

# *Risk Management* *2016*

Danske Bank Group



# Contents

|    |     |                          |
|----|-----|--------------------------|
| 4  | 1.  | 2016 in brief            |
| 9  | 2.  | Risk organisation        |
| 17 | 3.  | Capital management       |
| 28 | 4.  | Credit risk              |
| 43 | 5.  | Counterparty credit risk |
| 47 | 6.  | Market risk              |
| 56 | 7.  | Liquidity risk           |
| 66 | 8.  | Operational risk         |
| 73 | 9.  | Insurance risk           |
| 78 | 10. | Other risks              |
| 82 | 11. | Definitions              |
| 88 | 12. | Management declaration   |

The objective of Risk Management 2016 is to inform shareholders and other stakeholders of Danske Bank Group's risk management, including policies, methodologies and practices.

Additional Pillar III disclosures required under Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 (CRR) and the Danish Executive Order on Calculation of Risk Exposure, Own Funds and Solvency Need can be downloaded from [www.danskebank.com/ir](http://www.danskebank.com/ir).

## *2016 in brief*

|   |     |                             |
|---|-----|-----------------------------|
| 6 | 1.1 | Capital management          |
| 6 | 1.2 | Credit risk                 |
| 6 | 1.3 | Counterparty credit risk    |
| 6 | 1.4 | Market risk                 |
| 7 | 1.5 | Liquidity risk              |
| 7 | 1.6 | Operational risk            |
| 7 | 1.7 | Insurance risk              |
| 8 | 1.8 | Key ratios and risk figures |

# 1.

Economic conditions in Danske Bank Group's home markets were generally benign for most of 2016 despite turmoil from a variety of geopolitical risks in Europe, the United Kingdom, the United States and Asia. While GDP growth in Denmark picked up slightly from a low level, demand for credit lending remained rather limited. In Norway, we saw moderate growth in our residential mortgage book as a direct consequence of our strategic partnership agreements, while low oil prices continued to slow down the recovery in the offshore oil industry and delay new investment initiatives. In Sweden, growth remained robust at a somewhat slower pace, with Swedish consumption and housing investments softening throughout the year. The continuation of low interest rates raised concerns about possible asset price bubbles in the property markets of Sweden, Norway and urban areas of Denmark, and we continue to focus on credit underwriting standards and the portfolio effects of various regulatory tightening initiatives.

Broadly speaking, uncertainties about the implementation of the "hard Brexit" proposed by the UK government are expected to dampen business investment in Britain. In 2016, investment in the United Kingdom declined because companies remained on the sidelines awaiting the political implications of the separation process. The Nordic countries saw lower levels of business investment, while the depreciation of the pound affected export trade with the United Kingdom. Despite the uncertainty over future economic growth and monetary policy in Europe, our core markets were affected less than we had expected.

Despite relatively low economic growth in 2016, the execution of the Group's strategy to become a more customer-focused and cost-efficient bank continued to yield positive results. Asset quality and our risk profile continued to improve, with capital and liquidity levels remaining at satisfactory levels. We also managed to reduce our Non-core portfolios in Ireland and divest of a large part of our Baltic personal banking portfolio in 2016. Non-performing assets were significantly reduced, reflecting the improvement in asset prices and a continuation of strong investor interest. The soft spot remained our energy and utilities portfolio, which saw higher impairments because of expectations of lower oil prices for longer. In July 2016, S&P Global upgraded Danske Bank A/S's standalone credit profile (SACP) from A- to A as a result of the improved capitalisation. In October 2016, Moody's upgraded Danske Bank A/S's long-term deposit rating to A1 from A2 and affirmed all other ratings. Moody's also changed the outlook for Danske Bank A/S's ratings to positive from stable.

In order to better position our activities in an uncertain financial environment with changing customer expectations, we have steadily enhanced our risk management capabilities by taking a more consistent and integrated approach. Two business-line credit functions - Corporates & Institutions Credit and Business Banking Credit - were merged into a unified Corporate Credit function that oversees all credit risks for corporate, financial and institutional customers. Moreover, we strengthened the front-line business organisation by transferring resources from the credit unit to lending support functions. By bringing credit expertise closer to customers, we intend to accelerate the decision-making process and provide offerings that are better suited to our customers' needs and financial capacity.

In 2016, Group Risk Management consolidated its portfolio management resources into a dedicated Portfolio Management function with the aim of strengthening the group-wide risk appetite framework and building enhanced analytical and stress-testing capabilities. Moreover, we enhanced our risk reporting by introducing a local version of the CRO Letter in regions and business segments that presents a comprehensive view of risks and risk profiles in these markets. The report is discussed by local risk committees and used by senior management in monitoring the Group's overall risk profile to ensure that it remains within the defined risk appetite.

The main developments in the individual risk areas in 2016 are summarised below, and a table of key ratios and risk figures is provided at the end of the section.

## 1.1 Capital management

The Group is constantly improving its capital allocation framework in order to reflect as closely as possible the effects of new regulation and the risk entailed in business activities. In 2016, we changed the principles for allocating capital across the business units to ensure full alignment with the regulatory requirements and our common equity tier 1 (CET1) capital ratio target.

At the end of 2016, our capital position was strong, with a total capital ratio of 21.8% and a CET1 capital ratio of 16.3% (2015: 21.0% and 16.1%, respectively). At the same date, the Group's solvency need was 10.6%, and its leverage ratio was 4.6% under the transitional rules. Assuming fully phased-in tier 1 capital under CRR/CRD IV without taking into account any refinancing of non-eligible additional tier 1 capital instruments, the leverage ratio would be 4.3%.

Section 3 of this report provides more detailed information on capital management.

## 1.2 Credit risk

In 2016, the Group saw a satisfactory increase in net customer inflow in Norway and Sweden, mainly because of strategic partnerships with large professional unions, and this had a positive effect on our results. Credit quality remained stable in the light of stable macroeconomic conditions, managerial efforts and enhanced underwriting. Total net impairment charges at our core business units amounted to DKK -3 million (2015: DKK 57 million).

Net non-performing exposure (NPL) decreased to DKK 21.9 billion at the end of 2016 (2015: DKK 24.7 billion).

Our commercial property portfolio increased in 2016, mainly as a result of new high-quality transactions in Sweden. The overall credit quality of the portfolio improved in 2016, mainly because of increased exposure to highly rated customers and the continuation of low interest rates.

In the agricultural industry, market conditions showed positive signs in the second half of the year. The main drivers behind the market developments were stronger demand from China, reduced supply and higher productivity. Overall, high indebtedness and a high proportion of variable-rate loans remained the major risks, and our focus was on reducing our customers' interest rate sensitivity.

In the shipping industry, market conditions remained difficult and continued to affect the portfolio's credit quality. The offshore oil and gas support segment in particular was hurt by the negative investment sentiment coming from expectations of lower oil prices for longer. We continued to monitor market conditions and the way they affect our customers' financial performance and engaged constructively with our customers to find satisfactory restructuring solutions.

We actively reduced the total credit exposure in our Non-core portfolio by DKK 5.6 billion to DKK 23 billion at 31 December 2016 (2015: DKK 28.6 billion).

Section 4 of this report provides more detailed information on credit risk.

## 1.3 Counterparty credit risk

Trading volumes in 2016 were relatively stable, with total exposure at the end of the year similar to the level at the end of 2015. At the end of 2016, the total exposure (on a mark-to-market basis after close-out netting and collateral) of the Group's derivatives and securities financing transactions was DKK 46.7 billion (2015: DKK 49.9 billion). Around 52% of the derivatives trading volume was cleared through central clearing counterparties, and 95% of non-cleared transactions were supported by collateral agreements.

Section 5 of this report provides more detailed information on counterparty credit risk

## 1.4 Market risk

The Group continued de-risking its trading operations in 2016, reducing its average trading-related market risk from DKK 52 million in 2015 to DKK 44 million in 2016. Stand-alone interest rate risk fell in 2016, mainly because of significantly lower market volatility and reductions in positions early in the year. More stable P/L results led to significantly fewer days

with losses during the year. Interest rate risk in the banking book remained relatively stable. We continued to develop our xVA model to make it in line with evolving market practices, and at the end of 2016, our xVA model framework was aligned with the best practice in the industry.

Section 6 of this report provides more detailed information on market risk.

## *1.5 Liquidity risk*

The Group's liquidity position and liquidity profile remained strong throughout 2016. At the end of 2016, our liquidity coverage ratio stood at 158% (2015: 125%). We issued senior debt for DKK 62.6 billion and covered bonds for DKK 19.2 billion, totalling DKK 81.8 billion. We tapped the US domestic markets twice, most recently with dual-tranche issues of 5-year fixed-rate and 3-year floating-rate bonds. We redeemed long-term debt for DKK 62.9 billion. Stress tests showed that we have a sufficient liquidity buffer well beyond 12 months.

Section 7 of this report provides more detailed information on liquidity risk.

## *1.6 Operational risk*

As in previous years, we focused on anti-money-laundering measures in 2016 in our ongoing efforts to ensure compliance with regulations and industry standards. We continued to increase resources and launched new initiatives. In 2016, we strengthened the compliance organisation by establishing the Global Monitoring & Financial Crime Compliance function, which is responsible for group-wide transaction monitoring to identify possible money laundering, terrorism financing, customer tax evasion and market abuse. We focused on developing our existing Know Your Customer systems and processes and also increased transaction monitoring, improved employee training, and coordinated an extensive update of the Group's customer database.

We also focused on cybersecurity risk in 2016. Cyberattacks are becoming more sophisticated at targeting customers directly, and we are committed to protecting our customers. During the year, we enhanced our IT strategy and our cybercrime framework substantially. Two new units were established to focus on cybersecurity management: the Security Operation Centre and the Security Incident Response Team. They work according to best-practice playbooks in the National Institute of Standard and Technology framework on security incidents.

Section 8 of this report provides more detailed information on operational risk and compliance.

## *1.7 Insurance risk*

Danica Pension's solvency ratio was 246% at the end of 2016, compared with 199% at the end of 2015. The increase was attributable mainly to large customer buffers and the transitional regulatory measure for equity risk, which was introduced in April 2016. Danica Pension performs both daily solvency monitoring and monthly best-effort solvency calculations, and past calculations show that the solvency ratio was stable in 2016.

Section 9 of this report provides more detailed information on insurance risk.

## 1.8 Key ratios and risk figures

| Key ratios and risk figures for Danske Bank Group<br>(At 31 December)                  | 2016        | 2015        | 2014         |
|--|-------------|-------------|--------------|
| <b>Earnings</b>  |             |             |              |
| Dividends per share (DKK)  | 9.0         | 8.0         | 5.5          |
| Earnings per share (DKK) <sup>1</sup>  | 20.2        | 12.8        | 3.8          |
| Share price (end of year) (DKK)  | 214.2       | 185.2       | 167.4        |
| Book value per share (DKK) <sup>1</sup>  | 162.8       | 153.2       | 146.8        |
| Return on avg. shareholders' equity (%) <sup>1</sup>                                   | 13.1        | 8.5         | 2.5          |
| Return on goodwill impairment charges on average shareholders' equity (%) <sup>1</sup> | 13.1        | 11.6        | 8.6          |
| Return on avg. tangible equity (%) <sup>1</sup>  | 14.0        | 12.9        | 10.5         |
| Net interest income as % of loans and deposits   | 0.9         | 0.9         | 1.0          |
| Cost/income ratio (%)  | 47.2        | 59.8        | 72.1         |
| Cost/income ratio before goodwill impairment charges (%)                               | 47.2        | 49.4        | 51.5         |
| <b>Solvency</b>  |             |             |              |
| Common equity tier 1 capital ratio (%)   | 16.3        | 16.1        | 15.1         |
| Tier 1 capital ratio (%)   | 19.1        | 18.5        | 16.7         |
| Total capital ratio (%)  | 21.8        | 21.0        | 19.3         |
| Leverage ratio, transitional rules (%)   | 4.6         | 4.7         | 4.1          |
| Leverage ratio, fully phased in (%)  | 4.3         | 4.2         | 3.6          |
| Total assets (DKK billions)  | 3,484       | 3,293       | 3,453        |
| <b>Funding &amp; Liquidity</b>   |             |             |              |
| Liquidity coverage ratio (LCR) (%)   | 158         | 125         | NA           |
| Asset encumbrance (DKK billions)   | 1,314       | 1,170       | NA           |
| Asset encumbrance ratio (%) <sup>2</sup>   | 42          | 44          | NA           |
| S&P Global issuer rating & outlook   | A / stable  | A / stable  | A / negative |
| Moody's issuer rating & outlook  | A2 / stable | A2 / stable | A3 / stable  |
| Fitch issuer rating & outlook  | A / stable  | A / stable  | A / stable   |
| <b>Asset quality</b>   |             |             |              |
| Risk exposure amount total (DKK billions)  | 815.3       | 833.6       | 865.1        |
| Expected loss (DKK billions)   | 14.9        | 17.7        | 23.5         |
| Impairment charges, loans, total, full year (DKK millions) <sup>2</sup>                | -3          | 57          | 2,788        |
| Impairment charges, loans, individual accumulated (DKK billions) <sup>2</sup>          | 18.5        | 23.2        | 29.1         |
| Loan loss ratio, full year (%) <sup>3</sup>  | -           | 0.0         | 0.2          |
| Non-performing loans, gross exposure (DKK billions) <sup>3</sup>                       | 40.4        | 47.8        | 58.4         |
| Non-performing loans, net exposure (DKK millions) <sup>3</sup>                         | 21.9        | 24.7        | 29.4         |
| Non-performing loans as % of total gross exposure (%)                                  | 1.6         | 2.0         | 2.5          |
| Non-performing loans coverage ratio (%) <sup>4</sup>                                   | 82.7        | 82.8        | 86.2         |
| Defaulted loans, gross (DKK billions) <sup>3</sup>                                     | 21.4        | 26.6        | 29.5         |
| Defaulted loans, net (DKK billions) <sup>3</sup>                                       | 8.8         | 10.5        | 10.6         |
| Forborne loans (DKK billions)  | 24.6        | 17.7        | 8.9          |
| <b>Other</b>   |             |             |              |
| Core net credit exposure, lending activities (DKK billions)                            | 2,534       | 2,323       | 2,269        |
| Non-core net credit exposure, lending activities (DKK billions)                        | 23.0        | 28.6        | 31.3         |
| Exposure at default (DKK billions)   | 2,581       | 2,356       | 2,194        |
| Assets under management (DKK billions)   | 1,420       | 1,369       | NA           |

<sup>1</sup>Ratios are calculated as if the additional tier 1 capital were classified as a liability. Average shareholders' equity is calculated as a quarterly average.

<sup>2</sup>Group level.

<sup>3</sup>Group level, core portfolios, excluding non-core.

<sup>4</sup>Accumulated individual impairment charges as a percentage of gross impaired loans net of collateral (after haircut).

