Deutsche Bank

Deutsche Bank Trust Corporation

2017 Annual Stress Test Disclosure

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1 Overview and Requirements

Deutsche Bank Trust Corporation ("DBTC", "we" or "our") is a U.S. bank holding company ("BHC") regulated by the Board of Governors of the Federal Reserve System ("FRB") that primarily engages in commercial banking activities through its main depository institution subsidiary, Deutsche Bank Trust Company Americas ("DBTCA"). DBTC is a wholly-owned subsidiary of DB USA Corporation, the U.S. intermediate holding company of Deutsche Bank Aktiengesellschaft ("DBAG", and together with its subsidiaries, "DB Group"). DBTCA is a licensed New York State-chartered insured depository institution regulated by the New York State Department of Financial Services ("NYSDFS").

DBTC and its subsidiaries engage in a variety of lending, deposit taking and other financial services activities. DBTC operates three primary Lines of Business ("LoBs"): Corporate & Investment Banking ("CIB"), which includes the Corporate Finance, Global Transaction Banking ("GTB") and Global Markets ("GM") businesses; Deutsche Asset Management ("AM"); and Private, Wealth & Commercial Clients ("PWCC").

Section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") and the related regulations promulgated thereunder by the FRB require U.S. BHCs with $50 billion or more of total consolidated assets, such as DBTC, to conduct two stress tests each year, generally referred to as the Dodd-Frank Act stress tests or "DFAST". Under the annual DFAST requirement, DBTC is required to conduct and complete stress tests over a nine quarter time horizon using a set of macroeconomic scenarios (Supervisory baseline, Supervisory adverse and Supervisory severely adverse) provided by the FRB.[1] The results of these stress tests are submitted to the FRB. For the 2017 annual DFAST, the forecast time horizon for the stress tests is the nine-quarter period beginning in the first quarter of 2017 (January 1, 2017) and continuing through the end of the first quarter of 2019 (March 31, 2019).

The DFAST rules require DBTC and DBTCA to publish a summary of our 2017 DFAST results under the Supervisory severely adverse scenario.[2] The projections, which form the basis of the information provided in this report, represent hypothetical estimates that involve an economic outcome that is more adverse than expected and, as such, these estimates do not represent DBTC's and DBTCA's expected losses, revenues, net income before taxes, or capital ratios. DFAST for DBTC and DBTCA was conducted in accordance with the Comprehensive Capital Analysis and Review ("CCAR") 2017 Summary Instructions published by the FRB in February 2017 and the amended Capital Plan Rule[3] and Stress Test Rules,[4] as applicable.

The results of DBTC's and DBTCA's annual DFAST indicate that we would expect to have ample capital throughout a hypothetical severe and protracted economic downturn to allow us to continue operations, maintain ready access to funding, remain a financial intermediary, and meet our obligations to creditors and counterparties and the expectations of internal and external stakeholders.

[1] For more information with respect to the scenarios provided by the FRB, see Board of Governors of the Federal Reserve System (February 10, 2017), "2017 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule," available at https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20170203a5.pdf.
[2] Under FRB regulations, DBTCA's obligation to publish summary results is satisfied by the publication of the summary results by its parent BHC, DBTC. See 12 C.F.R. 251.17(b)(2).
[3] See 12 C.F.R. 225.8.
[4] See 12 C.F.R. 252 Subparts B and F.

2 Risk Types

DBTC has identified the following risks and risk drivers arising from its strategies and business activities under the Supervisory severely adverse scenario. Material risks, individually and in the aggregate, are incorporated in internally defined idiosyncratic events and in models, and are projected to result in material balance sheet, income statement, or capital impacts.

2.1 Credit Risk

Credit Risk arises from any transaction in which an actual, contingent or potential claim against a borrower, obligor or other counterparty exists.

Risk drivers for Credit Risk include, but are not limited to:
- Counterparty default risk related to loans;
- Loss severity due to a decline in collateral values or inability to utilize collateral; and
- Changes in commitment and utilization.

2.2 Operational Risk

Operational Risk is 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 risk and reputational risk (such as foregone revenue).

