-German renegotiated loans considered non-impaired have increased in line with the Group's total renegotiated loans position.

It should be noted that these renegotiations are not part of a special modification or restructuring program such as the Fannie Mae "Home Affordable Modification Program". Rather, new terms (for example modification of interest rates, principal amounts, interest due, maturities, etc.) were arranged depending on the requirements of the individual renegotiation.

## Foreign Outstandings

The following tables list only those countries for which the cross-border outstandings exceeded 0.75 % of the Group's total assets as of December 31, 2016, 2015 and 2014. Offsetting of local country claims is done for third party liabilities of the respective foreign offices that represent legal obligations of the foreign offices and for which no payment is guaranteed at locations outside of the country of the office. As of December 31, 2016, there were no outstandings that exceeded 0.75 % of total assets in any country currently facing debt restructuring or liquidity problems that the Group expects would materially impact the country's ability to service its obligations.

Dec 31, 2016							
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other <sup>1</sup>	Commit- ments	Net local country claim	Total	in %
United States	10,252	18,334	149,251	11,548	–	189,385	11.91
Great Britain	5,135	9,344	11,704	4,110	48,050	78,343	4.93
Luxembourg	8,352	10,740	34,945	2,549	18,731	75,316	4.74
Italy	5,377	14,642	9,020	614	22,391	52,044	3.27
France	5,180	10,317	23,627	6,332	–	45,456	2.86
Netherlands	2,595	6,984	13,503	5,102	–	28,184	1.77
Ireland	385	2,541	18,722	850	4	22,502	1.41
Switzerland	2,354	3,760	9,923	3,615	1,412	21,064	1.32
Japan	1,339	525	18,087	281	–	20,232	1.27
Spain	4,594	5,244	6,939	884	–	17,661	1.11
China	4,072	1,528	7,657	562	–	13,820	0.87
India	3,237	650	5,656	191	2,439	12,173	0.77

<sup>1</sup> Other includes commercial and industrial, insurance and other loans.

Dec 31, 2015							
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other <sup>1</sup>	Commit- ments	Net local country claim	Total	in %
United States	8,803	16,364	145,268	15,209	323,952	509,596	31.28
Great Britain	5,960	10,919	17,175	4,492	60,516	99,062	6.08
Luxembourg	9,458	13,531	36,149	3,877	10,297	73,312	4.50
France	7,371	11,865	34,225	5,980	–	59,441	3.65
Italy	10,030	13,988	12,159	764	9,351	46,292	2.84
Netherlands	3,107	8,714	18,440	4,148	171	34,580	2.12
Spain	5,431	3,222	9,471	1,113	3,900	23,137	1.42
Switzerland	2,761	3,980	11,011	3,998	1,147	22,897	1.41
Ireland	692	1,873	17,251	1,336	804	21,956	1.35
China	5,114	1,977	9,600	600	51	17,342	1.06
Japan	963	1,117	10,741	568	2,639	16,028	0.98
Cayman Islands	197	873	6,774	571	6,669	15,084	0.93
India	3,921	1,008	6,436	235	3,066	14,666	0.90

<sup>1</sup> Other includes commercial and industrial, insurance and other loans.

Dec 31, 2014							
in € m. (unless stated otherwise)	Banks and other financial institutions	Governments and Official institutions	Other <sup>1</sup>	Commit- ments	Net local country claim	Total	in %
United States	7,662	30,096	125,879	10,645	29,982	204,264	11.95
Great Britain	6,816	6,777	52,563	3,579	43,348	113,083	6.62
France	5,157	13,802	19,174	6,221	–	44,354	2.60
Luxembourg	7,712	8,706	23,328	3,395	879	44,020	2.58
Netherlands	4,210	9,562	22,930	3,848	112	40,662	2.38
Italy	9,662	18,914	7,840	446	3,228	40,090	2.35
Spain	6,865	3,579	8,134	738	4,737	24,053	1.41
China	7,205	1,354	9,067	605	42	18,273	1.07
Ireland	985	1,115	14,238	1,079	839	18,256	1.07
Switzerland	2,138	421	9,909	3,813	1,098	17,379	1.02
India	3,884	551	5,940	235	2,846	13,456	0.79

<sup>1</sup> Other includes commercial and industrial, insurance and other loans.

## Allowance for Loan Losses

### Breakdown of the movements in the Group's allowance for loan losses

in € m.