# *Risk organisation*

|    |       |   |
|----|-------|---|
| 10 | 2.1   | Risk organisation                           |
| 10 | 2.1.1 | Board of Directors and Group Internal Audit |
| 11 | 2.1.2 | Executive Board                             |
| 11 | 2.2   | Risk governance                             |
| 12 | 2.3   | Risk committees                             |
| 13 | 2.4   | Risk management                             |
| 13 | 2.4.1 | Business units                              |
| 14 | 2.4.2 | Group Risk Management                       |
| 14 | 2.4.3 | CFO area                                    |
| 15 | 2.4.4 | COO area                                    |
| 15 | 2.5   | Report and monitoring                       |
| 16 | 2.5.1 | Crisis management                           |
| 16 | 2.5.2 | Management declaration                      |

# 2.

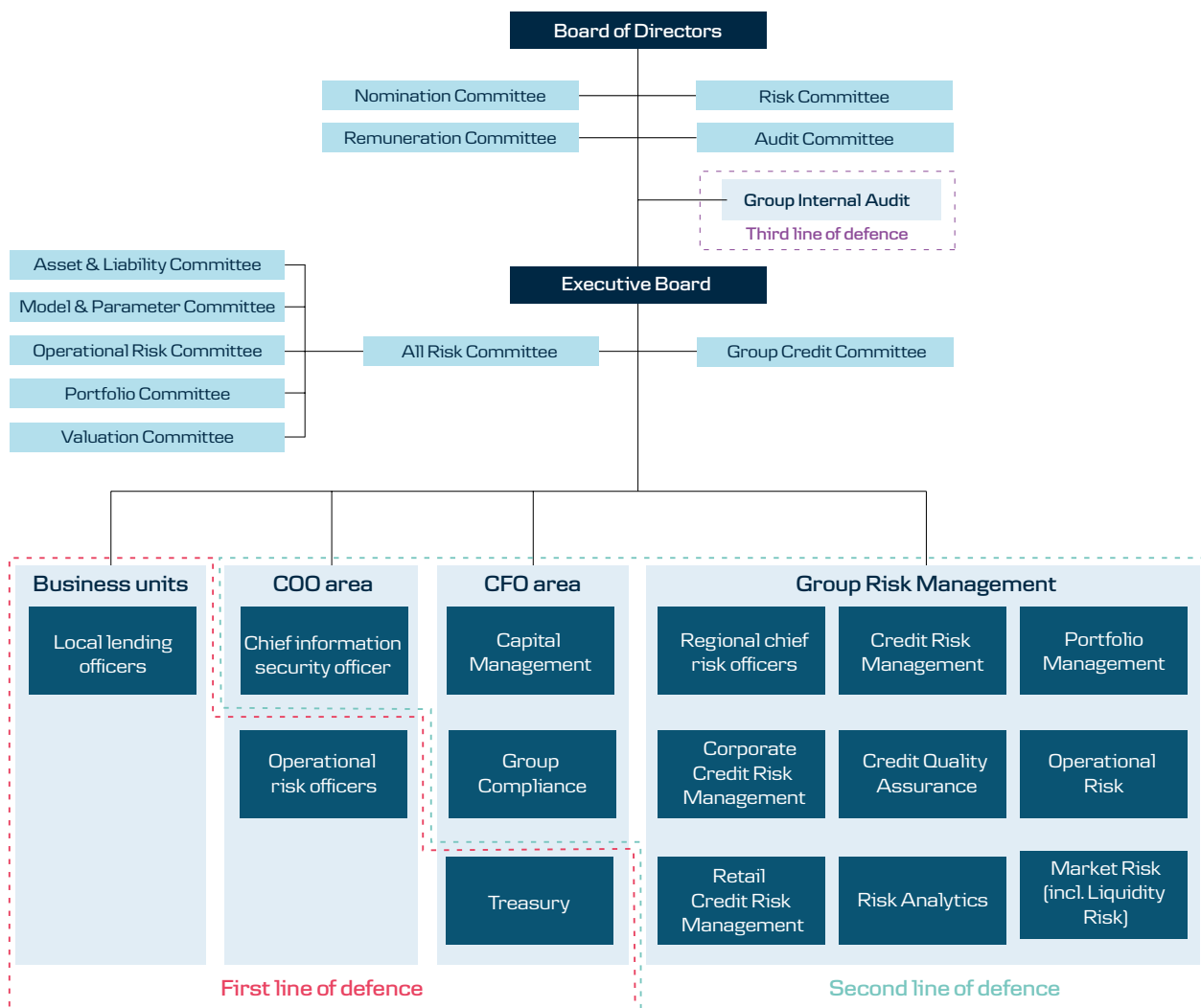


## 2.1 Risk organisation

The Group's risk management practices are organised according to the principle of three lines of defence. These lines of defence segregate duties between (1) units that enter into business transactions with customers or otherwise expose the Group to risk, (2) units in charge of risk oversight and control, and (3) the internal audit function

The heads of the business units, operations areas and service areas are responsible for all business-related risks. The segmented organisation allows risk management processes to be tailored to the various customer segments and to be aligned across borders.

### Risk organisation: Two tier management structure with three lines of defence



Danske Bank Group's rules of procedure for the Board of Directors and the Executive Board specify the responsibilities of the two boards and the division of responsibilities between them. The two-tier management structure and the rules of procedure, which were developed in accordance with Danish law, regulations and relevant corporate governance recommendations, are central to the organisation of risk management and the delegation of authorities throughout the Group.

The Group operates in accordance with statutory requirements governing listed Danish companies in general and financial institutions in particular, such as the requirements set forth in the Danish Executive Order on Management and Control of Banks issued by the Danish Financial Supervisory Authority (the Danish FSA). The Group also follows relevant recommendations for effective corporate governance.

#### 2.1.1 Board of Directors and Group Internal Audit

The Board of Directors ensures that the Group is organised properly. As part of this duty, the Board appoints the mem-

bers of the Executive Board, the Group chief audit executive (CAE) and the secretary to the Board of Directors.

In accordance with the rules of procedure, the Board of Directors approves the overall business model, risk profile and strategy. In addition, the Board receives regular reporting on and monitors the main risks and reviews the largest credit exposures. The Board reviews risk appetites, frameworks, policies, instructions and delegated risk mandates at least once a year.

Regular reporting enables the Board of Directors to monitor whether the risk appetites, policies, instructions and mandates are complied with and whether they are appropriate, given the Group's business model, risk profile and strategy. In addition, the Board regularly reviews reports containing analyses of the Group's portfolios, including information on concentrations.

The Board of Directors consists of six to ten members elected by the general meeting and a number of employee representatives as stipulated by Danish statutory rules. At the end of 2016, the Board consisted of twelve members, including four employee representatives.

The Board meets at least eight times a year in accordance with a schedule that is set for each calendar year. Once a year, the Board holds an extended two-day strategy seminar to discuss the Group's strategy.

The CAE, who heads the Group Internal Audit department, reports directly to the Board of Directors. The primary role of Group Internal Audit is to help the Board of Directors and the Executive Board protect the assets, reputation and sustainability of Danske Bank Group. The scope of Group Internal Audit's work is unrestricted. The CAE prepares an audit plan for the year that is reviewed by the Audit Committee and the Board of Directors and is approved by the latter.

### 2.1.2 Executive Board

The Executive Board is responsible for the day-to-day management of the Group as stated in the rules of procedure. The Executive Board sets forth specific risk directives, supervises the Group's risk management practices, approves credit applications up to a defined limit and ensures that bookkeeping and asset management are sound and in accordance with the business model, strategy plan, policies, instructions and guidelines established by the Board of Directors and with applicable legislation.

The Executive Board consists of the chief executive officer, the heads of the four main business units and the heads of group functional areas related to risk, finance, and services and IT.

## 2.2 Risk governance

Risk policies and appetites defined by the Board of Directors and detailed in directives set forth by the Executive Board are the foundation for the business and control procedures of the business units and for systems development throughout the Group.

The Board of Directors sets forth individual risk appetites for credit risk, market risk, operational risk and liquidity risk. Each risk appetite specifies the risk types and risk amounts that the Board of Directors is willing to accept in pursuit of the Group's strategic goals. Relevant KPIs are incorporated in regular risk reporting, and this enables the Group to monitor whether the risk profile remains within the risk appetite formulated. For more information about risk appetites, see the individual risk sections in this report.

The Board of Directors determines what risks the Group may assume, the size of these risks, the limits on the main activities and the principles for calculating and measuring such risks. The Group's risk profile covers the following risk types:

- Credit risk, including counterparty credit risk
- Market risk
- Liquidity risk
- Operational risk
- Insurance risk

At business unit level, new product approval procedures are based on a directive provided by the Executive Board to the heads of the business units. Materiality criteria determine whether the approval of new products is escalated to the Group's chief risk officer. In cases of a reputational or material financial nature, both the Executive Board and the Board of Directors are involved in new product approval processes.

## 2.3 Risk committees

The Board of Directors has established four committees to supervise specific risk areas and to prepare topics for consideration by the Board. Under Danish law, board committees have no decision-making authority but serve in a consulting role only. The role of each committee is described in the table below.

### Committees established by the Board of Directors

|  |   |
|--|---|
| <p><b>Risk Committee</b></p> <p>Convenes at least six times a year</p>     | <p>The Risk Committee operates as a preparatory committee for the Board of Directors with respect to the Group's risk management and related matters.</p> <p>The committee advises the Board of Directors on the Group's risk profile, risk culture, risk appetite, risk strategy and risk management framework.</p> <p>The committee reviews and submits recommendations to the Board of Directors on the Group's risk appetite, risk policies, risk instructions, capital levels and allocation, leverage (ratio), liquidity, solvency need, recovery requirements, business continuity plans, impairment levels, new product approval processes, and the credit quality of the loan portfolio. Furthermore, the Risk Committee reviews the use of internal models, the adequacy of risk management resources and incentive programmes.</p> |
| <p><b>Remuneration Committee</b></p> <p>Convenes at least twice a year</p> | <p>The Remuneration Committee operates as a preparatory committee for the Board of Directors with respect to general remuneration matters, with a focus on the remuneration of the members of the Board of Directors, the Executive Board, material risk takers, key employees and executives in charge of control and internal audit functions, and incentive programmes.</p> <p>The committee reviews and submits recommendations to the Board of Directors on remuneration policies and practices and on changes in remuneration levels, including variable remuneration. The committee monitors the incentive programmes to ensure that they promote ongoing, long-term shareholder value creation and that they comply with the Remuneration Policy.</p>   |
| <p><b>Nomination Committee</b></p> <p>Convenes at least twice a year</p>   | <p>The Nomination Committee operates as a preparatory committee for the Board of Directors with respect to the nomination and appointment of candidates for the Executive Board and the Board of Directors. The committee evaluates the work and performance of the Executive Board, the Board of Directors and the latter's individual members.</p> <p>The committee also submits policy proposals to the Board of Directors on succession planning, diversity and inclusion.</p>  |
| <p><b>Audit Committee</b></p> <p>Convenes at least four times a year</p>   | <p>The Audit Committee operates as a preparatory committee for the Board of Directors with respect to accounting and auditing, including related risk matters. The committee reviews and submits recommendations to the Board of Directors on financial reports and the assessment of the related risks, key accounting principles and procedures, internal controls, reports from both internal and external auditors, whistleblowing, compliance and anti-money laundering activities.</p>  |

The Executive Board has established two risk committees: the All Risk Committee and the Group Credit Committee.

### Committees established by the Executive Board

|  |  |
|--|--|
| <p><b>All Risk Committee</b><br/>Consists of the members of the Executive Board</p>  | <p><b>Group Credit Committee</b><br/>Consists of selected members of the Executive Board</p>   |
| <p>Convenes once a month</p>   | <p>Convenes twice a week</p>   |
| <p>On behalf of the Executive Board, the committee</p> <ul style="list-style-type: none"> <li>manages the balance sheet structure and developments</li> <li>defines the overall funding structure</li> <li>defines the general principles for measuring and managing risks</li> <li>monitors the effects of regulation</li> <li>ensures a robust and well-functioning risk management structure</li> </ul> | <p>On behalf of the Executive Board, the committee</p> <ul style="list-style-type: none"> <li>approves or rejects credit applications that exceed the lending authorities delegated to the business units</li> <li>endorses credit applications for consideration by the Board of Directors</li> </ul> |

The All Risk Committee has overall responsibility for risk management as defined in the risk framework determined by the Board of Directors. The committee reviews the risk reports submitted to the Board of Directors and the Board's

committees. The committee receives periodic group liquidity and solvency reports and monitors risk trends at both the business unit and the group level.

The All Risk Committee has established five sub-committees to ensure that adequate time and attention are given to the individual risk management areas. These sub-committees consist of representatives from the All Risk Committee and senior staff from relevant risk management functions.

#### Sub-committees of the All Risk Committee

|   |  |
|---|--|
| <b>Asset &amp; Liability Committee</b><br>Convenes at least every month       | The committee oversees the alignment of balance sheet risks with the Group's liquidity risk appetite. It has a sub-committee, the Group Risk Liquidity Committee, which focuses on liquidity risk and funding plans. |
| <b>Model &amp; Parameter Committee</b><br>Convenes at least four times a year | The committee oversees all material risks associated with risk models and model parameters that contribute to the risk exposure amount (REA) and the Group's business decision models.                               |
| <b>Operational Risk Committee</b><br>Convenes at least six times a year       | The committee oversees the implementation and maintenance of the operational risk framework within the Group.  |
| <b>Portfolio Committee</b><br>Convenes at least six times a year              | The committee oversees all material risks associated with the Group's business model that can be managed on a portfolio basis as well as activities across business units and geographical regions.                  |
| <b>Valuation Committee</b><br>Convenes at least four times a year             | The committee oversees the valuation estimates and the valuation governance process.   |

In general, the committees oversee risk developments within the Group and ensure that risk management and risk reporting are always compliant with statutory regulations and the Group's general principles for such practices.

## 2.4 Risk management

The first line of defence is represented by the business units and the operations and service organisations. Each unit operates in accordance with the risk policies and delegated mandates. The units are responsible for having skills, operating procedures, systems and controls in place to ensure their compliance with risk policies and mandates and the execution of sound risk management.

The second line of defence is represented by group-wide functions that monitor whether the business units and the operations and service organisations adhere to the general policies and mandates. Group Risk Management, units in the CFO area, regional chief risk officers and the chief information security officer share the responsibility for these group-wide functions.

The third line of defence is represented by Group Internal Audit.

### 2.4.1 Business units

Each of the four business units – Personal Banking, Wealth Management, Business Banking, and Corporates & Institutions – is headed by a member of the Executive Board. Northern Ireland is the fifth business unit serving personal and business customers, and it is a separate legal entity with its own executive board and separate board of directors.

The mandate of the business units to originate credit applications, take deposits and undertake investments for the Group is regulated by risk policies, instructions and limits. The Group strives to cultivate a corporate culture that supports and enforces the organisation's objective to assume selected risks in accordance with the defined guidelines.

The heads of the business units and the heads of the operations and service areas are responsible for all business-related risks, and their responsibilities extend across national borders. Lending authorities are cascaded down from the Board of Directors, through the Executive Board to Group Risk Management, to lending officers at the business units. Credit applications exceeding the delegated lending authorities are submitted to the Group Credit Committee and to the Board of Directors. While the business units are responsible for risk assessment, the credit oversight functions led by the heads of credit at Group Risk Management check that credit applications are within the defined credit policy and credit risk appetite.

The business units perform the fundamental tasks required for sound risk management and controls. These tasks include updating customer information used in risk management systems and models as well as maintaining and following up on customer relationships. Each business unit is responsible for preparing documentation and recording business transactions properly.

The business units must also ensure that all risk exposures do not exceed the specific risk limits and comply with the Group's relevant guidelines.

#### **2.4.2 Group Risk Management**

Group Risk Management serves as the Group's second line of defence. It has responsibility for recommending and monitoring the Group's risk appetite and policies and for following up and reporting on risk issues across all risk types, organisational units and geographical regions. Group Risk Management also serves as a resource for referrals from local risk committees.

The department is headed by the Group's chief risk officer (CRO), who is a member of the Executive Board. In cooperation with the Group CEO, the Group CRO reports to the Board of Directors. The CRO has the authority to veto any decision in relation to credit applications. The following terms apply to the CRO position:

1. The CRO cannot be removed from office without the preceding approval of the Board of Directors.
2. The CRO is the only Executive Board member who is a permanent member of the Risk Committee.
3. The CRO is also responsible for the risk reports that are submitted to the Board of Directors, the Board Risk Committee, the Executive Board and the All Risk Committee. These reports do not require prior approval from the CEO.

Group Risk Management oversees the risk management framework and practices across the organisation and serves as the secretariat of the Group Credit Committee, the All Risk Committee and the following five sub-committees: the Model & Parameter Committee, the Operational Risk Committee, the Portfolio Committee, the Group Liquidity Committee and the Valuation Committee. Senior risk managers are also members of the Asset & Liability Committee.

At Group Risk Management, various sub-departments are responsible for monitoring and managing the Group's main risk types.

The heads of Retail Credit Risk Management and Corporate Credit Risk Management report directly to the CRO and are responsible for retail and wholesale banking, respectively. They delegate credit risk mandates and oversee the day-to-day credit risk management in the first line of defence in their respective areas. This also includes reviewing the approval and follow-up processes for the lending books of the business units.

Risk Analytics develops and maintains credit rating methodologies and models. The team ensures that rating methodologies and models are fit for day-to-day credit processing at the business units and that statutory requirements are met. A separate unit is responsible for validating credit risk parameters.

The Credit Quality Assurance function ensures that an effective credit risk control environment is in place in the first line of defence.

The Portfolio Management function is responsible for the development of the Group's risk appetite framework, stress-testing engine and portfolio management. The team facilitates the quarterly processes of calculating and consolidating the impairment of credit exposures and monitors and reports on the Group's consolidated credit portfolio, with sector- and country-specific views and risk appetites.

Regional chief risk officers are responsible, in cooperation with country managers, for ensuring compliance with local rules and regulation. Local risk committees are established where relevant.

#### **2.4.3 CFO area**

The CFO area is headed by the Group's chief financial officer (CFO), who is a member of the Executive Board. The department oversees the Group's financial reporting, budgeting and strategic business analysis, including the tools used by the business units for performance follow-up.

The department is also in charge of the Group's investor relations, relations with international rating agencies, legal, regulatory and corporate matters, capital management and compliance.

Group Capital Management is responsible for calculating the total REA, for regulatory reporting, for performing the

Group's internal capital adequacy assessment process (ICAAP), and for allocating internal capital to the business units.

Group Compliance is an independent function that is responsible for identifying, assessing, monitoring and reporting on whether the Group complies with applicable laws, regulations and internal requirements. The head of Group Compliance reports to the CFO.

Group Treasury is responsible for executing the funding plan, managing the Group's liquidity plan and monitoring its liquidity needs. Group Treasury also ensures that the Group's structural liquidity profile is within the defined limits and that the targets set by the Board of Directors and the All Risk Committee as well as regulatory and prudential requirements are met. Furthermore, Group Treasury is responsible for asset and liability management, private equity activities and long-term funding activities.

