Treasury Management at Deutsche Bank

Knut Pohlen, Deputy Group Treasurer and Global Head of Funding & Liquidity Management

Cheuvreux Treasury Seminar
London, 11 December 2007
## Agenda

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Organizational set-up

Chief Risk Officer
Hugo Banziger

Group Treasurer
Chris Whitman

Functions
- Capital & Balance Sheet
- Liquidity & Funding

Regions
- Americas
  - Richard Ferguson
- Asia / Pacific
  - Gunar Schramm
- Europe
  - Rainer Rauleder

Treasury Policy Committee
- Rainer Rauleder
- Knut Pohlen (Deputy Treasurer)
Treasury & Capital Management fully integrated into corporate governance process

<table>
<thead>
<tr>
<th>Functional Committees</th>
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<tbody>
<tr>
<td>Finance</td>
<td>Capital and Risk</td>
<td>Compliance</td>
<td>Investment</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Risk Executive</td>
<td>IT &amp; Operations</td>
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<tr>
<th>Management Board</th>
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<tr>
<td><strong>Group Executive Committee</strong></td>
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<tr>
<td>(includes Business Heads &amp; Regions)</td>
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<table>
<thead>
<tr>
<th>Divisional Committees</th>
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<tr>
<td>Corporate and Investment Bank</td>
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<table>
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<th>Regional Committees</th>
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<tr>
<td>(includes Regional Capital &amp; Liquidity Risk Mgmt.)</td>
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<tr>
<td>Operating</td>
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☐ indicates Treasury & Capital Mgmt involvement and discussion/decision on issues directly impacting the capital base.
Strategic functions in Treasury & Capital Management

**Liquidity Management**
- Liquidity Risk Management to safeguard the ability of the bank to meet all payment obligations when they come due
- Framework to identify, measure, monitor, and control liquidity risk under normal market conditions and under stress
- Liquidity Toolbox, Transfer Pricing, Inter-branch Funding & Country Risk Limitation

**Capital & Balance Sheet Management**
- Regulatory, economic, and shareholder dimension of capital
- Group-wide and local management
- RWA/ Balance Sheet planning [no interest rate risk mgmt]
- FX Hedging of Capital, Share Buybacks, Capital Allocation, Investment Committee, Pension Fund Mgmt

**Funding / Issuance Management**
- Global funding requirements and liquidity risk appetite guide the issuance activities of Deutsche Bank liability products
- One credit to all markets, public or private, and across all currencies
- Senior Benchmark & Innovative Structured Issuance, Issue of Contingent Capital & Regulatory Capital Instruments
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### Treasury and Global Markets – partnering on various fields

<table>
<thead>
<tr>
<th>Treasury</th>
<th>Global Markets</th>
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<tr>
<td>Banking book risk</td>
<td>Transferred into trading books</td>
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<tr>
<td>Issuance of senior &amp; junior instrum.</td>
<td>GM Global Capital Markets</td>
</tr>
<tr>
<td>Securitizations / Secondary market trading</td>
<td>GM Global Credit Trading</td>
</tr>
<tr>
<td>Share buybacks</td>
<td>GM Equities</td>
</tr>
<tr>
<td>FX hedging of capital</td>
<td>GM Global FX / Structured Capital Mkts.</td>
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Deposit bucketing as effective asset & liability management tool

- Empirical stability of retail core deposits serves as natural hedge for interest rate & liquidity risk of retail loans

- Duration of deposit bucketing to reflect correlation of customer rates to market rates

- Matching duration reduces structural hedging costs and results in stable income margins

- Any residual interest rate risk is hedged

- Virtually no interest rate risk in banking book

**Determine “core balance“ and duration**

- Business scenarios
- Stochastical projections

**Reduction of earnings risk**

- Stabilization of yield
- Revolving investment strategy
Daily cash flow projection and limits for the first 8 weeks

- Daily cash flow projection based on contractual maturity
- Modelling of liabilities and loan assets with non-contractual maturities
- Cash flow limits for the first 8 weeks consider the impact from predefined stress events
- Framework includes limit for short-term wholesale funding
Structural Funding Profile

Further improvement due to long-term capital market issues and stable retail deposits

- Profile includes all assets and all liabilities with their contractual maturity
- Assets and liabilities are included based on maturity modelling if a behavioural maturity better reflects their effective liquidity
- Equity is included as a permanently available source of liquidity
- Residual exposure at short end is limited to our tolerance for liquidity risk
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Balance sheet structure boosted since IFRS implementation

**Assets**
- Cash / Bank / Central bank
- Other assets
- Loans (net)
- Other
- Financial assets

**Liabilities**
- Equity
- Unsecured funding
- Secured funding
- Other liabilities

Total EUR 1.9 tn

Note: Indicative figures as per 30 Sep 2007

(1) Includes Cash and due from banks, Interest-earning deposits with banks, Central bank funds sold and securities purchased under resale agreement.
(2) Includes Securities borrowed, Equity method investments, Premises and equipment (net), Intangible Assets, Income tax assets.
(3) Difference between total balance sheet and equity plus the non-accounting driven categories of secured, unsecured funding for the purpose of this presentation (i.e. mainly non-cash items).

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Secured funding

• Repo market:
  Deutsche Bank is a significant player in bilateral and tri-party repo and stock loan market. A substantial portion of the trading assets are funded on a secured basis, some of which through Central Bank tender operations.