(unless stated otherwise)

	2016	2015	2014	2013	2012
<b>Balance, beginning of year</b>	<b>5,028</b>	<b>5,212</b>	<b>5,589</b>	<b>4,692</b>	<b>4,158</b>
<b>Charge-offs:</b>					
German:					
Financial intermediation	(1)	(3)	(1)	(0)	(1)
Manufacturing	(49)	(32)	(52)	(79)	(42)
Wholesale and retail trade	(10)	(24)	(60)	(17)	(42)
Households (excluding mortgages)	(309)	(276)	(167)	(192)	(265)
Households – mortgages	(90)	(107)	(142)	(64)	(60)
Commercial real estate activities	(6)	(30)	(92)	(26)	(11)
Public sector	(0)	0	0	(0)	(0)
Other	(156)	(75)	(59)	(95)	(71)
German total	(621)	(547)	(574)	(474)	(491)
Non-German total	(1,330)	(708)	(1,076)	(741)	(789)
<b>Total charge-offs</b>	<b>(1,951)</b>	<b>(1,255)</b>	<b>(1,650)</b>	<b>(1,215)</b>	<b>(1,281)</b>
<b>Recoveries:</b>					
German:					
Financial intermediation	0	0	1	0	0
Manufacturing	6	14	9	10	10
Wholesale and retail trade	3	3	3	3	6
Households (excluding mortgages)	22	33	26	64	106
Households – mortgages	44	39	40	38	15
Commercial real estate activities	5	7	3	2	2
Public sector	0	0	0	0	0
Other	13	14	13	18	19
German total	94	110	95	136	158
Non-German total	93	51	46	26	37
<b>Total recoveries</b>	<b>187</b>	<b>161</b>	<b>141</b>	<b>162</b>	<b>195</b>
<b>Net charge-offs</b>	<b>(1,764)</b>	<b>(1,094)</b>	<b>(1,509)</b>	<b>(1,053)</b>	<b>(1,086)</b>
Provision for loan losses	1,347	882	1,129	2,060	1,728
Other changes (i.e., exchange rate changes, changes in the group of consolidated companies)	(65)	28	3	(109)	(108)
<b>Balance, end of year<sup>1</sup></b>	<b>4,546</b>	<b>5,028</b>	<b>5,212</b>	<b>5,589</b>	<b>4,692</b>
Percentage of total net charge-offs to average loans for the year	0.43 %	0.25 %	0.37 %	0.28 %	0.27 %

<sup>1</sup> Fluctuation rate (Allowance for Loan Losses at end of reporting period/Total Loans before deduction of Allowance for Loan Losses at end of reporting period): 1.10 % for 2016, 1.16 % for 2015, 1.12 % for 2014, 1.46 % for 2013, 1.17 % for 2012.

The Group's allowance for loan losses as of December 31, 2016 was €4.5 billion, 54 % of which was related to collectively assessed and 46 % to individually assessed loan losses. The reduction in the allowance for loan losses of €482 million compared to prior year end was driven by €1.8 billion net charge-offs, partly offset by €1.3 billion of additional loan loss provisions.

Provision for loan losses increased by €465 million compared to 2015. The increase in our individually assessed portfolio mainly resulted from CIB and Global Markets reflecting the continued market weakness of the shipping sector as well as lower commodity prices in the metals and mining and oil and gas sectors. The increase in provisions for our collectively assessed loan portfolio was mainly driven by NCOU partly relating to higher charges for IAS 39 reclassified assets and partly offset by PW&CC and Postbank, among other factors reflecting the good quality of the loan book and the benign economic environment.

The increase in net charge-offs of €670 million compared to prior year is mainly driven by NCOU caused by IAS 39 reclassified assets along with disposals.

Our allowance for loan losses for IAS 39 reclassified assets, which are reported in NCOU, amounted to €69 million as of December 31, 2016, representing 2 % of our total allowance for loan losses, down 82 % from the level at the end of 2015 which amounted to €389 million (8 % of total allowance for loan losses). This reduction was driven by charge offs



of €355 million along with reduction driven by foreign exchange as most IAS 39 reclassified assets are denominated in non-Euro currencies and was partly offset by additional provisions of €66 million.

Compared to 2015, provision for loan losses for IAS 39 reclassified assets increased by €110 million mainly related to our European Mortgage Portfolios. Net Charge offs increased by €242 million mainly driven by the European Mortgage portfolio and one large single booking.