#### 2.4.4 COO area

The COO area is headed by the Group's chief operating officer (COO), who is a member of the Executive Board. The department is responsible for the Group's operations and Group IT. Group IT is headed by the chief technology officer (CTO).

The chief information security officer (CISO) reports functionally to the CTO, with a secondary reporting line to the CRO. The CISO is organisationally independent and may report and escalate issues directly to the Board of Directors in situations of severe policy breaches or notification of risks. The CISO heads Group IT Security & Risk within Group IT. Group IT Security & Risk performs control monitoring and ensures compliance with the Security Policy as a second line of defence function.

## 2.5 Reporting and monitoring

The Group has allocated a considerable amount of resources to risk monitoring and to ensuring that approved risk limits are not exceeded. Processes have been established for reporting changes in risks to the relevant management bodies and risk committees.

In 2016, the Group enhanced its enterprise-wide risk reporting by introducing a monthly report (CRO Letter) covering analyses across all risk types, business units and geographical regions.

### Risk Reporting

|                                 |  |
|---------------------------------|--|
| <b>CRO Letter</b>               | Provides a comprehensive overview of the Group's risk profile across all risk types, business units and geographical regions. The report is updated monthly and is presented to the All Risk Committee and to the Board of Directors.                                |
| <b>Portfolio Review reports</b> | Provides detailed portfolio and industry analyses focusing on exposure, risk factors, financial trends and performance.  |
| <b>Impairment Overview</b>      | Provides a quarterly overview of developments in collective and individual impairments.  |
| <b>Risk Management report</b>   | Provides a detailed description of the Group's risk profile, capital management, risk management organisation and risk frameworks. The report is presented along with the Additional Pillar III disclosures, and in concert they fulfil the CRR/CRD IV requirements. |

### Solvency and liquidity reporting

|                               |  |
|-------------------------------|--|
| <b>ICAAP report</b>           | Provides a review of the Group's capital adequacy. The report presents the results from stress tests, including the effects of various scenarios on expected losses and the solvency need. The report is submitted annually.   |
| <b>Quarterly ICAAP report</b> | Provides a quarterly review of the Group's capital adequacy. The report is an abridged version of the annual ICAAP report.   |
| <b>ILAAP report</b>           | Provides a description of the Group's liquidity situation and liquidity management, including its funding profile and plan. The report assesses liquidity risk indicated in liquidity stress tests and similar analyses. The report also describes the minimum amount of liquidity reserves required by the Group. The report is submitted annually. |

The Board of Directors receives risk reports, including ICAAP and ILAAP reports, on a regular basis. The Group's ICAAP report is submitted both quarterly and annually to the Board of Directors.

The Group regularly reviews and revises its risk and crisis management frameworks for the purpose of implementing new regulatory requirements, expanding its risk and crisis capabilities, and improving efficiency. The Board of Directors reviews the revised frameworks.

### **2.5.1 Crisis management**

The Group is a significant player in the Nordic financial markets and provides a number of critical functions upon which the financial systems in our core markets rely. The Group recognises the importance of having plans and procedures in place to ensure that it is viable in the long term and that the critical services are available.

The Group's operational crisis management is supported by business continuity plans, which describe measures that can restore the Group's operational capabilities and that allow it to recover from material operational risk events.

In a situation of severe financial stress, the Group's contingency plans for capital and liquidity will ensure that the Group takes measures to restore the Group's liquidity and funding position.

The Group has prepared a recovery plan in the event that conditions further deteriorate and threaten its liquidity or capital position and thus its long-term viability. The plan documents a framework that ensures that proper monitoring is in place to identify and understand a potential threat to the Group. It describes the governance processes and the selection of actions to be implemented to restore the Group's long-term viability.

The Group discusses the recovery plan with the Danish Financial Supervisory Authority and foreign supervisory authorities on an annual basis.

### **2.5.2 Management declaration**

The Board of Directors reviews all risk frameworks, risk policies, risk instructions and risk appetites at least once a year.

Annually, the chief risk officer initiates the preparation of a summarised risk framework overview. Together with other risk reports, this overview serves as the basis for the Board of Director's assessment of the Group's total and individual risks.

The management declaration on this assessment is included in the appendix (see section 12.1).

# Capital management

|    |       |  |
|----|-------|--|
| 18 | 3.1   | Capital profile  |
| 19 | 3.2.  | Capital management   |
| 19 | 3.2.1 | Capital planning   |
| 20 | 3.2.2 | Input from stress test analysis  |
| 21 | 3.2.3 | Capital allocation   |
| 21 | 3.3   | Total capital  |
| 22 | 3.3.1 | Consolidation methods  |
| 22 | 3.3.2 | Common equity tier 1 capital   |
| 22 | 3.3.3 | Statutory deductions for insurance companies and significant investments |
| 23 | 3.3.4 | Additional tier 1 capital and tier 2 capital                             |
| 23 | 3.4   | Total capital requirements   |
| 23 | 3.4.1 | Minimum capital requirement  |
| 25 | 3.4.2 | Solvency need  |
| 26 | 3.4.3 | Combined buffer requirement  |
| 26 | 3.5   | Future regulatory requirements   |
| 26 | 3.5.1 | Leverage ratio   |
| 27 | 3.5.2 | Minimum requirement for own funds and eligible liabilities               |
| 27 | 3.5.3 | Revised capital regulation and directive                                 |
| 27 | 3.5.4 | Basel IV   |

# 3.



### 3.1 Capital profile

The main purposes of the Group's capital management policies and practices are to support the Group's business strategy and to ensure a sufficient level of capital to withstand even severe macroeconomic downturns.

As part of the ongoing capital assessment, the Group reviewed its capital targets in 2016. In light of regulatory uncertainty, we have set a target for the common equity tier 1 (CET1) capital ratio in the range of 14-15% in the short-to-medium term. The target for the total capital ratio is set around 19%. With substantial capital in excess of the regulatory requirements, the Group considers itself well capitalised.

At the end of 2016, the Group's total capital ratio was 21.8% and its CET1 capital ratio 16.3%, against 21.0% and 16.1%, respectively, at the end of 2015. The Group's capital management policies and practices are based on the Internal Capital Adequacy Assessment Process (ICAAP), and the Group determines its solvency need during this process.

At the end of 2016, the Group's solvency need was 10.6%. The solvency need consists of the 8% minimum capital requirement for risks covered under Pillar I and an additional capital requirement under Pillar II for risks not covered under Pillar I.

In addition to the solvency need, there is also a combined buffer requirement. At the end of December 2016, the Group's combined capital buffer requirement was 2.2%. When fully phased-in, the buffer requirement will be 6.0%, bringing the fully phased-in CET1 capital requirement to 12.0% and the fully phased-in total capital requirement to 16.6%. Assuming fully phased-in rules, the Group would have excess CET1 capital of 4.2 percentage points at the end of 2016.

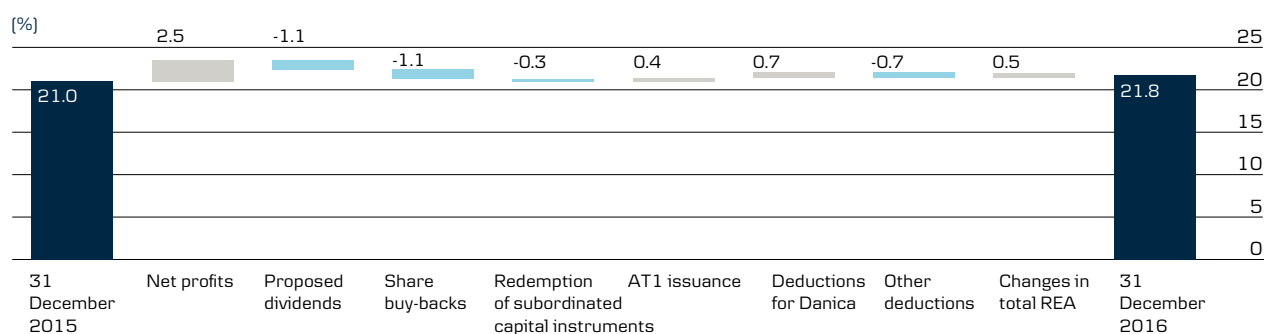
| Capital ratios and requirements<br>(percentage of total risk exposure amount) | 31 December 2016 | Fully phased-in <sup>1</sup> |
|---|------------------|------------------------------|
| <b>Capital ratios</b>   |                  |                              |
| CET1 capital ratio  | 16.3             | 16.2                         |
| Total capital ratio   | 21.8             | 19.9                         |
| <b>Capital requirements (incl. buffers)<sup>2</sup></b>                       |                  |                              |
| Minimum CET1 capital requirement (Pillar I)                                   | 4.5              | 4.5                          |
| Capital add-on to be met with CET1 capital (Pillar II)                        | 1.5              | 1.5                          |
| Combined buffer requirement   | 2.2              | 6.0                          |
| - Portion from countercyclical capital buffer                                 | 0.4              | 0.5                          |
| - Portion from capital conservation buffer                                    | 0.6              | 2.5                          |
| - Portion from SIFI buffer  | 1.2              | 3.0                          |
| CET capital requirement   | 8.2              | 12.0                         |
| Minimum capital requirement (Pillar I)  | 8.0              | 8.0                          |
| Capital add-on (Pillar II)  | 2.6              | 2.6                          |
| Combined buffer requirement   | 2.2              | 6.0                          |
| Total capital requirement   | 12.8             | 16.6                         |
| <b>Excess capital</b>   |                  |                              |
| CET1 capital  | 8.1              | 4.2                          |
| Total capital   | 9.0              | 3.3                          |

<sup>1</sup>Based on fully phased-in CRR and CRD IV rules and requirements.

<sup>2</sup>The total capital requirement consists of the solvency need and the combined buffer requirement. The fully phased-in countercyclical capital buffer is based on the buffer rates announced at the end of 2016.

In 2016, the Group optimised its capital structure through retained earnings, capital issues and a share buy-back programme. In November 2016, the Group issued DKK 3 billion of additional tier 1 capital.

### Change in total capital ratio Danske Bank Group, 2015-2016



In 2016, the Group also expanded the use of internal models for the calculation of the total risk exposure amount (REA). In January 2016, the Group received approval from the Danish Financial Supervisory Authority (the Danish FSA) to implement revised internal models according to the 2013 FSA orders. In December 2016, the Group received approval to calculate the REA at Danske Bank Plc (Finland) according to the IRB approach for the retail asset class and according to the F-IRB approach for the institution asset class. Implementation will take place in the first quarter of 2017.

The Group performs stress tests to verify that it is sufficiently capitalised to withstand adverse events caused by material risks arising from its business strategy at present and in future. The results of both internal and regulatory stress tests, including the EBA stress test, have confirmed the Group's substantial capitalisation.

As regards new regulation, the Group expects the Danish FSA to set the minimum requirement for own funds and eligible liabilities (MREL), including transitional requirements, for systemically important banks.

The European Commission's proposals to review a significant part of the EU's financial regulations (the CRR, CRD IV and BRRD) will be subject to negotiations with the European Council and the European Parliament in 2017. The Group supports the Commission's aim to further harmonise such regulations, but transitional measures are needed to ensure a proper implementation of the revised requirements.

The Basel Committee is reviewing the standards for measuring the REA, which could include a proposal to implement an REA floor. It is too early to assess the full effect of these changes since the political dialogue on how and when to implement the revised standards in the EU has not yet begun. The Group is monitoring the developments in financial regulations closely.

## 3.2 Capital management

The Group ensures that the level of capital supports its business strategy and is sufficient to meet the regulatory capital requirements at all times and that it maintains access to the funding markets under all market conditions. It is also the Group's ambition to have a capital level that rating agencies and investors consider robust.

The Group has met its CET1 capital ratio target since the end of 2012, while the total capital ratio has been above the current target of 19% since Q3 2015. The Group's capital considerations are based on the rules governing the transition from current regulation, the phase-in of CRR/CRD IV rules and the SIFI requirements. The capital structure will be adjusted if excess capital is available after dividends have been paid out and the capital targets have been met. The Group revises its capital policy at least once a year and will reassess its capital targets when the regulatory requirements are final.

### 3.2.1 Capital planning

The Group's capital planning takes into account both short-term and long-term horizons in order to give the Board of Directors a comprehensive view of current and future capital levels. The capital plan includes a forecast of the Group's expected capital performance based on budgets and takes pending regulation into account when future capital requirements are assessed. The Group also uses stress tests in its internal capital planning and compliance with regulatory capital requirements.

### 3.2.2 Input from stress test analysis

The Group uses macroeconomic stress tests in the ICAAP for the purpose of projecting its solvency need and actual capital level in various unfavourable scenarios. Stress tests are an important means of analysing the risk profile since they give management a better understanding of how the Group's portfolios are affected by macroeconomic changes, including the effects of undesirable events on the Group's total capital.

When the Group uses stress tests in its capital planning, it applies stress to risks, income and the cost structure. Stressing income and costs affects the Group's total capital, while stressing risk exposures affects its solvency need. The stress test methodology consists of four steps: (1) choice of scenario; (2) translation of scenario; (3) stress test calculations; and (4) evaluation of results and methodology. The Group evaluates the main scenarios and their relevance on an ongoing basis. The scenarios that are most relevant to the current economic situation and related risks are analysed at least once a year. New scenarios may be added when necessary. The scenarios are an essential part of the Group's capital planning in the ICAAP.

#### Internal stress test

The Group's internal stress test is based on various scenarios, each consisting of a set of macroeconomic variables. The scenarios are generally used both at the group level and for subsidiaries. Specific scenarios are also developed for subsidiaries. The scenarios are submitted to the Board of Directors for approval.

#### The Group's most important stress test scenarios

| Scenario             | Description and use   |
|----------------------|---|
| Severe recession     | <p>A sharp slowdown in the global economy reduces exports, private consumption and GDP, while increasing unemployment. This scenario assumes a significant setback in property prices because of weak consumer confidence, high unemployment and tight credit policies.</p> <p>The Group uses the severe recession scenario in its capital planning to determine whether the capital level is satisfactory. If management concludes that the excess capital is too small in the scenario's worst year, it will consider changing the risk profile or raising capital.</p> |
| Extreme recession    | <p>A very sharp slowdown in the global economy reduces exports, private consumption and GDP, while increasing unemployment. This scenario assumes deflation in most economies and a very sharp drop in property prices.</p> <p>The Group uses the extreme recession scenario for recovery plan purposes to test the credibility and effectiveness of its actions to restore its capital and liquidity position in the contingency and recovery plan.</p>  |
| Regulatory scenarios | <p>Base cases and stress scenarios of the Danish Financial Supervisory Authority and the European Banking Authority.</p> <p>The Danish Financial Supervisory Authority uses the regulatory scenarios for the Supervisory Review and Evaluation Process (SREP).</p>  |
| Other scenarios      | <p>Besides the main scenarios listed above, the Group also uses various specialised or portfolio-specific scenarios that provide management an understanding of how the Group will be affected by specific events.</p>  |

#### External stress test

Danske Bank also participates in the EU-wide external stress test conducted by the European Banking Authority (the EBA). The purpose of the EBA stress test is to assess the health of the European banking sector in the stress scenario and the ability of the individual banks to absorb losses in various economic scenarios. According to the latest stress test, which was conducted in the spring of 2016, the Group complies with the capital requirements with a solid margin.

#### Reverse stress test

A reverse stress test is a risk management tool that complements the standard risk framework. The purpose of a reverse stress test is to identify any extreme event (or combination of events) that could bring the Group in a recovery state and then to determine the likelihood of the events. The Group can judge whether it is comfortable with the probability that the events will occur in relation to the implications of their occurrence.

Along with the results from the various stress tests in the ICAAP, the reverse sensitivity analysis shows that the Group has a comfortable capital level in excess of its solvency need – even when heavily stressed income is combined with unprecedented impairments, trading losses, operational losses and funding costs.

In conclusion, the results of internal, external and reverse stress tests show that the Group is robust in the event of unfavourable economic developments in the selected stress test scenarios.

For more information about the stress test process, see the ICAAP report, which is updated quarterly and published along with the Group's quarterly and annual reports at [danskebank.com/ir](http://danskebank.com/ir).

### 3.2.3 Capital allocation

The Group makes a full internal allocation of its total equity across business units on the basis of each unit's contribution to the Group's total risk as estimated by means of regulatory models. The Group is constantly improving its capital allocation framework in order to reflect as closely as possible the effects of new regulation and the risk entailed in its business activities. In 2016, Danske Bank Group changed the principles for allocating capital across the business units so that they are fully aligned with the regulatory requirements and our CET1 capital ratio target. This means that the capital consumption of the Group's individual business units is closely aligned with the Group's total capital consumption.

## 3.3 Total capital

On 31 December 2016, Danske Bank Group's CET1 capital amounted to DKK 133 billion, or 16.3% of the total REA, and its tier 1 capital amounted to DKK 156 billion, or 19.1% of the total REA. The Group's total capital amounted to DKK 178 billion, and the total capital ratio was 21.8%.