Risk drivers for Operational Risk include, but are not limited to:
- Anti-financial crime risks (including anti-money laundering/Bank Secrecy Act risks);
- Transaction processing risks;
- Information security risks (e.g., cyber security, identity risk); and
- Technology and infrastructure disruption risks.

Many of the key drivers of reputational and compliance risks, as described below, are also drivers of the Operational Risk exposure of DBTC.

2.3 Market Risk

In general, Market Risk arises from the uncertainty concerning changes in market prices and rates (including interest rates, foreign exchange rates, equity prices and commodity prices) and other relevant parameters. As of December 31, 2016, aggregate trading assets and liabilities represented less than 1% of DBTC's total assets and fall below the thresholds for application of the Market Risk Capital Rule.[5]

2.4 Liquidity Risk

Liquidity Risk is the risk arising from the potential inability to meet payment obligations when they come due.

Given that over 95% of DBTC's assets reside in DBTCA and are funded solely with stable deposits and equity capital, Liquidity Risk (e.g., extensive deposit withdrawal and inability to fund assets) is low with respect to DBTC.

[5] See 12 C.F.R. 217.201.

2.5 Business Risk

Business Risk is the risk assumed due to potential changes in general business conditions, such as changes in markets, client behaviors and technological developments. This can affect business results if DBTC fails to adjust quickly to changing conditions.

Risk drivers for Business Risk include, but are not limited to:

- An economic downturn driving a decline of (new) business activity coupled with increased utilization of unfunded commitments and resulting credit losses; and
- Changes in competition and the regulatory framework applicable to DBTC that result in significant business impact.

2.6 Reputational Risk

Reputational Risk is the risk of possible damage to DBTC's brand and reputation, and the associated risk to earnings, capital or liquidity, arising from any association, action or inaction by DBTC and/or its affiliates, which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with DBTC's values and beliefs.

Potential sources of Reputational Risk include, but are not limited to:

- Unsuitable products or transactions;
- Regulatory actions;
- Dealings with certain clients; and
- Employee misconduct.

2.7 Compliance Risk

Compliance Risk is defined as the current or prospective risk to earnings, capital and/or public trust arising from violations or non-compliance with laws, rules and regulations or ethical standards. Such violations or non-compliance may lead to fines, damages and/or the voiding of contracts and may diminish an institution's reputation (as discussed above).

Potential sources of Compliance Risk include, but are not limited to:

- Duties to customers risk (e.g., client suitability, fiduciary risk); and
- Supervisory control risks and regulatory compliance risks.

3 Methodology

For purposes of DFAST, DBTC uses quantitative models and expert judgment methodologies to project asset and liability balances, revenue, losses, risk weighted assets ("RWA") and capital over the planning horizon. All quantitative models and expert judgment methodologies undergo a thorough review and challenge process and are validated for their conceptual soundness.

3.1 Pre-Provision Net Revenue

Net interest income ("NII") is the product of projected balances and rates. Asset and liability balance projections take into consideration contractual maturity information, prepayments, new business, and non-accruals. Projected rates take into consideration contractual pricing for existing exposures and projected pricing on new business. Balances, prepayments, non-accruals, and pricing on new business are projected using quantitative and expert judgment models leveraging the historical relationship between modeled outcomes and drivers identified by the LoBs.

Non-interest income is projected using quantitative and expert judgment models that incorporate key drivers and scenario inputs for fee income, shortfall income, trading gains/losses, other gains/losses, transfer pricing, and cash management.

Non-interest expense is driven by internal policies and spending strategy. Management uses historical information and internal operating variables to project the sub-components of non-interest expense, including: salary expense, benefits expense, other personnel expenses, premises and fixed assets, communication and data services, and intercompany expenses.

3.2 Losses and Provisions

Credit Risk

DBTC projects credit losses under stress using an expected loss approach, where expected losses depend on the probability of default (“PD”), loss given default (“LGD”), and exposure at default (“EAD”). These risk parameters are projected under stress and then utilized to estimate DBTC's potential net charge-offs (“NCOs”), Allowance for Loan and Lease Losses (“ALLL”), and Provision for Loan and Lease Losses (“PLLL”) over the projection horizon.