The Group's allowance for loan losses as of December 31, 2015 was €5.0 billion, 55 % of which was related to collectively assessed and 45 % to individually assessed loan losses. The reduction in the allowance for loan losses of €184 million compared to prior year end mainly related to €1.1 billion net charge-offs largely offset by €0.9 billion of additional loan loss provisions.

The reduction in 2015 in provisions for loan losses in our individually assessed loan portfolio amounted to €164 million driven by IAS 39 reclassified assets and other real estate exposures recorded in NCOU, partly offset by higher provisioning in our Shipping and Leveraged Finance Portfolios in CIB. The reduction in our collectively assessed loan portfolio of €83 million mainly resulted from higher releases related to non-performing loan sales along with an ongoing positive credit environment in Germany and a stabilization of Southern European markets.

The reduction in charge offs of €415 million compared to 2014 was mainly driven by Postbank and results from high prior year levels caused by a one-off effect due to the alignment of processes.

Our allowance for loan losses for IAS 39 reclassified assets, which were reported in NCOU, amounted to €389 million at the end of 2015, representing 8 % of our total allowance for loan losses, down 25 % from the level at the end of the prior year which amounted to €518 million (10 % of total allowance for loan losses). This reduction was driven by net charge offs of €113 million along with net releases of €44 million and partly offset by increases related to foreign exchange as most IAS 39 reclassified assets are denominated in non-Euro currencies.

Compared to 2014, provision for loan losses for IAS 39 reclassified assets dropped by €129 million and net charge-offs increased by €98 million in 2015. Both changes were partly related to disposals.

The Group's allowance for loan losses as of December 31, 2014 was €5.2 billion, 55 % of which was related to collectively assessed and 45 % to individually assessed loan losses. The reduction in the allowance for loan losses of €376 million compared to prior year end mainly relates to €1.5 billion net charge-offs largely offset by €1.1 billion of additional loan loss provisions.

The Group's provision for loan losses decreased by €930 million or 45 % in 2014 compared with 2013. The reduction in our individually assessed loan portfolio of €878 million reflected material reductions across all businesses. The reduction in NCOU was driven by decreased provision for credit losses in IAS 39 reclassified and commercial real estate assets, while the performance in our Core Bank benefited from increased releases and a non-recurrence of large single name bookings. Provisions for our collectively assessed portfolio decreased compared to prior year reflecting among other factors the ongoing good environment in the German credit market.

The main driver of the increase in charge-offs in 2014 against our individually assessed loan portfolio was an alignment of processes in Postbank. This alignment resulted in an adjustment of the level of loan loss allowance for loans recorded at Postbank by €233 million reflecting accelerated write-offs as well as the elimination of previous misclassification of recoveries in the credit quality of Postbank loans, which had been impaired after change of control, as interest income. Additionally, higher charge-offs in CIB relating to a single client credit event in the prior year contributed to the overall increase which was partly offset by reductions in charge-offs for IAS 39 reclassified assets. The increase in charge-offs against our collectively assessed loan portfolio mainly related to the disposal of impaired loan portfolios in Italy.

The Group's allowance for loan losses as of December 31, 2013 was attributable 51 % to individually assessed and 49 % to collectively assessed loan losses. The net increase in the allowance for loan losses of €897 million compared with prior year end results from additions of €2.1 billion partly offset by €1.1 billion of net charge-offs and €110 million other changes, such as accretion of interest on impaired loans and foreign exchange effects.

The Group's provision for loan losses increased by €332 million or 19 % in 2013 compared with 2012. This increase was driven by the individually assessed loan portfolio, where provisioning increased by €262 million along with an increase of €70 million in the collectively assessed portfolio. The increase of provisions in the individually assessed loan portfolio was a result of a single client credit event recorded and increased provisioning for shipping exposure recorded in CIB and higher charges in NCOU driven by single client items including some related to the European Commercial Real Estate sector. The increase in the collectively assessed loan portfolio was driven by NCOU and was mainly the result of higher provisioning related to the Group's de-risking activities. This increase was partly offset by reductions in the Group's Core business mainly reflecting an improved credit environment in the German retail market compared to prior year.