The high-level components of total capital are shown in the table below (a more detailed breakdown appears in Danske Bank Group's Annual Report 2016). The figures reflect the capital subject to the transitional rules according to the CRR on 31 December 2016.

| <b>Danske Bank Group's total capital and ratios</b>                  |                |                |
|--|----------------|----------------|
| At 31 December (DKK millions)  | 2016           | 2015           |
| Total equity   | 166,615        | 160,830        |
| Adjustment to total equity   | 270            | 3,714          |
| Total equity calculated according to the rules of the Danish FSA     | 166,886        | 164,544        |
| Additional tier 1 (AT1) capital instruments included in total equity | -14,133        | -11,177        |
| Adjustments for accrued interest and tax effect on AT1 capital       | -132           | -119           |
| Common equity tier 1 (CET1) capital instruments                      | 152,621        | 153,248        |
| Deductions from CET1 capital   | -19,927        | -18,890        |
| - Portion from goodwill  | -6,707         | -6,426         |
| - Portion from statutory deductions for insurance subsidiaries       | -626           | -2,885         |
| CET1 capital   | 132,694        | 134,358        |
| AT1 capital  | 23,623         | 22,338         |
| Deductions from AT1 capital  | -209           | -2,171         |
| - Portion from statutory deductions for insurance subsidiaries       | -209           | -2,164         |
| Tier1 capital  | 156,108        | 154,525        |
| Tier 2 capital instruments   | 22,141         | 22,782         |
| Deductions from tier 2 capital                                       | -209           | -2,171         |
| - Portion from statutory deductions from insurance subsidiaries      | -209           | -2,164         |
| Total capital  | 178,041        | 175,136        |
| <b>Total risk exposure amount</b>                                    | <b>815,249</b> | <b>833,594</b> |
| Common equity tier 1 capital ratio (%)                               | 16.3           | 16.1           |
| Tier 1 capital ratio (%)   | 19.1           | 18.5           |
| Total capital ratio (%)  | 21.8           | 21.0           |

### 3.3.1 Consolidation methods

The consolidation of the Group's financial statements is based on IFRSs, whereas the prudential consolidation in the statement of capital is based on the rules of the Danish FSA and the CRR. The main difference is that, under IFRSs, Danica Pension is consolidated on a line-by-line basis, whereas, under the rules of the Danish FSA, it is treated as a (net) investment in a subsidiary in accordance with the equity method.

In December 2013, the Danish FSA designated the Group as a financial conglomerate because of its ownership of Danica Pension. Consequently, the Group is subject to supplementary supervision as a financial conglomerate (at the group level). For this reason, the Group's solvency calculations are treated according to the deduction method described in section 3.3.3.

In rare circumstances, companies taken over by the Group because they are in default are consolidated in the financial statements and are sold as soon as they become marketable. They are not included in the calculation of the Group's total capital, but the holdings are included in the calculation of the total REA. The following table shows the differences between the ordinary consolidation principles used in the financial statements and those used in solvency calculations for subsidiaries and significant investment in credit institutions.

#### Consolidation principles for subsidiaries and other holdings of Danske Bank A/S

| Subsidiaries and other holdings of Danske Bank A/S | Consolidation of solvency calculations |                   | Consolidation in IFRS accounts |          |
|--|--|-------------------|--------------------------------|----------|
|  | Full                                   | Capital deduction | Full                           | One line |
| Credit institutions                                | √                                      |                   | √                              |          |
| Significant investments in credit institutions     |  | √                 |                                | √        |
| Insurance operations (consolidated <sup>1</sup> )  |  | √                 | √                              |          |
| Foreclosed companies (risk-weighted)               |  |                   | √                              |          |

<sup>1</sup> Insurance operations are consolidated according to the capital deduction method.

### 3.3.2 Common equity tier 1 capital

Starting with total equity under IFRSs, the Group makes a number of adjustments in order to determine its CET1 capital. In accordance with IFRSs and the Danish FSA's accounting rules, total equity is subject to the following adjustments:

- Revaluation of domicile property is recognised at estimated fair value. Revaluation to a value above the cost of acquisition is recognised as CET1 capital.
- The new CRR-compliant additional tier 1 capital instruments issued in March 2014, February 2015 and November 2016 count as equity under accounting rules, but do not qualify as equity under capital and solvency rules. The additional instruments are therefore excluded from CET1 capital instruments and instead categorised as additional tier 1 capital.

In addition to the adjustment listed above, total equity is also subject to certain deductions to determine CET1 capital in accordance with the CRR. These are the main deductions:

- Proposed dividend
- Carrying amounts of intangible assets, including goodwill
- Deferred tax assets
- Defined benefit pension fund assets
- Statutory deduction for insurance subsidiaries (see also section 3.3.3)
- Prudential filters
- Adjustment to eligible capital instruments

The phase-in of the CRR increases the level of deductions from CET1 capital until 2018. The increase comes mainly from the transfer of current deduction elements from tier 1 and tier 2 capital to CET1 capital.

The Group estimates that the CET1 capital ratio will decline by around 0.1 of a percentage point from the level on 31 December 2016 (16.3%) when it is calculated on the basis of the CRR with fully loaded capital deductions (fully phased-in rules by 2018).

### 3.3.3 Statutory deductions for insurance companies and significant investments

The statutory deductions for insurance companies were previously divided equally between tier 1 and tier 2 capital. According to the transitional rules of the CRR, these deductions will gradually be phased out and moved to CET1 capital by 2018.

As a financial conglomerate, the Group has obtained approval to use the Danish FSA's deduction method for investments in insurance subsidiaries in line with the conglomerate method in the CRR. Since 2014, the deduction has been based on Danica Pension's solvency need; previously, it was based on the minimum capital requirement. The modification had been phased in linearly until 2016.

The Group's statutory deductions for insurance subsidiaries and other statutory deductions from total capital in 2016 were as follows:

- Danica Pension's solvency need less the difference between Danica Pension's total capital and the carrying amount of Danske Bank's capital holdings in Danica Pension. This method ensures that the Group's total capital is reduced fully by deductions made from Danica Pension's total capital, among other things.
- Capital holdings in other credit and financial institutions that represent more than 10% of the share capital of such institutions, excluding capital holdings in subsidiaries. The deduction will be phased out since the position is lower than the threshold defined in the CRR. Instead, the position will be risk-weighted at 250%

#### Total capital deductions for insurance subsidiaries and other deductions

| At 31 December (DKK millions)   | 2016         | 2015         |
|---|--------------|--------------|
| Capital requirement at Danica   | 9,605        | 7,865        |
| Add-on for positive difference between solvency need and capital requirement (transitional) | -            | 1,593        |
| Less the difference between   |              |              |
| Danica Pension's capital base   | 23,663       | 17,686       |
| Danske Bank's capital holdings  | 15,464       | 15,752       |
| Danica Pension's holding of Danske Bank shares etc  | 363          | 311          |
| Deduction for insurance subsidiaries  | 1,043        | 7,213        |
| Deduction for holdings in other credit institutions   | 0            | 14           |
| <b>Total deductions, divided equally between tier 1 and tier 2 capital</b>                  | <b>1,043</b> | <b>7,227</b> |
| <b>Total deductions from common equity tier 1 capital</b>                                   | <b>625</b>   | <b>2,885</b> |

Note: The carrying amount of Danske Bank's capital holdings in Danica Pension less the total deduction for Danica Pension from the Group's total capital is included in the total REA calculations at a 100% weight. Danske Bank's capital holding in Danica Pension at the end of 2016 reflects the deduction of a proposed dividend from Danica Pension.

#### 3.3.4 Additional tier 1 capital and tier 2 capital

At the end of 2016, the Group's additional tier 1 capital (including old hybrid capital issues) amounted to DKK 23.6 billion, or 2.9 percentage points of the total capital ratio. On 31 December 2016, the Group's tier 2 capital amounted to DKK 22.1 billion, or 2.7 percentage points of the total capital ratio.

The phase-in of the CRR will affect the way outstanding additional tier 1 and tier 2 capital instruments will be incorporated in the Group's total capital. Outstanding old hybrid tier 1 and tier 2 capital instruments not eligible under the CRR requirements will be phased out over a period that started in 2014. Since September 2013, the Group's issues of additional tier 1 and tier 2 capital instruments have been fully CRR-compliant.

For a description of the conditions of the Group's outstanding issues of individual additional tier 1 and tier 2 capital instruments, see note 21 in Annual Report 2016.

## 3.4 Total capital requirements

### 3.4.1 Minimum capital requirement

The regulatory minimum capital requirement under Pillar I of the CRR is defined as 8% of the risk exposure amounts for credit risk (including counterparty credit risk), market risk and operational risk.

Credit risk amounted to 78.2% of the total REA, making it Danske Bank Group's largest risk type. In collaboration with other national financial supervisory authorities, the Danish FSA has approved Danske Bank Group's use of the A-IRB approach for the calculation of credit risk.

In January 2016, the Group received approval from the Danish FSA to implement revised IRB models according to the

2013 FSA orders. The changes were implemented in the first quarter of 2016.

The Danish FSA has granted the Group an exemption from the A-IRB approach for exposures to government bonds and equities, among other things. The exemption also applies to exposures at the legal entities Danske Bank Limited (Northern Ireland) and Danske Bank International (Luxembourg) as well as to retail exposures at Danske Bank Plc (Finland) and Danske Bank Ireland. For these exposures, the Group currently uses the standardised approach.

At Danske Bank Plc (Finland), the Group has permission to use the F-IRB approach for credit risk exposures to corporate customers. In December 2016, the Group received approval to calculate the REA at Danske Bank Plc according to the F-IRB approach for the institutions asset class and according to the IRB approach for the retail asset class. Implementation will take place in the first quarter of 2017.

Counterparty credit risk, including central clearing counterparty (CCP) and CVA risk charges, amounted to 6.0% of the total REA.

Market risk amounted to 6.4% of the total REA. The Group uses an internal VaR model for both market risk on items in the trading book and for foreign exchange risk on items outside the trading book. Operational risk amounted to 9.3% of the total REA. The Group uses the standardised approach for the calculation of operational risk.

#### Risk exposure amount and risk weights

| At 31 December (DKK millions)                | 2016           |             | 2015           |             |
|--|----------------|-------------|----------------|-------------|
|  | REA            | Weights (%) | REA            | Weights (%) |
| Credit risk                                  |                |             |                |             |
| A-IRB approach:                              |                |             |                |             |
| Institutions                                 | 10,784         | 29          | 7,618          | 24          |
| Corporates                                   | 312,362        | 37          | 314,066        | 39          |
| Exposures secured by real property           | 102,950        | 15          | 89,547         | 14          |
| Other retail                                 | 21,227         | 21          | 29,005         | 22          |
| Securitisations                              | 2,421          | 51          | 2,647          | 35          |
| Other assets                                 | 11,032         | 83          | 13,366         | 86          |
| A-IRB approach, total                        | 460,776        | 27          | 456,249        | 28          |
| F-IRB Corporate                              | 26,808         | 48          | 33,512         | 56          |
| Standardised approach, total                 | 150,320        | 18          | 156,972        | 24          |
| Credit risk, total                           | 637,904        |             | 646,733        |             |
| Counterparty credit risk                     | 41,602         |             | 31,271         |             |
| Central counterparty (CCP) default risk      | 1,016          |             | 1,404          |             |
| Credit value added (CVA) risk charge         | 6,099          |             | 9,282          |             |
| Counterparty credit risk (incl. CCP and CVA) | 48,717         |             | 41,958         |             |
| Market risk, total                           | 52,562         |             | 72,172         |             |
| Operational risk, total                      | 76,065         |             | 72,732         |             |
| <b>Total risk exposure amount</b>            | <b>815,249</b> |             | <b>833,595</b> |             |

From 2015 to 2016, the total REA declined by DKK 18 billion to DKK 815 billion. The implementation of revised IRB models led to an increase in the total REA that was offset by the effects of lower market and credit risk.

The REA for credit risk fell by DKK 9 billion. The implementation of revised IRB models led to an increase in the REA for credit risk of DKK 7 billion. The sale of Danmarks Skibskredit and the revised prudential treatment of LR Realkredit A/S accounted for an REA decrease of DKK 14 billion, while portfolio changes led to a decrease of DKK 2 billion.

The REA for counterparty risk, including the CPP default risk and CVA risk charge, increased by DKK 7 billion. The implementation of revised IRB models accounted for an increase of DKK 1.3 billion, while portfolio changes led to an REA decrease of DKK 6 billion.

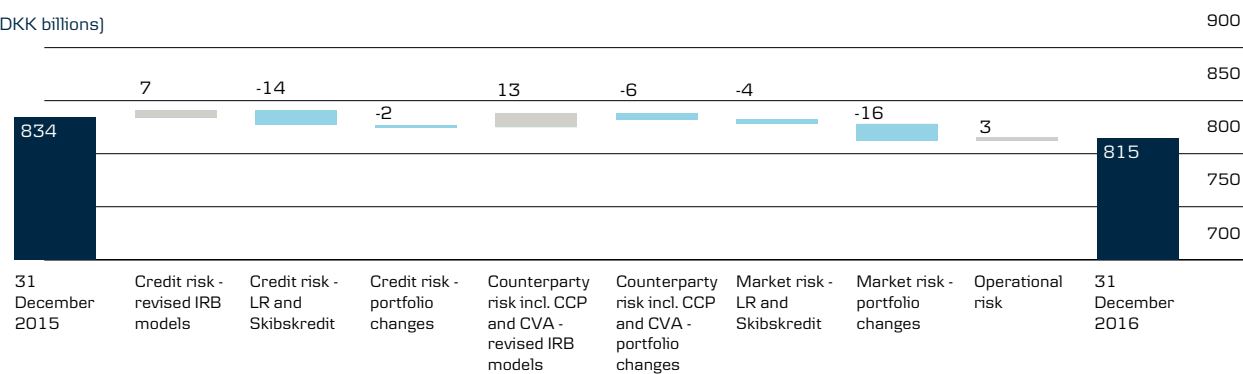
The REA for market risk fell by DKK 20 billion. The sale of Danmarks Skibskredit and the revised prudential treatment

of LR Realkredit A/S accounted for a decrease in the REA of DKK 4 billion. Portfolio changes led to a decrease of DKK 16 billion.

The REA for operational risk increased slightly, up by DKK 3 billion.

### Change in total risk exposure, 2015-2016

(DKK billions)



### 3.4.2 Solvency need

The solvency need is the amount of capital that is adequate in terms of size and composition to cover the risks to which a financial institution is exposed. According to Danish law, the solvency need ratio is the solvency need divided by the total REA determined under Pillar I.

The Group assumes risks as a normal part of its business activities and expects to incur some financial losses as a consequence of these risks. Under normal circumstances, it expects such losses to be well covered by its earnings. If earnings are not sufficient to cover the losses, they are covered by the Group's capital.

The Group is involved in a broad range of business activities. These activities can be divided into five segments for the purpose of risk identification: banking, market, asset management, insurance and group-wide activities. The latter category covers management activities that are not specific to any of the first four business segments but broadly support them all. Each of these activities entails various risks, which fall into the seven main categories of the Group's risk management framework.

### Risk identification across activities

| Activities                 | Danske Bank Group's risk categories |             |                  |              |                             |               |                |
|----------------------------|-------------------------------------|-------------|------------------|--------------|-----------------------------|---------------|----------------|
|                            | Credit risk                         | Market risk | Operational risk | Pension risk | Insurance risk <sup>1</sup> | Business risk | Liquidity risk |
| Banking activities         | √                                   | √           | √                |              |                             | √             | √              |
| Market activities          | √                                   | √           | √                |              |                             | √             | √              |
| Asset management           |                                     |             | √                |              |                             | √             |                |
| Insurance (Danica Pension) |                                     |             |                  |              | √                           |               |                |
| Group-wide activities      |                                     |             | √                | √            |                             | √             | √              |

<sup>1</sup>Insurance risk includes a number of risk types among others market risk, operational risk and business risk.

After identifying the risks, the Group determines how and to what extent it will mitigate them. Mitigation usually takes place by means of business procedures and controls, contingency plans and other measures. Finally, the Group determines what risks will be covered by capital. The Group thus ensures that it has sufficient excess capital to cover the risks associated with its business activities. It uses models and expert assessments to monitor all significant risks.

As part of the ICAAP under Pillar II, the solvency need is determined on the basis of an internal assessment of the Group's risk profile in relation to the minimum capital requirement. An important part of the process of determining the solvency need is evaluating whether the calculation takes into account all material risks to which the Group is exposed. The Group uses its internal models as well as expert judgement and [Danish FSA] benchmark models to quantify whether the regulatory framework indicates that additional capital is needed.