DBTC utilizes a suite of models that reflect the characteristics and risks of each of DBTC’s sub-portfolios. The models link variables (which may include macroeconomic and loan level variables) to the scenario-dependent projections. The macroeconomic variables considered include, but are not limited to, Gross Domestic Product, the US unemployment rate, House Price Index, and Commercial Real Estate Index.

Operational Risk

DBTC’s approach to the operational risk loss projections includes results from quantitative models and expert judgment methodologies.

Management projects legal and non-legal related operational risk losses utilizing a suite of quantitative models, scenario analyses, and qualitative expert judgment. Operational risk is assessed in terms of:

- Baseline and stressed losses based on internal operational loss data;
- Baseline and stressed losses related to current and pending litigation exposures; and
- Idiosyncratic tail risk losses based on current and expected future risk profile.

Results are then compared against empirical benchmarks and a benchmark model to assess appropriateness of overall loss estimates.

Market Risk

Any Mark-to-Market losses/gains are included in non-interest revenue. Non-interest revenue projections associated with Mark-to-Market positions are driven primarily by macroeconomic drivers. DBTC is exposed to only a limited amount of Market Risk.

3.3 Changes in Capital Ratios

Capital projections utilize a framework which is based upon exposure identification and data sourcing, risk weight classification, exposure calculation, aggregation, and report line item mapping. Using balances as of December 31, 2016, capital supply was projected based on anticipated activity over the planning horizon and the resulting balance and Pre-Provision Net Revenue (“PPNR”) projections under the Supervisory severely adverse scenario.

RWAs were projected using a rule-based approach based on interpretations of the U.S. Basel III capital rules. Exposure attributes were used to classify exposures and determine the corresponding risk weights and Credit Conversions Factors ("CCFs"). Once the RWA classification of exposures was determined, the risk weights and CCFs were applied to actual and projected balances for all assets. All measures were calculated utilizing the standardized approach.

3.4 Capital Actions

For purposes of the DFAST results set forth herein, standardized capital action assumptions were applied as required by 12 C.F.R. 252.56(b), as follows:

> *(1) For the first quarter of the planning horizon, the covered company must take into account its actual capital actions as of the end of that quarter; and*
>
> *(2) For each of the second through ninth quarters of the planning horizon, the covered company must include in the projections of capital:*
>
> > *(i) Common stock dividends equal to the quarterly average dollar amount of common stock dividends that the company paid in the previous year (that is, the first quarter of the planning horizon and the preceding three calendar quarters) plus common stock dividends attributable to issuances related to expensed employee compensation or in connection with a planned merger or acquisition to the extent that the merger or acquisition is reflected in the covered company's pro forma balance sheet estimates;*
> >
> > *(ii) Payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest, or principal due on such instrument during the quarter;*
> >
> > *(iii) An assumption of no redemption or repurchase of any capital instrument that is eligible for inclusion in the numerator of a regulatory capital ratio; and*
> >
> > *(iv) An assumption of no issuances of common stock or preferred stock, except for issuances related to expensed employee compensation or in connection with a planned merger or acquisition to the extent that the merger or acquisition is reflected in the covered company's pro forma balance sheet estimates.*

4 Annual DBTC and DBTCA Stress Test Results

4.1 Pre-Provision Net Revenue, Provisions, Other Gains/Losses and Net Income before Taxes

Figure 4-1: DBTC Projected Nine-Quarter Cumulative PPNR, PLLL, Other Gains/Loss and Net Income before Taxes under the Supervisory Severely Adverse Scenario

Projected PPNR, PLLL, Other Gains/Losses and Net Income before Taxes – DBTC	
$ millions	**Cumulative 9Qtrs**
PPNR[6]	511
Other Revenue	0
Less	
Provision for Loan and Lease Losses	225
Realized Losses/(Gains) on Securities (AFS/HTM)	0
Other Losses/(Gains)	0
Equals	
Net (Loss)/Income Before Taxes	286