• Central bank access:
  DB is clearer in many currencies (including USD, EUR, GBP, and JPY) and has central bank access across the regions.

• Liquidity portfolio:
  DB maintains liquidity portfolio as for central bank pledge across major hubs and time zones.

• Unencumbered trading assets:
  Significant portion of remaining unsecured funded trading assets are highly liquid and ready available for secured funding.

Note: Illustrative distribution based on internal management information systems
**Broad and stable unsecured funding base**

The bank’s unsecured funding base is well diversified over a broad range of products and markets. Funding mix further strengthened by increase of stable deposit base and capital market issuances while reducing reliance on short-term wholesale funding. Further significant growth in stable funding sources in 4Q2007.
Deutsche Bank’s issuance strategy

**Internal drivers**
- Capital planning
- Spread management
- Diversification

**External drivers**
- Market opportunities
- Investor demand

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Integrated long-term issuance strategy

Funding requirements
Capital markets issues are well diversified

Total outstanding of EUR 98 bn*

Distribution by type

- Capital instruments: 36%
- Senior vanilla: 49%
- Senior structured: 15%

Distribution by currency

- USD: 39%
- EUR: 46%
- JPY: 3%
- CHF: 4%
- GBP: 2%
- CAD: 1%
- Other: 5%
Review of issuance plan 2007

- Orig. funding plan largely completed by end-July
  - ~ EUR 19bn based upon leading the cycle strategy
- Treasury revised long-term funding plan in light of this summer’s liquidity squeeze:
  - Diversify away from dislocated money markets
  - Prepare for market headline risk
  - Provide additional funding for business opportunities
- Raised EUR 24 bn mid-August to mid-October:
  - Range of currencies and maturities (avg. 6 yrs)
  - Competing with banks-and-brokers for limited opportunities
  - ‘Reopened’ numerous ‘closed’ markets
- Significant issues
  - Debut issuance in fixed rate US mkt with 5 and 10 yrs
  - Largest EUR-denominated senior issuance by a financial institution (EUR 3 bn 5yr issue)
  - Largest AUD issue by DB to date
  - Largest Samurai issuance by DB to date
  - Continued issuance in niche ccy, eg. CHF, SEK, SGD

Issuance activity year-to-date, in EUR bn

<table>
<thead>
<tr>
<th>By product</th>
<th>Initial Plan 2007: 23.0</th>
<th>Actual: 42.8</th>
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<tbody>
<tr>
<td>Capital</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Plain Vanilla</td>
<td>29.2</td>
<td></td>
</tr>
<tr>
<td>Structured</td>
<td>11.5</td>
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Volatility in DB credit spreads in line with market

- Junior DB 5y CDS
- Senior DB 5y CDS
- Itraxx Senior Finan. 5y

(in bps)
Issuance plan 2008

Total issuance at EUR 38 bn

- Key demand drivers for issuance plan
  - Business growth
  - Diversify away from dislocated money markets
  - Funding of 2008 maturities and partial pre-funding of 2009 maturities

- Key figures for base case
  - Issuance plan of EUR 38 bn increases capital markets outstanding to around EUR 130 bn at 2008 year-end
  - Average duration at 5 to 6 years

- Low/high scenarios reflect uncertainty with regard to
  - Business demand
  - Market / spread development
  - Plan will be reviewed regularly to reflect supply and demand changes

- We do not expect a rapid correction in the recent spread widening over 1Q2008 – Deutsche Bank has performed well vs. peers

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**Capital markets issuance plan 2008, in EUR bn**

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<thead>
<tr>
<th>Case</th>
<th>Low</th>
<th>Base</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital instruments</td>
<td>1.5</td>
<td>2.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Senior debt</td>
<td>31.5</td>
<td>36</td>
<td>41.5</td>
</tr>
<tr>
<td>Total volume</td>
<td>33</td>
<td>38</td>
<td>44</td>
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**Market & peer credit spreads, 5yr CDS in bps**

- 15 Jun
- 16 Aug
- 05 Dec
Agenda

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4. Summary
Summary

- Virtually all banking book rate risk transferred into trading books
- Significant duration extension in 2007
- Strong growth in stable deposit base in 2007
- Continuation of duration extension & stable deposit growth in 2008
Cautionary statements

Unless otherwise indicated, the financial information provided herein has been prepared under the International Financial Reporting Standards (IFRS). It may be subject to adjustments based on the preparation of the full set of financial statements for 2007. The segment information is based on IFRS 8: ‘Operating Segments’. IFRS 8, whilst approved by the International Accounting Standards Board (IASB), has yet to be endorsed by the European Union. The segment information in our Interim Report provides a reconciliation to IAS 14, which is the EU-endorsed standard covering this topic.

This presentation also contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of Deutsche Bank. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our trading revenues, potential defaults of borrowers or trading counterparties, the implementation of our management agenda, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of 27 March 2007 on pages 9 through 15 under the heading “Risk Factors.” Copies of this document are readily available upon request or can be downloaded from www.deutsche-bank.com/ir.

This presentation contains non-IFRS financial measures. For a reconciliation to directly comparable figures reported under IFRS refer to the 3Q2007 Financial Data Supplement, which is accompanying this presentation and available on our Investor Relations website at www.deutsche-bank.com/ir.