The Group's ICAAP also forms the basis for the Supervisory Review and Evaluation Process (SREP), which is a dialogue between a financial institution and the relevant financial supervisory authorities on the institution's risks and capital needs. The outcome of the latest SREP for Danske Bank Group was that the supervisory colleges, led by the Danish FSA, considered the Group adequately capitalised.

In addition to determining the solvency need, the Group uses the Basel I transitional rules as a "backstop" measure to determine the adequacy of its total capital. That is, the transitional rules determine the minimum level of total capital needed if they indicate an amount that is larger than the solvency need plus the phased-in regulatory buffer requirements. The regulatory buffer requirements are described in further detail in section 3.4.3.

At the end of 2016, the Group's solvency need was DKK 86.5 billion, or 10.6% of the total REA. The solvency need declined DKK 2.4 billion, or 0.1 of a percentage point, from the level at the end of 2015.

For information about the general methods of calculating the solvency need and solvency need ratio, see the ICAAP report, which is updated quarterly and published along with the Group's quarterly and annual reports at [danskebank.com/ir](http://danskebank.com/ir).

### 3.4.3 Combined buffer requirement

CRD IV introduced a combined buffer that applies in addition to the solvency need and will be phased in from 2015 to 2019. The combined buffer consists of a countercyclical buffer, a capital conservation buffer and a SIFI buffer.

The capital conservation buffer and the countercyclical capital buffer are designed to ensure that credit institutions accumulate a sufficient capital base during periods of economic growth to absorb losses during periods of stress. The capital conservation buffer is being gradually phased in to a final level of 2.5% in 2019. The countercyclical buffer requirement is calculated as a weighted average of the national buffers in effect in the jurisdictions in which a bank has credit exposures. The Group's countercyclical buffer rate of 0.4% at the end of 2016 was based primarily on the countercyclical buffer rates in Norway and Sweden (both set at 1.5%).

Danske Bank Group was designated as a SIFI in Denmark in 2014. Consequently, the Group is subject to stricter capital requirements than non-SIFI banks. At the end of 2016, the Group's SIFI buffer requirement was 1.2%. The fully phased-in SIFI buffer requirement in 2019 will be 3%.

Breaching the combined buffer requirement will restrict the Group's capital distributions, including the payment of dividends, payments on additional tier 1 capital instruments, and variable remuneration.

According to the CRR, any dividends on CET1 and additional tier 1 capital instruments must be paid from distributable items, which are primarily retained earnings. At the end of 2016, Danske Banks A/S's distributable items amounted to DKK 114.9 billion.

### Distributable items for Danske Bank A/S

| At 31 December (DKK millions)                        | 2016  | 2015  |
|--|-------|-------|
| Retained earnings                                    | 106.5 | 101.8 |
| Proposed dividends                                   | 8.9   | 8.1   |
| Interest on AT1 capital instruments, not distributed | 0.2   | 0.2   |
| Foreign currency translation reserve                 | -0.6  | -0.6  |
| Distributable items                                  | 114.9 | 109.5 |

## 3.5 Future regulatory requirements

### 3.5.1 Leverage ratio

The leverage ratio represents a non-risk-adjusted capital requirement that is implemented to function as a further "backstop" measure for risk-based capital. Since January 2014, the CRR/CRD IV rules have required that credit institutions calculate, monitor and report on their leverage ratios, defined as tier 1 capital as a percentage of total exposure. On the basis of the European Commission's legislative proposal for a revised CRR, a leverage ratio of 3% is expected to become a minimum requirement with the implementation of the revised CRR.

At the end of 2016, the Group's leverage ratio was 4.6% under the transitional rules. Assuming fully phased-in tier 1 capital under CRR/CRD IV without taking into account any refinancing of non-eligible additional tier 1 capital instruments, the leverage ratio would be 4.3%.

## Leverage ratio

| At 31 December (DKK billion)                     | 2016    | 2015    |
|--|---------|---------|
| Total exposure for leverage ratio calculation    | 3,380.7 | 3,273.7 |
| - Portion from derivatives                       | 114.2   | 170.2   |
| - Portion from securities-financing transactions | 255.6   | 229.5   |
| - Portion from off-balance-sheet items           | 439.7   | 431.4   |
| Reported tier 1 capital (transitional rules)     | 156.1   | 154.5   |
| Tier 1 capital (fully phased-in rules)           | 145.7   | 139.0   |
| Leverage ratio (transitional rules), (%)         | 4.6     | 4.7     |
| Leverage ratio (fully phased-in rules), (%)      | 4.3     | 4.2     |

The Group's overall monitoring of leverage risk is done in the ICAAP. The ICAAP also includes an assessment of changes in the leverage ratio under stressed scenarios. The leverage ratio is determined and monitored monthly. To ensure sound monitoring, the Group has set forth policies for the management and control of each component that contributes to leverage risk.

### 3.5.2 Minimum requirement for own funds and eligible liabilities

On 23 November 2016, the European Commission published a proposal to review the existing Bank Recovery and Resolution Directive (the BRRD). One purpose of the proposed review is to implement the total loss-absorbing capacity (TLAC) standard for global systemically important banks (G-SIBs) in EU legislation. The TLAC standard is integrated with the existing minimum requirement for own funds and eligible liabilities (MREL) in the BRRD since both measures pursue the same regulatory objective: to ensure that banks hold a sufficient amount of bail-in-able liabilities to absorb losses equal to the capital requirements and restore their critical functions without support from public funds.

The Group welcomes the review of the BRRD and the proposal to harmonise the TLAC standard and the MREL. However, for most banks, the revised requirements imply that the existing stock of senior debt will not be eligible to meet the MREL, and the Group is concerned that all major banks in the EU will need to issue eligible senior debt within a very short period of time. The Group strongly recommends grandfathering the existing stock of senior unsecured debt since this will allow a proper transition to the new requirements without severely damaging the market for senior debt.

In accordance with the Danish implementation of the existing BRRD, the Danish FSA is required to set an MREL for Danish banks. In 2017, the Group expects the Danish FSA to set the MREL, including transitional requirements, for systemically important banks.

### 3.5.3 Revised capital requirements regulation and directive

Along with the proposal to review the BRRD, the European Commission has also brought forward proposals to review the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD IV). The Group supports the European Commission's aim to further harmonise financial regulations across jurisdictions in the EU. The Group does not expect that the proposed changes will have any significant effect on its overall capital requirements.

The full prudential package from the European Commission consisting of the proposed review of the BRRD, CRR and CRD IV will be subject to negotiations with the European Council and the European Parliament in 2017. The Group is monitoring the process closely.

### 3.5.4 Basel IV

There has been a delay in the completion of the Basel Committee's review of the standardised approach for credit and operational risk, the constraints on the use of internal model approaches, and the possible implementation of an REA floor. The Group is closely monitoring the international process, including the pending political dialogue in the EU on how and when to implement the revised Basel standards. It is still too early to assess the outcome of this process.

# Credit risk

|    |       |   |
|----|-------|---|
| 29 | 4.1   | Credit risk profile                               |
| 30 | 4.1.1 | Net credit exposure from lending activities       |
| 30 | 4.1.2 | Credit quality                                    |
| 31 | 4.1.3 | Credit risk mitigation                            |
| 32 | 4.1.4 | Industry concentrations                           |
| 33 | 4.1.5 | Trends in selected portfolios                     |
| 36 | 4.2   | Governance and responsibilities                   |
| 37 | 4.3   | Credit risk appetite and concentration frameworks |
| 38 | 4.4   | IRB framework and model development               |
| 39 | 4.4.1 | IRB framework monitoring                          |
| 39 | 4.4.2 | IRB exemptions and rollout                        |
| 39 | 4.5   | Credit process                                    |
| 39 | 4.5.1 | Credit risk assessment                            |
| 40 | 4.5.2 | Credit risk mitigation and collateral management  |
| 40 | 4.5.3 | Reporting and monitoring                          |
| 41 | 4.5.4 | Impairment charges and non-performing loans       |

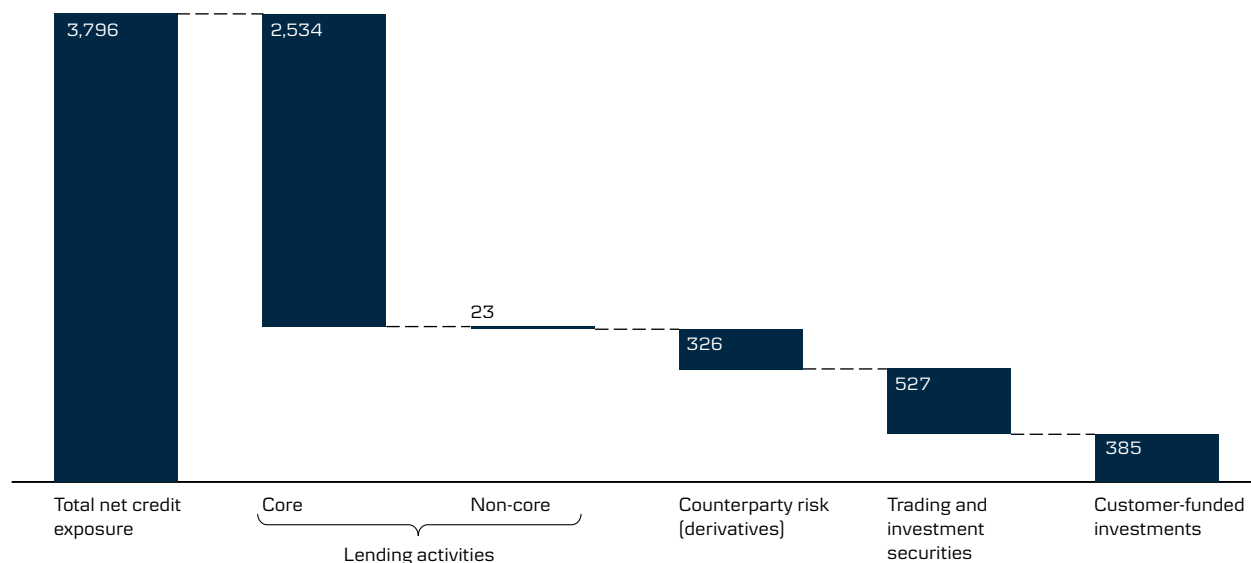
# 4.

## 4.1 Credit risk profile

Danske Bank Group's total net credit exposure is defined as on-balance sheet items and off-balance sheet items net of impairment charges that carry credit risk. At the end of 2016, the Group's total net credit exposure for accounting purposes was DKK 3,796 billion (2015: DKK 3,600 billion).

### Breakdown of net credit risk exposure

(DKK billions)



Net credit exposure from lending activities accounts for most of the Group's net credit exposure and is the focus of this section.

At the end of 2016, net credit exposure from core lending activities amounted to DKK 2,534 billion (2015: DKK 2,323 billion). Net credit exposure from Non-core lending activities amounted to DKK 23 billion (2015: DKK 29 billion). Net credit exposure from lending activities includes amounts due from credit institutions and central banks, loans, guarantees, irrevocable loan commitments and also includes repo loans.

The Group reduced its exposure to activities classified as non-core business in 2016 through the active work-out of the portfolio in combination with portfolio sales.

At the end of 2016, the counterparty credit risk amounted to DKK 326 billion (on a mark-to-market basis before close-out netting and collateral reduction). Counterparty credit risk is described in section 5.

Net credit exposure from trading and investment securities arises from securities positions taken by the Group's trading and investment units, and it also entails credit risk. This risk type is described in the credit risk notes to Danske Bank Group's financial statements.

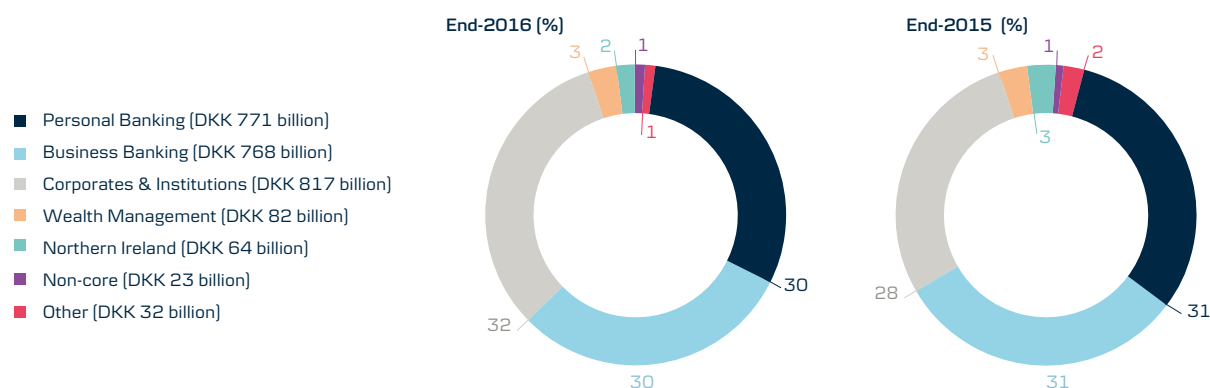
The Group's credit risk exposure from assets in customer-funded investment pools, unit-linked investment contracts and insurance contracts (customer-funded investments) is limited. The risk on assets under pooled schemes and unit-linked investment contracts is assumed solely by customers, while the risk on assets under insurance contracts is assumed primarily by customers. The credit risk on customer-funded investments and insurance contracts is explained in the notes on credit risk and insurance contracts to Danske Bank Group's financial statements.

From section 4.1 onwards, net credit exposure from lending activities (referred to as "net credit exposure") excludes Non-core exposure (unless otherwise stated).

#### 4.1.1 Net credit exposure from lending activities

Lending at Personal Banking and Wealth Management, which accounted for the largest share of the net credit exposure (33%), consisted mainly of mortgage products in the Nordic countries. The commercial portfolios in Business Banking and Corporates and Institutions (C&I) are diversified across various industries. Overall, lending increased by DKK 206 billion from 2015 to 2016. The main driver was increased deposits at central banks. Lending at Personal Banking and Wealth Management increased by DKK 44 billion, of which DKK 19 billion originated in Norway, DKK 19 billion in Denmark and DKK 6 billion in Sweden. Lending at Business Banking increased in most countries and totalled DKK 39 billion.

#### Breakdown of net credit exposure by business unit (lending activities)



#### 4.1.2 Credit quality

##### Net credit exposure by rating category

Stable macroeconomic conditions, managerial efforts and enhanced underwriting continued to support the Group's credit risk profile in 2016. Overall credit quality remained stable, with 97% of total credit exposure having a rating classification from 1 to 8. This trend was unchanged from 2015. At Personal Banking, the exposure in rating categories 1-8 accounted for 98% of total exposure. At Business Banking and C&I, the exposure in rating categories 1-8 accounted for 95% and 99% of credit exposure, respectively. The significant increase in rating category 1 was attributable to increased deposits at central banks.

At the end of 2016, the exposure-weighted PD was 0.73%, against 1.00% in 2015.

#### Rating category breakdown

| Rating category | PD scale (%) |        | Net credit exposure (DKK billions) |              |
|-----------------|--------------|--------|------------------------------------|--------------|
|                 | Upper        | Lower  | End-2016                           | End-2015     |
| 1               | 0.00         | 0.01   | 251                                | 99           |
| 2               | 0.01         | 0.03   | 253                                | 248          |
| 3               | 0.03         | 0.06   | 414                                | 382          |
| 4               | 0.06         | 0.14   | 544                                | 459          |
| 5               | 0.14         | 0.31   | 461                                | 494          |
| 6               | 0.31         | 0.63   | 302                                | 302          |
| 7               | 0.63         | 1.90   | 179                                | 196          |
| 8               | 1.90         | 7.98   | 64                                 | 70           |
| 9               | 7.98         | 25.70  | 14                                 | 16           |
| 10              | 25.70        | 99.99  | 35                                 | 37           |
| 11              | 100.00       | 100.00 | 16                                 | 19           |
| <b>Total</b>    |              |        | <b>2,534</b>                       | <b>2,323</b> |

#### Impairment charges, non-performing loans and forborne exposure

In 2016, net impairment charges at our core business units amounted to DKK -3 million (2015: DKK 57 million). Individual impairment charges fell at most business units, reflecting stable macroeconomic conditions. However, at C&I, impairment charges increased because of significantly higher individual charges for oil-related customers. Compared with 2015, the agricultural segment at Business Banking saw an increase in individual impairment charges.

Net non-performing exposure (NPL) decreased to DKK 21.9 billion at the end of 2016 (2015: DKK 24.7 billion). The decrease was attributable mainly to a few large customers and a positive trend in the personal customer segment.