4.2 Cumulative Loan Losses

Figure 4-2: DBTC Projected Nine-Quarter Cumulative Loan Losses by Loan Type under the Supervisory Severely Adverse Scenario[7]

Projected Loan Losses – DBTC		
$ millions	**Cumulative 9-Quarters**	**Portfolio Loss Rates (%)[8]**
Loan Losses	322	2.91%
First Lien Mortgages, Domestic	61	2.00%
Junior Liens and HELOCs, Domestic	38	5.87%
Commercial and Industrial	54	3.66%
Commercial Real Estate, Domestic	129	5.50%
Credit Cards	-	-
Other Consumer	-	-
Other Loans	39	1.10%

[6] Trading and counterparty losses are included in PPNR.
[7] Numbers may not foot due to rounding.
[8] Portfolio loss rates are calculated as cumulative nine quarter loan losses divided by the average nine quarter loan balance. Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option and are calculated over nine quarters.

4.3 Risk Weighted Assets

Figure 4-3: DBTC Projected Risk Weighted Assets

Actual 4Q16 and Projected 1Q19 Risk Weighted Assets under the Supervisory Severely Adverse Scenario - DBTC		
$ billions	Actual 4Q16	Projected 1Q19 Standardized Approach
Risk Weighted Assets	12.1	9.6

4.4 Capital Ratios[9]

Figure 4-4: DBTC Capital Results under the Supervisory Severely Adverse Scenario

Capital Ratios – DBTC			
		Stressed Capital Ratios	
Capital Ratios (%)	Actual – 4Q16	Ending – 1Q19	Projected - 9Qtrs Minimum
Common Equity Tier 1 Capital Ratio	64.4	82.4	62.3
Tier 1 Capital Ratio	64.4	82.4	62.3
Total Capital Ratio	64.7	82.9	63.3
Tier 1 Leverage Ratio	14.6	16.6	13.9

Figure 4-4-1: DBTCA Capital Results under the Supervisory Severely Adverse Scenario

Capital Ratios – DBTCA			
		Stressed Capital Ratios	
Capital Ratios (%)	Actual – 4Q16	Ending – 1Q19	Projected - 9Qtrs Minimum
Common Equity Tier 1 Capital Ratio	81.3	96.9	77.6
Tier 1 Capital Ratio	81.3	96.9	77.6
Total Capital Ratio	81.6	97.4	78.6
Tier 1 Leverage Ratio	17.6	19.2	16.8

[9] These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios.

5 Drivers of DBTC and DBTCA Stress Test Results

5.1 Capital Ratios

As of December 31, 2016, DBTC had Common Equity Tier 1 (“CET1”), Tier 1 capital, Total capital, and Tier 1 leverage ratios of 64.4%, 64.4%, 64.7% and 14.6%, respectively. DBTCA had CET1, Tier 1 capital, Total capital, and Tier 1 leverage ratios of 81.3%, 81.3%, 81.6% and 17.6%, respectively. DBTC’s and DBTCA’s capital is mainly composed of CET1, the form of capital with the highest loss absorbing capacity.