Net charge-offs slightly decreased by €33 million or 3 % in 2013 driven by a reduction of €61 million in the individually assessed loan portfolio and partly offset by an increase of €28 million in the Group's collectively assessed loan portfolio.

The Group's allowance for loan losses as of December 31, 2012 was €4.7 billion, 52 % of which was related to collectively assessed and 48 % to individually assessed loan losses. The increase in the allowance for loan losses of €531 million mainly related to €1.7 billion of additional loan loss provisions partly offset by €1.1 billion of charge-offs.

The Group's provision for loan losses decreased by €104 million or 6 % in 2012 compared with 2011. This decrease was driven by the collectively assessed loan portfolio, which saw a reduction of €312 million or 34 % driven by lower levels of provisioning for non-impaired loans within the NCOU mainly as a result of the Group's de-risking measures along with lower provisioning in the homogenous Postbank portfolio basically driven by improvements in the portfolio quality. Further credit was recorded in other interest income representing increases in the credit quality of Postbank loans recorded at fair value on initial consolidation in the Group accounts. The increase in provisions for individually assessed loans of €208 million or 23 % was related to assets which had been reclassified in accordance with IAS 39 in North America and United Kingdom now held in the NCOU as of 2012.

Net charge-offs increased by €189 million or 21 % in 2012. Net charge-offs for individually assessed loans were up €249 million mainly related to assets which had been reclassified in accordance with IAS 39.

The following table presents an analysis of the changes in the non-German component of the allowance for loan losses. As of December 31, 2016, 67 % of the Group's total allowance was attributable to non-German clients compared to 67 % as of December 31, 2015.

in € m.	2016	2015	2014	2013	2012
Balance, beginning of year	3,345	3,339	3,612	2,968	2,509
Provision for loan losses	1,004	612	724	1,438	1,152
Net charge-offs	(1,238)	(657)	(1,030)	(715)	(752)
Charge-offs	(1,330)	(708)	(1,076)	(741)	(789)
Recoveries	93	51	46	26	37
Other changes (i.e., exchange rate changes, changes in the group of consolidated companies)	(54)	51	34	(80)	59
Balance, end of year	3,057	3,345	3,339	3,612	2,968

The following table presents the components of the Group's allowance for loan losses by industry of the borrower, and the percentage of its total loan portfolio accounted for by those industry classifications, on the dates specified. The breakdown between German and non-German borrowers is based on the location of the borrowers.

in € m. (unless stated otherwise)	Dec 31, 2016		Dec 31, 2015		Dec 31, 2014		Dec 31, 2013		Dec 31, 2012	
German:										
Individually assessed loan loss allowance:										
Financial intermediation	0	1 %	0	1 %	2	1 %	2	2 %	1	2 %
Manufacturing	139	2 %	196	2 %	213	2 %	236	2 %	277	2 %
Households (excluding mortgages)	11	4 %	98	4 %	152	4 %	139	5 %	94	5 %
Households – mortgages	5	29 %	6	27 %	6	29 %	11	30 %	14	28 %
Public sector	0	3 %	0	3 %	0	3 %	0	3 %	0	2 %
Wholesale and retail trade	74	1 %	84	1 %	82	1 %	129	1 %	111	1 %
Commercial real estate activities	45	2 %	48	5 %	78	5 %	149	5 %	157	5 %
Other <sup>1</sup>	289	5 %	216	3 %	207	4 %	197	4 %	128	4 %
Individually assessed loan loss allowance										
German total	563		647		740		864		782	
Collectively assessed loan loss allowance	926		1,035		1,133		1,113		942	
German total	1,489	48 %	1,683	47 %	1,873	50 %	1,977	53 %	1,724	49 %
Non-German:										
Individually assessed loan loss allowance	1,508		1,604		1,624		1,993		1,484	
Collectively assessed loan loss allowance	1,549		1,741		1,715		1,619		1,484	
Non-German total	3,057	52 %	3,345	53 %	3,339	50 %	3,612	47 %	2,968	51 %
Total allowance for loan losses	4,546	100 %	5,028	100 %	5,212	100 %	5,589	100 %	4,692	100 %
Total individually assessed loan loss allowance	2,071		2,252		2,364		2,857		2,266	
Total collectively assessed loan loss allowance	2,475		2,776		2,849		2,732		2,426	
Total allowance for loan losses	4,546		5,028		5,212		5,589		4,692	

<sup>1</sup> Includes mainly Transportation and Services.