#### NPL and impairment charges broken down by industries and personal customers

| (DKK millions)                                  | End- 2016          |  |                          |                                      | End-2015           |  |                          |                                       |
|---|--------------------|--|--------------------------|--------------------------------------|--------------------|--|--------------------------|---------------------------------------|
|   | Gross NPL<br>= a+b | Acc.<br>individual<br>impairment<br>charges<br>b | Net NPL<br>exposure<br>a | Net NPL<br>exposure, ex<br>collatera | Gross NPL<br>= a+b | Acc.<br>individual<br>impairment<br>charges<br>b | Net NPL<br>exposure<br>a | Net NPL<br>exposure, ex<br>collateral |
| Public institutions                             | 1                  | -  | -                        | -                                    | 1                  | 1  | 1                        | 1                                     |
| Banks   | 149                | 149  | -                        | -                                    | 142                | 142  | -                        | -                                     |
| Credit institutions                             | -                  | -  | -                        | -                                    | -                  | -  | -                        | -                                     |
| Insurance                                       | 16                 | 8  | 8                        | -                                    | 30                 | 9  | 21                       | -                                     |
| Investment funds                                | 320                | 205  | 115                      | 33                                   | 604                | 434  | 170                      | 74                                    |
| Other financials                                | -                  | -  | -                        | -                                    | 25                 | 9  | 16                       | -                                     |
| Agriculture                                     | 5,335              | 2,994  | 2,341                    | 187                                  | 3,845              | 2,733  | 1,111                    | 591                                   |
| Commercial property                             | 7,887              | 3,091  | 4,797                    | 260                                  | 10,756             | 4,763  | 5,993                    | 421                                   |
| Construction, engineering and building products | 1,513              | 1,010  | 503                      | 127                                  | 1,990              | 1,378  | 612                      | 119                                   |
| Consumer discretionary                          | 2,684              | 1,526  | 1,157                    | 581                                  | 3,005              | 1,891  | 1,114                    | 187                                   |
| Consumer staples                                | 345                | 161  | 184                      | 22                                   | 384                | 220  | 164                      | 39                                    |
| Energy & utilities                              | 484                | 180  | 304                      | -                                    | 288                | 145  | 144                      | 8                                     |
| Health care                                     | 103                | 64   | 40                       | 4                                    | 128                | 75   | 53                       | 10                                    |
| Industrial services, supplies & machinery       | 2,173              | 1,238  | 934                      | 96                                   | 2,515              | 1,332  | 1,184                    | 304                                   |
| IT and telecommunication services               | 209                | 146  | 63                       | 25                                   | 216                | 151  | 66                       | 15                                    |
| Materials                                       | 1,011              | 768  | 243                      | -                                    | 1,744              | 1,144  | 600                      | 209                                   |
| Non-profits & associations                      | 1,929              | 814  | 1,115                    | 139                                  | 2,441              | 945  | 1,497                    | 190                                   |
| Other commercials                               | 275                | 269  | 7                        | -                                    | 303                | 253  | 50                       | 3                                     |
| Shipping  | 3,504              | 719  | 2,785                    | 52                                   | 2,816              | 1,134  | 1,682                    | -                                     |
| Transportation                                  | 163                | 110  | 53                       | 7                                    | 312                | 186  | 126                      | 12                                    |
| Personal customers                              | 12,303             | 5,054  | 7,248                    | 2,334                                | 16,273             | 6,207  | 10,066                   | 2,639                                 |
| <b>Total</b>                                    | <b>40,406</b>      | <b>18,505</b>                                    | <b>21,900</b>            | <b>3,868</b>                         | <b>47,820</b>      | <b>23,151</b>                                    | <b>24,670</b>            | <b>4,822</b>                          |

Since 2014, the Group has identified an increasing number of exposures subject to forbearance measures. Benign economic conditions allow the Group to establish workout processes for large customers, including forbearance measures. This was the main driver of the increase in forborne exposure from DKK 17.7 billion at the end of 2015 to DKK 24.6 billion in 2016.

#### Exposure subject to forbearance

| (DKK millions)  | End of 2016   |                             | End of 2015  |                             |
|-----------------|---------------|-----------------------------|--------------|-----------------------------|
|                 | Performing    | Non-performing <sup>1</sup> | Performing   | Non-performing <sup>1</sup> |
| Modification    | 433           | 1,713                       | 36           | 1,347                       |
| Refinancing     | 1,730         | 12,079                      | 1,848        | 9,150                       |
| Under probation | 8,682         | -                           | 5,312        | -                           |
| <b>Total</b>    | <b>10,844</b> | <b>13,793</b>               | <b>7,196</b> | <b>10,497</b>               |

<sup>1</sup>These loans are part of the total non-performing loan amount.

At the end of 2016, the Group had recognised properties taken over in Denmark at a carrying amount of DKK 71 million (2015: DKK 76 million) and properties taken over in other countries at DKK 61 million (2015: DKK 388 million).

#### 4.1.3 Credit risk mitigation

The main method used by the Group to mitigate credit risk is to obtain collateral for new transactions. The most im-

portant collateral types, measured by volume, are real property, custody accounts and securities (financial assets in the form of shares and bonds). Personal customers' real property accounted for 47% of the total collateral base (after haircuts) in 2016.

#### Collateral value by type (after haircuts)

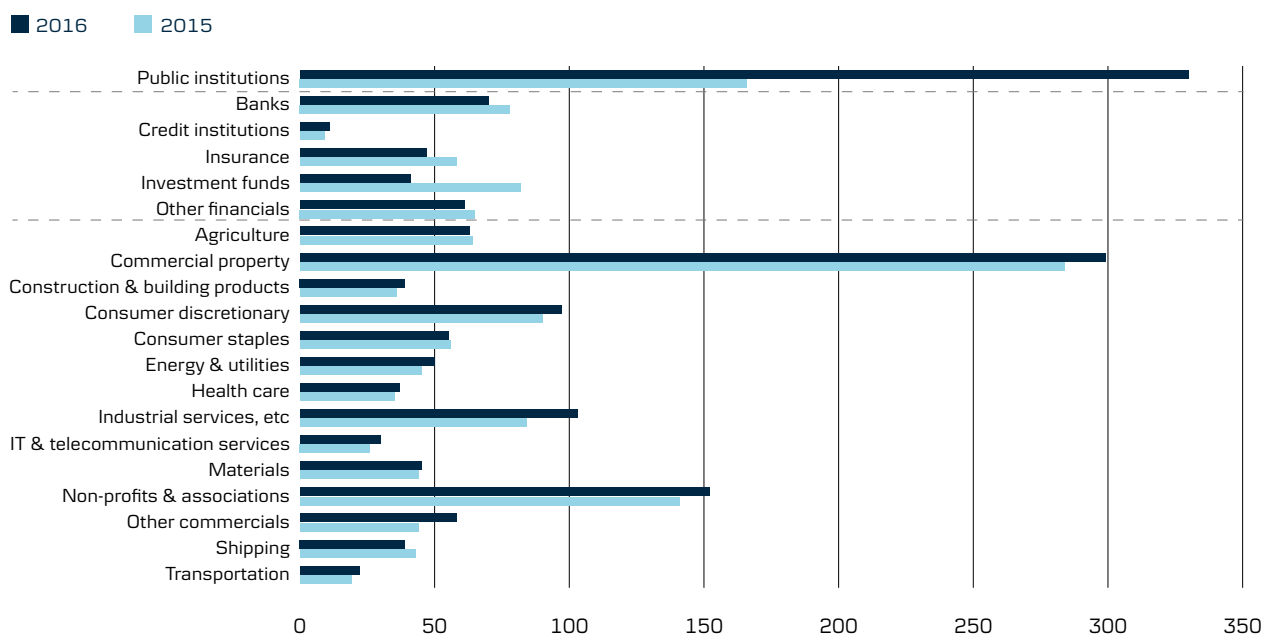
| At 31 December<br>(DKK billions) | Total        |              | Portion from:    |            |                  |            |                           |            |                   |           |                  |           |
|----------------------------------|--------------|--------------|------------------|------------|------------------|------------|---------------------------|------------|-------------------|-----------|------------------|-----------|
|                                  | 2016         | 2015         | Personal Banking |            | Business Banking |            | Corporates & Institutions |            | Wealth Management |           | Northern Ireland |           |
|                                  |              |              | 2016             | 2015       | 2016             | 2015       | 2016                      | 2015       | 2016              | 2015      | 2016             | 2015      |
| Real property                    | 1,197        | 1,173        | 653              | 640        | 438              | 428        | 27                        | 24         | 50                | 48        | 28               | 33        |
| - Personal                       | 733          | 721          | 653              | 640        | 15               | 16         | -                         | -          | 49                | 47        | 15               | 17        |
| - Commercial                     | 416          | 404          | -                | -          | 380              | 369        | 25                        | 22         | 1                 | 1         | 10               | 11        |
| - Agricultural                   | 49           | 48           | -                | -          | 43               | 42         | 2                         | 2          | -                 | -         | 3                | 4         |
| Bank accounts                    | 1            | 1            | -                | -          | -                | -          | -                         | -          | -                 | -         | -                | -         |
| Custody accounts & securities    | 230          | 207          | -                | -          | 6                | 6          | 211                       | 190        | 10                | 8         | -                | -         |
| Vehicles                         | 19           | 17           | 2                | 2          | 16               | 15         | -                         | -          | -                 | -         | -                | -         |
| Equipment                        | 22           | 24           | -                | -          | 17               | 21         | 2                         | 1          | -                 | -         | 2                | 2         |
| Vessels and aircraft             | 31           | 28           | -                | -          | 3                | 3          | 27                        | 26         | -                 | -         | -                | -         |
| Guarantees                       | 13           | 13           | 4                | 3          | 3                | 2          | 5                         | 6          | 2                 | 2         | -                | -         |
| Amounts due                      | 4            | 5            | -                | -          | 4                | 5          | -                         | -          | -                 | -         | -                | -         |
| Other assets                     | 38           | 36           | -                | -          | 30               | 28         | 7                         | 6          | -                 | -         | 1                | 1         |
| <b>Total collateral</b>          | <b>1,556</b> | <b>1,504</b> | <b>660</b>       | <b>647</b> | <b>518</b>       | <b>507</b> | <b>280</b>                | <b>254</b> | <b>62</b>         | <b>57</b> | <b>32</b>        | <b>36</b> |

#### 4.1.4 Industry concentrations

At the end of 2016, exposure to personal customers, which consisted mostly of home financing secured on real property, represented the largest share of total exposure (35%). The remainder of the exposure, which related mainly to commercial customers, was diversified across various industries, with commercial property representing the largest exposure, at 12% of total exposure.

#### Corporate and sovereign net credit exposure broken down by industry

(DKK billions)



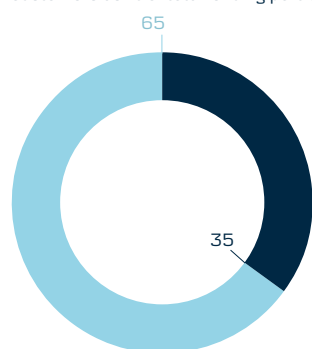
#### 4.1.5 Trends in selected portfolios

This section describes the trends in the credit quality of selected lending portfolios. These portfolios either have an elevated credit risk or represent a significant portion of the Group's total lending portfolio.

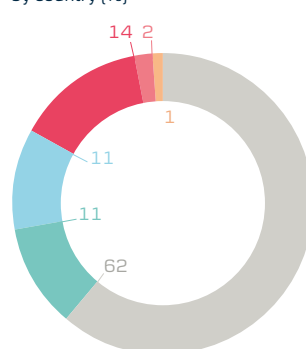
Measured by gross credit exposure, the personal customer portfolio is the Group's largest portfolio. At the end of 2016, the gross credit exposure amounted to DKK 893 billion, with DKK 440 billion at Realkredit Danmark reflecting the Group's position as a leading Danish mortgage finance provider. The exposure to personal customers covers loans secured on customers' assets, consumer loans and fully or partly secured credit facilities. Mortgage loans represent by far most of the exposure to personal customers (87%).

#### Personal customers

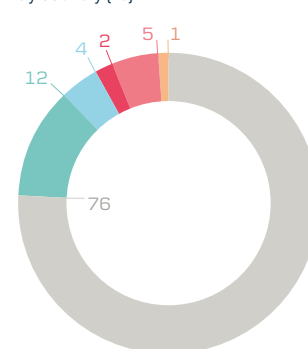
Gross credit exposure to Personal customers as % of total lending portfolio



Gross credit exposure by country (%)



Individual allowance account by country (%)



■ Personal customers ■ The rest

■ Denmark ■ Finland ■ Sweden ■ Norway ■ Northern Ireland ■ Other

Overall, the personal customer portfolio is stable, with underlying growth in Denmark as well as Norway and Sweden driven by strategic partnerships with large professional unions. Taking a selective approach to growth enables the Group to grow in the Nordic markets without increasing the overall risk level.

The credit quality of the personal customer portfolio benefited from low interest rates and more favourable macroeconomic conditions.

The main risks in the personal customer portfolio relate to the following:

- Interest-only loans in Denmark: The exposure to interest-only loans with high loan to value (LTV) ratios to be reset before the end of 2020 is limited at DKK 8.9 billion, and the vast majority of these customers have strong credit quality.
- The Group considers the current level of impairments to be sufficient. The Credit Risk Appetite includes a key performance indicator (KPI) for interest-only loans as a percentage of approvals of new lending, and the Group gives incentives for fixed-rate loans and amortisation.
- Possible asset price bubbles: The rapid increase in housing prices on some markets poses a potential risk. A focused underwriting strategy, combined with regulatory frameworks governing LTV ratios, debt factors and interest sensitivity, mitigates the risk. In addition, the Group encourages borrowing with fixed-rate loans and amortisation.

#### Developments in the personal customer portfolio

| (DKK millions) | Key figures                        |                               |            |                         |   | Non-performing loans |                                     |                    |
|----------------|------------------------------------|-------------------------------|------------|-------------------------|---|----------------------|-------------------------------------|--------------------|
|                | Gross credit exposure <sup>1</sup> | Allowance account, individual | Write-offs | Impairment charges (bp) | Collateral (after haircut) <sup>2</sup> | Gross exposure       | Share of total segment exposure (%) | Coverage ratio (%) |
| End-2015       | 857,410                            | 6,207                         | 1,571      | 6                       | 740,383                                 | 16,273               | 1.9                                 | 70                 |
| End-2016       | 893,472                            | 5,054                         | 1,143      | -6                      | 753,991                                 | 12,303               | 1.4                                 | 68                 |

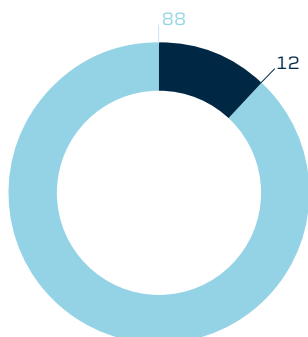
<sup>1</sup> Gross credit exposure excludes accumulated collective impairment charges.

<sup>2</sup> New haircuts were implemented in Q1 2016 as part of our revised IRB models, which were approved by the Danish Financial Supervisory Authority in January 2016.



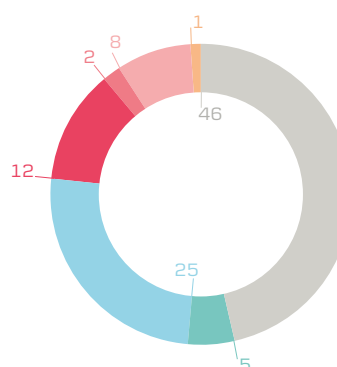
## Commercial property

Gross credit exposure to Commercial property as % of total lending portfolio



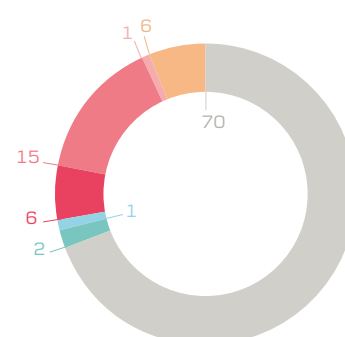
■ Commercial property ■ The rest

Gross credit exposure by country of residence (%)



■ Denmark ■ Finland ■ Sweden ■ Norway ■ Northern Ireland ■ C&I ■ Other

Individual allowance account by country of residence (%)



The commercial property portfolio consists primarily of secured property financing exposure to owners of property let to a third party. It also includes exposure in which the property owner and the property user are separate legal entities within the same group.

At the end of 2016, gross credit exposure amounted to DKK 302 billion. The individual allowance account for the portfolio, which amounted to DKK 3.1 billion, represented 1% of gross credit exposure.

In 2016, the commercial property portfolio grew and non-performing loans continued to decline as a result of disciplined underwriting, improving LTV ratios and low interest rates. Commercial property lending to Swedish customers with strong credit quality in particular rose in 2016.