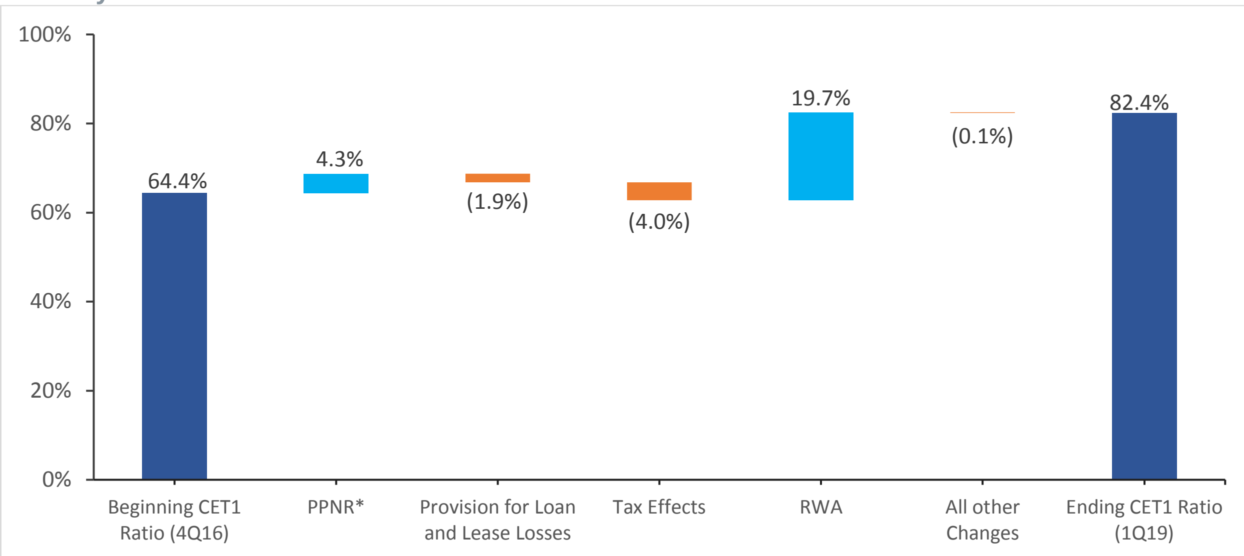
Regulatory capital ratios are calculated and reported under U.S. Basel III-based capital rules as in effect for a given quarter.

Throughout the projection horizon under the Supervisory severely adverse scenario, DBTC and DBTCA have capital ratios substantially in excess of regulatory minimum CET1, Tier 1 capital, Total capital, and Tier 1 leverage ratio requirements of 4.5%, 6.0%, 8.0%, and 4.0%, respectively. DBTC results show post-stress minimums of 62.3%, 62.3%, 63.3% and 13.9%, for CET1, Tier 1 capital, Total capital, and Tier 1 leverage ratios, respectively. DBTCA results show post-stress minimums of 77.6%, 77.6%, 78.6%, and 16.8% for CET1, Tier 1 capital, Total capital, and Tier 1 leverage ratios, respectively.

The main drivers of changes in DBTC’s regulatory capital ratios over the nine quarter planning horizon in the Supervisory severely adverse scenario consist of:

- A decrease in RWA, primarily driven by strategic actions, leading to increases in capital ratios;
- Positive PPNR over the planning horizon, due to transfer pricing projections, leading to increases in capital ratios that are partially offset by operational risk expenses from idiosyncratic events;
- Tax impacts leading to decreases in capital ratios; and
- Projected increase in provisions for loan and lease losses over the planning horizon leading to decreases in capital ratios.

Figure 5-1: Key Drivers of Annual DFAST Pro Forma CET1 Capital for DBTC under the Supervisory Severely Adverse Scenario[10]



*PPNR includes impacts from Operational Risk Idiosyncratic events

Cumulative PPNR leads to an increase in capital over the planning horizon, as a result of transfer pricing projections and improvements to macroeconomic conditions as the stress scenario progresses through the nine quarter projection horizon. This increase in capital is partially offset by increased operational risk expenses that include losses related to hypothetical idiosyncratic events.[11]

DBTC's and DBTCA's business strategy and risk profile have changed significantly since 2008, with an emphasis on exiting certain businesses while focusing on others. These changes have led to reductions in RWA, which accounts for the majority of the CET1 ratio increase across the projection horizon. DBTC's and DBTCA's RWA projections reflected the application of the FRB's capital rules in effect for a given quarter. Reductions in the balance sheet drove a decline in RWA over the nine-quarter projection horizon.

Because DBTCA represents over 95% of DBTC's assets, the same drivers apply to both DBTC's and DBTCA's stress results.

DBTC's disclosures of projected results, risks, and assumptions are hypothetical pursuant to the requirements of the DFAST and related instructions. These scenarios and assumptions do not reflect DBTC's future expectations; they involve an economic outcome that is more adverse than expected and, as such, these estimates do not represent DBTC's and DBTCA's expected losses, revenues, net income before taxes, or capital ratios.

[10] Numbers may not foot due to rounding.
[11] Operational Risk impacts and counterparty losses flow through PPNR (i.e., non-interest expense).