## Deposits

The amount of other time deposits in the amount of U.S.\$ 100,000 or more in offices in Germany was €51.2 billion as of December 31, 2016, of which €17.8 billion had maturities within three months, €11.1 billion had maturities after three months but within six months, €11.2 billion had maturities after six months but within one year and €11.0 billion had maturities after one year. The amount of certificates of deposits in the amount of U.S.\$ 100,000 or more in offices in Germany was €1.2 billion as of December 31, 2016, of which €60 million had maturities within three months and €1.1 billion had maturities after six months but within one year.

The amount of certificates of deposits and other time deposits in the amount of U.S.\$ 100,000 or more issued by non-German offices was €50.1 billion as of December 31, 2016.

Total deposits by foreign depositors in German offices were €36.0 billion, €40.5 billion and €38.4 billion as of December 31, 2016, 2015 and 2014, respectively.

## Return on Equity and Assets

	2016	2015	2014
Return on average shareholders' equity (post-tax) <sup>1</sup>	(2.26) %	(9.84) %	2.71 %
Return on average total assets (post-tax) <sup>2</sup>	(0.08) %	(0.38) %	0.10 %
Equity to assets ratio <sup>3</sup>	3.60 %	3.86 %	3.56 %
Dividend payout ratio: <sup>4</sup>			
Basic earnings per share	N/M	N/M	56 %
Diluted earnings per share	N/M	N/M	57 %

N/M – Not meaningful

<sup>1</sup> Net income (loss) attributable to Deutsche Bank shareholders as a percentage of average shareholders' equity.<sup>2</sup> Net income (loss) attributable to Deutsche Bank shareholders as a percentage of average total assets.<sup>3</sup> Average shareholders' equity as a percentage of average total assets for each year.<sup>4</sup> Dividends paid per share in respect of each year as a percentage of the Group's basic and diluted earnings per share for that year.

## Short-Term Borrowings with an original maturity of one year or less

The difference between the period-end and average balances for central bank funds purchased and securities sold under repurchase agreements mainly arises from fluctuating activity with respect to fixed income securities positions within GM. Intra-quarter trading volume, which increases the monthly averages relative to quarter- and year-end, predominantly comprises financing of short-term positions in highly liquid U.S. Treasuries and Agencies, which is a result of the Bank providing liquidity to the market via market-making activity and is largely driven by client demand. These U.S. Treasury and Agency positions are very low risk and have negligible impact on the firm's liquidity and capital position.

in € m.

(unless stated otherwise)

	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014
Central bank funds purchased and securities sold under repurchase agreements:			
Balance, end of year	25,740	9,803	10,887
Average balance <sup>1</sup>	20,368	10,541	24,566
Maximum balance at any month-end	27,027	17,520	42,492
Weighted-average interest rate during the year	1.20 %	1.45 %	0.65 %
Weighted-average interest rate on year-end balance	0.10 %	0.89 %	1.25 %
Securities loaned:			
Balance, end of year	3,598	3,270	2,339
Average balance <sup>1</sup>	3,743	3,015	3,834
Maximum balance at any month-end	8,677	3,449	4,443
Weighted-average interest rate during the year	(0.77) %	(1.50) %	(4.08) %
Weighted-average interest rate on year-end balance	0.10 %	0.32 %	1.01 %
Commercial paper:			
Balance, end of year	3,219	9,327	14,787
Average balance <sup>1</sup>	6,754	13,130	21,472
Maximum balance at any month-end	9,370	15,883	25,738
Weighted-average interest rate during the year	0.42 %	0.47 %	0.43 %
Weighted-average interest rate on year-end balance	0.72 %	0.65 %	0.49 %
Other:			
Balance, end of year	14,076	18,683	28,144
Average balance <sup>1</sup>	16,955	21,195	32,608
Maximum balance at any month-end	19,854	24,451	39,034
Weighted-average interest rate during the year	0.88 %	0.79 %	0.38 %
Weighted-average interest rate on year-end balance	0.21 %	0.55 %	0.34 %

<sup>1</sup> Based upon month-end balances.

## Imprint

Deutsche Bank Aktiengesellschaft  
Taunusanlage 12  
60262 Frankfurt am Main  
Germany  
Telephone: +49 69 9 10 00  
[deutsche.bank@db.com](mailto:deutsche.bank@db.com)