Most of the Group's commercial property customers are managed by specialist teams for customer relationships and credit management

## Developments in the commercial property portfolio

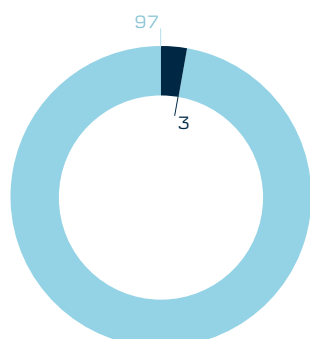
| (DKK millions) | Key figures                        |                               |            |                         |   | Non-performing loans |                                     |                    |
|----------------|------------------------------------|-------------------------------|------------|-------------------------|---|----------------------|-------------------------------------|--------------------|
|                | Gross credit exposure <sup>1</sup> | Allowance account, individual | Write-offs | Impairment charges (bp) | Collateral (after haircut) <sup>2</sup> | Gross exposure       | Share of total segment exposure (%) | Coverage ratio (%) |
| End-2015       | 289,055                            | 4,763                         | 1,823      | -47                     | 232,631                                 | 10,756               | 3.7                                 | 92                 |
| End-2016       | 301,776                            | 3,091                         | 1,164      | -18                     | 241,622                                 | 7,887                | 2.6                                 | 92                 |

<sup>1</sup> Gross credit exposure excludes accumulated collective impairment charges.

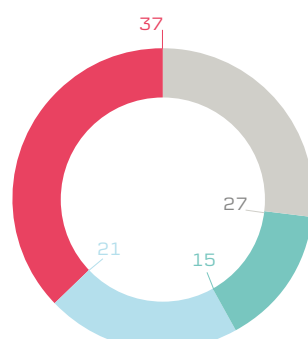
<sup>2</sup> New haircuts were implemented in Q1 2016 as part of our revised IRB models, which were approved by the Danish Financial Supervisory Authority in January 2016.

## Agriculture

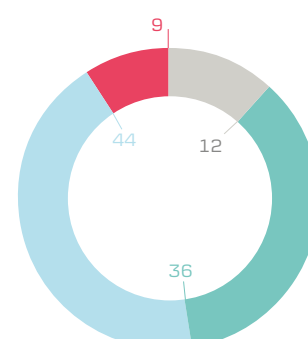
Gross credit exposure to Agriculture as % of total lending portfolio



Gross credit exposure by segment (%)



Individual allowance account by segment (%)



■ Agriculture ■ The rest

■ Growing of crops and cereals ■ Dairy ■ Pig breeding ■ Mixed operations

The agriculture portfolio includes customers within traditional agricultural segments such as dairy products, pigs, cereals and other crops as well as customers within related activities such as the manufacture and wholesale distribution of feed and seed products. Exposure to agricultural customers includes loans and credit facilities.

At the end of 2016, gross credit exposure amounted to DKK 65.7 billion, compared with DKK 66.4 billion at the end of 2015. Denmark accounted for 79% of the portfolio's gross exposure and for 97% of accumulated individual impairment charges. In the Danish agriculture portfolio, Realkredit Danmark accounted for 83% of the gross exposure and for 10% of accumulated individual impairment charges. Credit quality remained weakest among pig producers and dairy farmers.

Market conditions showed positive signs in the second half of the year, especially for pig farmers, and the milk price increased towards the end of the year from a very low level. Therefore, while impairments levels were elevated over the year, we saw no further individual charges in the last quarter of 2016. The main drivers behind the market developments were stronger demand from China, reduced supply and higher productivity. At the same time, the continuation of the Russian embargo had a negative effect on prices.

Overall, high indebtedness and a very high proportion of variable-rate loans remained major risks in 2016, and our focus was on reducing our customers' interest rate sensitivity.

The Group's agricultural exposure is managed by specialist teams for customer relationships and credit management.

### Developments in the agriculture portfolio

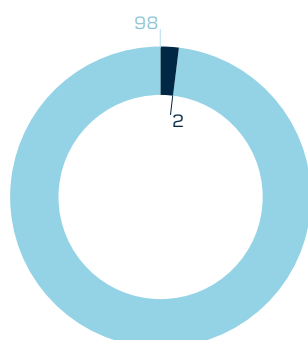
| (DKK millions) | Key figures                        |                               |            |                         |   | Non-performing loans |                                     |                    |
|----------------|------------------------------------|-------------------------------|------------|-------------------------|---|----------------------|-------------------------------------|--------------------|
|                | Gross credit exposure <sup>1</sup> | Allowance account, individual | Write-offs | Impairment charges (bp) | Collateral (after haircut) <sup>2</sup> | Gross exposure       | Share of total segment exposure (%) | Coverage ratio (%) |
| End-2015       | 66,387                             | 2,733                         | 125        | 75                      | 51,106                                  | 3,845                | 5.8                                 | 82                 |
| End-2016       | 65,686                             | 2,994                         | 403        | 95                      | 51,433                                  | 5,335                | 8.1                                 | 94                 |

<sup>1</sup> Gross credit exposure excludes accumulated collective impairment charges.

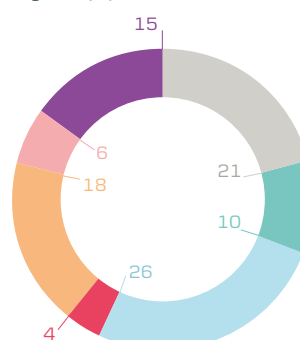
<sup>2</sup> New haircuts were implemented in Q1 2016 as part of our revised IRB models, which were approved by the Danish Financial Supervisory Authority in January 2016.

## Shipping

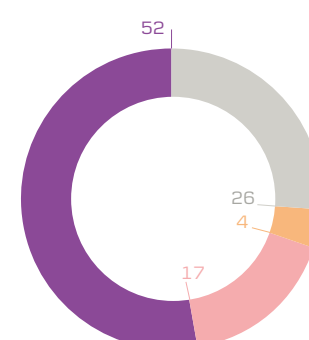
Gross credit exposure to Shipping as % of total lending portfolio



Gross credit exposure by segment (%)



Individual allowance account by segment (%)



■ Shipping ■ The rest

■ Tanker ■ LNG/LPG ■ Offshore ■ Car carriers ■ Container ■ Dry bulk ■ Other

The shipping portfolio includes customers in standard segments such as container, tanker, bulk and gas freight and also offshore-related activities. Exposure to shipping customers relates primarily to vessel financing secured by vessel or fleet mortgages.

### Developments in the shipping portfolio

| [DKK millions] | Key figures                        |                               |            |                         |   | Non-performing loans |                                     |                    |
|----------------|------------------------------------|-------------------------------|------------|-------------------------|---|----------------------|-------------------------------------|--------------------|
|                | Gross credit exposure <sup>1</sup> | Allowance account, individual | Write-offs | Impairment charges (bp) | Collateral (after haircut) <sup>2</sup> | Gross exposure       | Share of total segment exposure (%) | Coverage ratio (%) |
| End-2015       | 44,541                             | 1,134                         | 763        | -8                      | 24,237                                  | 2,816                | 6.3                                 | 100                |
| End-2016       | 39,692                             | 719                           | 449        | 328                     | 24,854                                  | 3,504                | 8.8                                 | 93                 |

<sup>1</sup> Gross credit exposure excludes accumulated collective impairment charges.

<sup>2</sup> New haircuts were implemented in Q1 2016 as part of our revised IRB models, which were approved by the Danish Financial Supervisory Authority in January 2016.

At the end of 2016, gross credit exposure amounted to DKK 39.7 billion, compared with DKK 44.5 billion at the end of 2015. Market conditions are still difficult and continue to affect the portfolio's credit quality. Low oil prices had an adverse effect on the offshore segment in particular, and this led to downward pressures on prices and generally low investments.

In addition to exposure to the offshore shipping segment, direct exposure to oil-related industries (mainly oil services and oil majors, which are included in the energy and utilities portfolio) amounted to DKK 15 billion at the end of 2016. The "lower for longer" situation in the oil market led to increased impairments - especially for a few large customers within the shipping and oil-related exposure.

The Group's shipping customers and most of the direct oil-related exposure are managed by specialist teams for customer relationships and credit management.

## 4.2 Governance and responsibilities

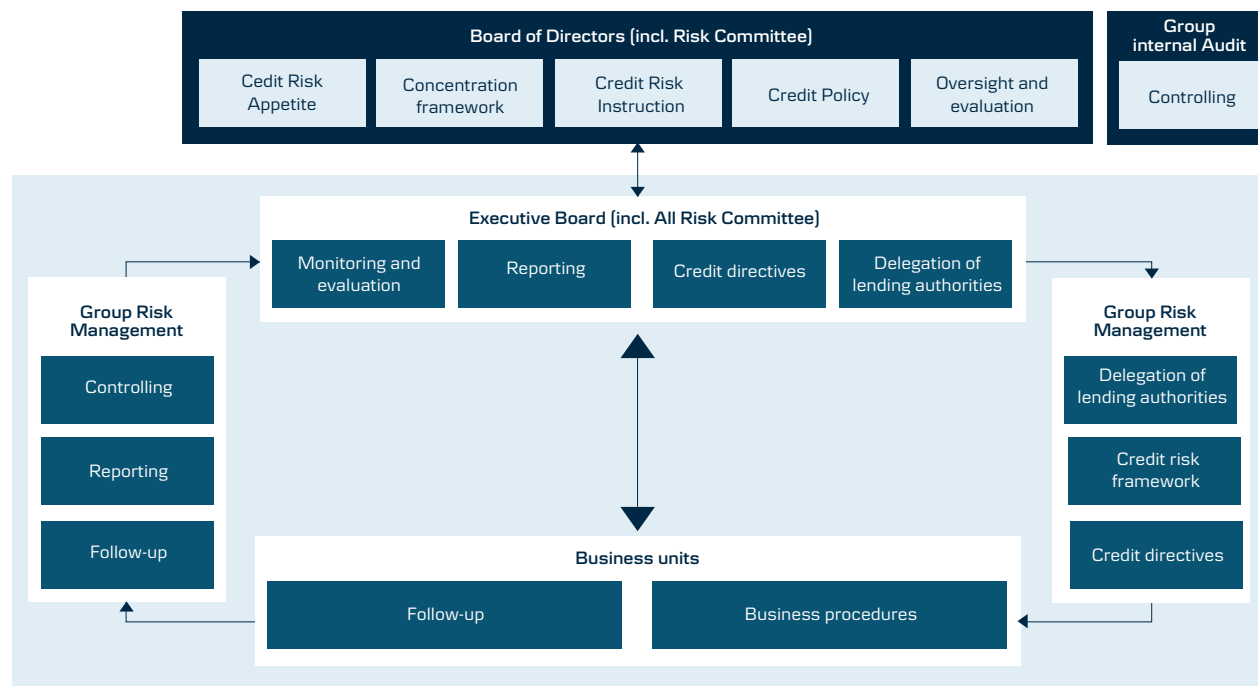
The Executive Board approves the Group's credit risk framework, which provides the overall structure that supports effective governance of the Group's credit risk. The Group's Credit Policy and Credit Risk Appetite and the credit risk framework set expectations for the conduct of the credit risk management activities and behaviour throughout the organisation. This ensures:

- a consistent and effective execution of credit risk management activities across the Group
- a strong credit risk management culture

- a performance that is in line with strategic objectives
- compliance with legal and regulatory requirements in relation to credit risk

The Executive Board ensures that the risk organisation is structured in such a way that the execution of tasks is separated from the control of tasks. The Group meets this requirement by organising its credit controls along three lines of defence.

#### Danske Bank Group's credit risk governance



In 2016, the credit risk organisation was reorganised by relocating resources from the second line of defence to the first line of defence. Going forward, one unit at Group Risk Management – Corporate Credit Risk Management – is responsible for overseeing and managing all business credit risks. The change will ensure a more consistent and unified approach to credit risk management across business units, establish a clearer segregation of responsibilities across the first and second lines of defence, and, in the process, also strengthen the first line of defence.

The Group adheres to dual underwriting as a general principle. Credit applications and renewals above a certain materiality threshold are considered under dual authority, which means that decisions made by business units are challenged or endorsed by Group Risk Management. The first line of defence is responsible for all credit exposures.

### 4.3 Credit risk appetite and concentration frameworks

The credit risk profile is monitored and strengthened in accordance with the Credit Risk Appetite, which encompasses credit quality (expected loss) and credit risk concentration (limits on single names, industries and geographical regions). Regular risk reporting enables the ongoing monitoring of the Group's credit risk profile in relation to the formulated risk appetite.

The Group Credit Risk Appetite statements are converted by the business units into specific key performance indicators (KPIs) in collaboration with Group Risk Management. Monitoring functions determine whether credit facilities are granted in accordance with the Credit Risk Appetite. Group Risk Management monitors and challenges the performance and reports the progress to the Executive Board and the Board of Directors.

As part of the overall risk appetite framework, the Group has implemented a set of frameworks to manage credit risk concentrations. The frameworks cover the following concentrations:

- Single-name concentrations
- Industry concentrations
- Geographical concentrations

### Single-name concentrations

Single-name concentrations are managed according to two frameworks:

1. Large exposures framework: This framework is based on the regulatory definition of large exposures specified in article 395 of the CRR (Regulation (EU) No. 575/2013). At the end of 2016, the Group was well within the regulatory limits for large exposures. The Group has also defined stricter internal limits for managing single-name concentrations, including the following:
  - Absolute limit on single-name exposures
  - The sum of single-name exposures larger than 10% of the total adjusted capital may not exceed a portfolio limit of 95% of the total adjusted capital (at the end of 2016, one single-name exposure exceeded 10%)
  - The sum of single-name exposures equal to 5-10% of the total adjusted capital may not exceed 150% of the total adjusted capital (at the end of 2016, this segment represented 14% of the total adjusted capital)
2. Single-name concentration framework: The Group has also implemented a risk-sensitive internal framework that sets limits on exposure, expected loss (EL) and loss given default (LGD) in order to limit losses on single-name exposures.

The largest single-name exposures are monitored daily under the large exposures framework and are reported on a quarterly basis to the All Risk Committee and the Risk Committee. Large exposures are reported on a quarterly basis to the All Risk Committee, the Risk Committee and the Board of Directors.

The Group has reduced single-name exposures substantially in recent years.

### Industry concentrations

The industry concentration framework outlines the principles of managing industry exposures. A portfolio committee consisting of industry experts, risk management representatives and business unit representatives proposes industry limits based on a scorecard, tailored analytics and expert knowledge. The committee submits the proposed limits to the All Risk Committee as well as input to the annual credit risk appetite process. The Group accepts the risks on material concentrations in accordance with the industry-specific guidelines that outline the application of credit policy within the industry.

### Geographical concentrations

Credit reporting includes a breakdown by region. Limits are set on exposures outside the Group's home markets (sovereigns, financial institutions and counterparties in derivatives trading). Limits are approved by the Group Credit Committee on the basis of expected business volume and an assessment of the specific country risk.

## 4.4 IRB framework and model development

In 2008, the Danish Financial Supervisory Authority (the Danish FSA) approved the Group's application to use the advanced internal ratings-based (A-IRB) approach for calculating the total risk exposure amount (REA). At the end of December 2016, the Group reported DKK 2,581 billion of exposure at default (EAD), with 66% calculated according to the A-IRB approach, 2% according to the foundation approach (F-IRB), and 32% according to the standardised approach.

Changes to the IRB framework resulting from the 2013 FSA orders were approved by the Danish FSA in January 2016 and implemented during the first quarter of 2016.

The following table shows an increase in the percentage of EAD covered by the standardised approach from 2014 to 2016 because of a rebalancing of the Group's liquidity buffer portfolio and an increase in holdings in sovereign bonds.

#### EAD broken down by credit risk measurement approach

| Measurement approach | 2016 | 2015 | 2014 |
|----------------------|------|------|------|
| Advanced IRB (%)     | 66.1 | 69.4 | 73.4 |
| Foundation IRB (%)   | 2.2  | 2.6  | 0.0  |
| Standardised (%)     | 31.7 | 28.0 | 26.6 |

In December 2016, the Group received approval to calculate the REA at Danske Bank Plc (Finland) according to the F-IRB approach for the institutions asset class and according to the IRB approach for the retail asset class. Implementation will take place in the first quarter of 2017.

#### 4.4.1 IRB framework monitoring

Group Risk Management reviews and follows up on compliance with the minimum IRB requirements in CRR/CRD IV. This annual process includes reporting to the Executive Board and Internal Audit. The IRB governance structure and the modelling framework are evaluated regularly.

#### 4.4.2 IRB exemptions and rollout

The Danish FSA has granted the Group exemptions for the following exposure types:

- Exposure to the sovereigns asset class
- Exposure to regional and local authorities (when the Group treats them as part of the institutions asset class)
- Exposure to equities
- Exposure to purchased receivables
- Intragroup exposures
- Exposure through branches in Estonia, Latvia and Lithuania
- Exposure to the retail asset class through branches in the Republic of Ireland
- Exposures at the legal entities Danske Bank Limited (Northern Ireland) and Danske Bank International (Luxembourg)
- Exposure to covered bonds
- Selected other minor portfolios

In addition to these exemptions, Danske Finance Plc (Finland) is currently switching to the IRB approach. The Group uses the standardised approach for both exempted portfolios and portfolios that are being switched to the IRB approach.

## 4.5 Credit process

The credit process ensures that loans are granted within customers' financial capacity and that distressed and non-performing loans are identified at an early stage and managed proactively. Assessing a customer's financial capacity is an element of the credit approval process. The Group follows a policy of mitigating credit risk by means of guarantees and/or collateralisation. The credit control environment verifies that credit facilities granted are in compliance with credit policies and directives and in alignment with the Group's Credit Risk Appetite. Credit exposures are monitored so that credit plans and/or forbearance measures can be applied for distressed loans and impairment charges can be calculated for non-performing loans.

#### 4.5.1 Credit risk assessment

The Group uses credit risk models to assess the riskiness of its customers. The assessments take into account the likelihood of a customer default and the estimated loss.

The Group classifies customers by means of probability of default (PD) models on a regular basis and uses loss given default (LGD) models to estimate the loss on facilities in case of default. The conversion factor (CF) models express a conservative estimate of the exposure at default (EAD).

In the credit risk management process, the Group uses point-in-time (PIT) estimates for PDs, LGDs and CFs. The PIT estimates are based on inputs that are sensitive to the current macroeconomic conditions and thus change over a business cycle.

For regulatory (REA) purposes, in the majority of models, PIT PDs are converted into through-the-cycle (TTC) PD levels by means of a scaling mechanism that ensures fixed-target levels while preserving the customer rankings. A small number of models use a hybrid PD approach in which PDs are not scaled to fixed-target levels. For regulatory purposes, downturn LGDs and CFs are used - with regulatory floors and additional prudential margins.

#### Rating and scoring

The Group uses a number of PD models to assess the probability of default of customers in various segments. Corporate and financial customers<sup>1</sup> are classified by rating models, while small business customers and personal customers are classified by scoring models. Group Risk Management is responsible for the rating and scoring models and processes.

<sup>1</sup> Customers with an exposure exceeding DKK 2 million and customer groups with an exposure exceeding DKK 7 million.

Group Risk Management is responsible for the overall rating process, including rating models. The rating process includes a control measure insofar as two employees are always involved in a rating decision: a rating officer recommending the rating and a senior rating officer with authority to approve the rating.

After approval, a rating applies until new customer information is received and the rating is reassessed. Customer ratings are reassessed periodically on the basis of new information that affects a customer's creditworthiness.

The Group assigns credit scores to customers that are not rated. The scoring models for personal customers and small and medium-sized enterprises are fully automated and are all statistically based models.

Credit scores are updated monthly in a process that is subject to automated controls and a manual review of the overall results.

#### **Risk classification distribution**

The Group's classification scale consists of 11 main categories, with category 11 containing customers in default.

Most of the categories are divided into two or three subcategories, making a total of 26 classification categories.

Scoring and rating are integral parts of the credit approval process and the overall credit risk management process.

The internal PD rating scale can be compared with the rating scales used by the international rating agencies.<sup>2</sup> The Group's internal ratings are based on PIT parameters, and the ratings reflect the probability of default within a year. Since Standard & Poor's and Moody's use TTC parameters, the rating scales are not 100% comparable.

#### **Validation of credit risk models**

The Group has an internal model validation system. This system is a set of processes and activities intended to verify that the models perform as expected. All new models are subject to an initial validation, while models in the production environment are validated at least annually, independently of the business units and the team that develops the models. The validation process plays an important role in the adjustment and further development of the models. The current validation scope encompasses PD models for the rating and scoring of customers as well as LGD, CF and collateral value models.

Validation includes both a quantitative and a qualitative aspect. The annual validations of the credit risk models are reviewed by the Model & Parameter Committee.

#### **4.5.2 Credit risk mitigation and collateral management**

The Group uses a number of measures to mitigate credit risk, including collateral, guarantees and covenants. The main method is obtaining collateral.

The market value of collateral is monitored and re-evaluated by advisers, internal or external assessors, or automatic valuation models. Automatic valuation models are validated annually and are monitored quarterly. The Group regularly evaluates the validity of the external inputs on which the valuation models are based. The Collateral System supports the process of reassessing the market value to ensure that the Group complies with regulatory requirements.

The market value of collateral is subject to a haircut. A haircut reflects the risk that the Group will not be able to obtain the estimated market value upon the sale of an asset in a distressed situation. The haircut applied depends on the collateral type. For regulatory purposes, the Group also applies a downturn haircut.

#### **4.5.3 Reporting and monitoring**

The Group has a number of systems for measuring and controlling credit risk. Among the most important are the Credit System (including the Delegated Lending Authorities System), the Collateral System, the Rating/Scoring System and a number of follow-up systems. Several controls are incorporated in these systems to ensure the following:

- Accurate classification of customers
- Timely registration and accurate valuation of collateral
- Granting of credit facilities according to delegated lending authorities
- Formalised monitoring and follow-up procedures

The Credit System is the foundation of an efficient and effective credit process. It contains all relevant details about credit facilities, financial circumstances and customer relations. The system is used for all customer segments and products

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<sup>2</sup> Ratings 1-5 are comparable to investment grades; ratings 9 and 10 designate highly vulnerable customers, and rating 11 represents customers in default.

across all sales channels. It ensures that the basis for decision-making, including file comments and credit exposure, is created and stored.

The Group closely monitors changes in customers' financial conditions in order to determine whether the basis for granting credit facilities has changed.

The facilities should adhere to the Group's Credit Policy, including the Principles of Responsible Lending. These principles focus on the customer's understanding of the consequences of borrowing; the assessment of the customer's needs and ability to repay; and possible conflicts with the Group's environmental, social and governance guidelines.

The Delegated Lending Authorities System ensures the efficient administration and control of lending authorities. If a delegated lending authority is exceeded, a report or a request for verification will be sent to the relevant manager or local credit office.

Group Risk Management oversees the Group's credit activities and reports on developments in the credit portfolios. Portfolio reports are produced for the Executive Board and the All Risk Committee on a monthly basis and for the Risk Committee and the Board of Directors on a quarterly basis.

#### 4.5.4 Impairment charges and non-performing loans

The Group conducts impairment tests, assessing all credit facilities for objective evidence of impairment (OEI) in accordance with IFRSs and the guidelines set out in the Executive Order on Financial Reports for Credit Institutions from the Danish FSA.

Impairment charges are based on discounted cash flows. The Group's systems calculate impairment charges for small loans automatically, taking into account the discounted market value of the collateral assets after a deduction of the costs of realising the assets (a haircut, according to International Accounting Standard (IAS) 39). Impairment charges for all medium and large exposures with OEI are assessed by senior credit officers. The accumulated impairment charges constitute the allowance account.

##### Individual impairment charges

When OEI exists for a facility, the Group applies it to all of the customer's facilities and calculates the impairment charge on the basis of the total customer exposure. Under certain conditions, OEI for one customer may be applied to other customers when the customers have a "financial relationship"; for example, if they are part of the same customer group.

All customers with OEI are downgraded to rating category 10 or 11.

##### Collective impairment charges

Loans without OEI are included in a pool for collective assessment of the need for impairment charges. Collective impairment charges are calculated for loans with similar credit characteristics, for example when the expected cash flow from a customer group deteriorates but no corresponding adjustment has been made to the earnings margin.

When external market information indicates that an impairment event has occurred, even though it has not yet caused a change in ratings, the Group registers an "early event" impairment charge. Early events represent an expected rating change because of deteriorating market conditions in an industry. If a rating downgrade does not occur as expected, the charge is reversed.

The stock of impairment charges is reduced by write-offs and reversals of charges.

##### Non-performing loans and forbearance

The Group defines non-performing loans (NPLs) as facilities for which individual impairment charges have been booked<sup>3</sup>. For exposures to non-retail customers with NPLs, the entire amount of the customer's exposure is considered to be non-performing. For retail exposures, only impaired facilities are included in NPLs.

The Group engages in work-out processes with customers in order to minimise losses and help viable customers in financial difficulty. During the work-out process, the Group makes use of forbearance measures to assist the non-performing customers. Concessions granted to customers include interest-reduction schedules, interest-only schedules, temporary payment holidays, term extensions, cancellation of outstanding fees, waiver of covenant enforcement and settlements. Because of the length of the work-out processes, the Group is likely to maintain impairments for these customers for years.

<sup>3</sup> The Group's definition of non-performing loans differs from the EBA's definition by excluding fully covered exposures to customers in default and previously forbore exposures that are now performing and are under probation.



Forbearance plans must comply with the Group's Credit Policy and are used as an instrument to maintain long-term customer relationships during economic downturns if there is a realistic possibility that the customer will be able to meet obligations again. The purpose of the plans is therefore to minimise loss in the event of default.

If it proves impossible to improve a customer's financial situation by forbearance measures, the Group will consider whether to subject the customer's assets to a forced sale or whether the assets could be realised later at higher net proceeds.

#### **IFRS 9**

On 1 January 2018, the Group will implement IFRS 9, the new accounting standard for financial instruments. As part of IFRS 9, the International Accounting Standards Board (IASB) has introduced a new expected credit loss impairment model that will require earlier recognition of expected credit losses. Specifically, the new standard requires the Group to account for 12-month expected credit losses at the initial recognition of a financial instrument and to make an earlier recognition of lifetime expected losses.

We are in the process of making the necessary changes in our models, data, reporting and governance to ensure compliance with IFRS 9. Part of this work will ensure continued compliance with the interpretation made by local regulators, and the final form of that interpretation has not yet been issued.

On the basis of our work and the current expectations for the local interpretation of IFRS 9, we expect that the implementation of IFRS 9 will result in an increase in the allowance account of DKK 3-5 billion. The effect will be recognised as a reduction in shareholders' equity on 1 January 2018.

# *Counterparty credit risk*

|    |     |                                  |
|----|-----|----------------------------------|
| 44 | 5.1 | Counterparty credit risk profile |
| 45 | 5.2 | Governance and organisation      |
| 45 | 5.3 | Methodologies and models         |
| 46 | 5.4 | Active risk management           |
| 46 | 5.5 | Monitoring and reporting         |
| 46 | 5.6 | Data and systems                 |

# 5.

Danske Bank Group takes on counterparty credit risk when it enters into derivatives transactions (interest rate, foreign exchange, equity, credit and commodity contracts) and securities-financing transactions (SFTs), which include repo agreements and securities lending.

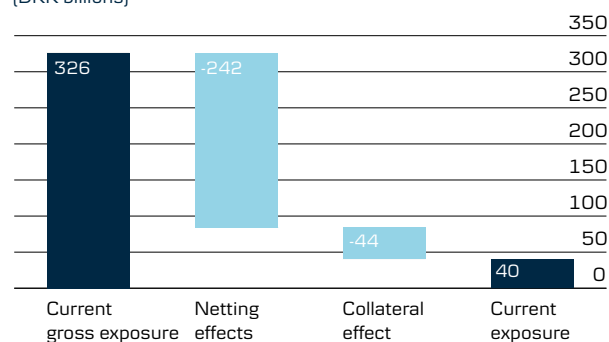
## 5.1 Counterparty credit risk profile

Trade volumes and exposures were relatively stable in 2016 and remained at the same levels as in 2015.

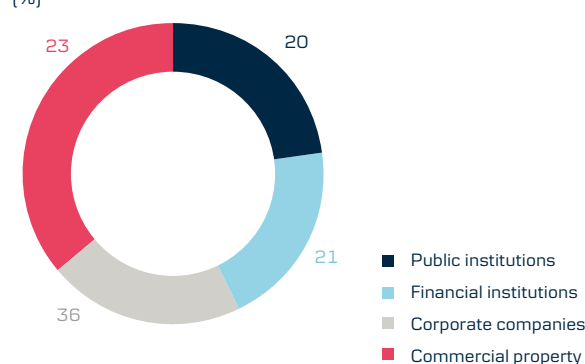
The Group mitigates counterparty credit risk through close-out netting agreements and collateral agreements. Some 52% of the total notional amount of derivatives transactions was cleared through central clearing counterparties, and 95% of non-cleared transactions were supported by collateral agreements.

### Counterparty credit risk, current exposure

Mitigation of counterparty credit risk (derivatives only)  
(DKK billions)



Break down of current exposure by sectors  
(%)



Current gross exposure is the total of all positive market values from transactions made before balance sheet netting (netting effect) and collateral reduction (collateral effect). It is equivalent to the total amount of derivatives with positive fair value on the balance sheet. At the end of December 2016, the Group's current gross exposure to derivatives was DKK 326 billion (2015: DKK 331 billion). If the netting effect and collateral received are taken into account, the current exposure to derivatives was DKK 40 billion (2015: DKK 44 billion).

The following table shows the Group's current exposure to derivatives and SFTs before and after netting and collateral.

### Current gross exposure and current exposure after netting and collateral

| At 31 December 2016 (DKK millions)            | 2016      |             |         | 2015      |             |         |
|---|-----------|-------------|---------|-----------|-------------|---------|
|   | Total     | Derivatives | SFTs    | Total     | Derivatives | SFTs    |
| Current gross exposure                        | 1,136,786 | 326,432     | 810,354 | 1,186,490 | 331,015     | 855,475 |
| Current exposure after netting                | 895,187   | 84,833      | 810,354 | 949,476   | 94,001      | 855,475 |
| Current exposure after netting and collateral | 46,647    | 40,389      | 6,258   | 49,884    | 43,699      | 6,184   |

Current exposure is a simple measure of counterparty credit risk exposure that takes into account only current mark-to-market values and collateral. More advanced measures such as exposure at default (EAD), which is a regulatory measure, express potential future losses and are based on internal models for future scenarios of market data. EAD figures are provided in the Additional Pillar 3 Disclosures tables, which are accessible at [danskebank.com/ir](http://danskebank.com/ir).

The Group currently has exposure to public institutions, commercial property companies, financial institutions and corporates. Some 90% of the exposure relates to counterparties with a classification comparable to investment grade.

The following table shows a breakdown of the Group's current exposure by rating category.

**Current exposure by rating category**

| At 31 December 2016 (DKK millions) | 2016          |               |              | 2015          |               |              |
|------------------------------------|---------------|---------------|--------------|---------------|---------------|--------------|
|                                    | Total         | Derivatives   | SFTs         | Total         | Derivatives   | SFTs         |
| 1                                  | 7,899         | 6,053         | 1,846        | 7,745         | 7,019         | 726          |
| 2                                  | 7,434         | 5,462         | 1,972        | 5,048         | 3,635         | 1,413        |
| 3                                  | 7,063         | 5,267         | 1,796        | 10,181        | 6,606         | 3,575        |
| 4                                  | 10,219        | 10,031        | 188          | 12,518        | 12,332        | 187          |
| 5                                  | 9,477         | 9,395         | 82           | 9,078         | 9,020         | 58           |
| 6                                  | 2,470         | 2,096         | 375          | 2,210         | 1,990         | 220          |
| 7                                  | 913           | 913           | -            | 1,182         | 1,177         | 5            |
| 8                                  | 788           | 788           | -            | 1,345         | 1,345         | -            |
| 9                                  | 80            | 80            | -            | 139           | 139           | -            |
| 10                                 | 169           | 169           | -            | 231           | 231           | -            |
| 11                                 | 136           | 136           | -            | 206           | 206           | -            |
| <b>Total</b>                       | <b>46,647</b> | <b>40,389</b> | <b>6,258</b> | <b>49,884</b> | <b>43,699</b> | <b>6,184</b> |

The following table shows a breakdown of the Group's current exposure by exposure class.

**Current exposure by exposure class**

| At 31 December 2016 (DKK millions)    | 2016          |               |              | 2015          |               |              |
|---------------------------------------|---------------|---------------|--------------|---------------|---------------|--------------|
|                                       | Total         | Derivatives   | SFTs         | Total         | Derivatives   | SFTs         |
| Central governments and central banks | 9,128         | 6,334         | 2,795        | 6,273         | 4,308         | 1,965        |
| Institutions                          | 7,589         | 6,297         | 1,291        | 10,393        | 7,316         | 3,077        |
| Corporates                            | 29,884        | 27,712        | 2,172        | 33,138        | 31,996        | 1,142        |
| Retail                                | 46            | 46            | -            | 80            | 80            | -            |
| <b>Total</b>                          | <b>46,647</b> | <b>40,389</b> | <b>6,258</b> | <b>49,884</b> | <b>43,699</b> | <b>6,184</b> |

Some 83% of the Group's collateral agreement holdings consisted of cash. The remainder consisted of Danish and Swedish mortgage bonds and government bonds issued by Denmark, France, Germany, the Netherlands, Norway, Sweden and the United States.

## 5.2 Governance and organisation

As part of the overall credit risk governance described in section 4, the Counterparty Credit Risk Policy approved by the All Risk Committee sets the expectations for counterparty credit risk management.

Group Risk Management is responsible for the consolidated counterparty credit risk management, risk modelling and reporting. Local credit departments are responsible for day-to-day risk management, market risk management is responsible for counterparty risk models, and an independent risk model validation team validates the models.

## 5.3 Methodologies and models

For risk management purposes, counterparty credit risk is measured as potential future exposure (PFE) at the 97.5% percentile at a set of future time horizons. All transactions are assumed to be held to maturity.

The Group uses simulation-based models to calculate counterparty credit risk exposure. The models simulate the potential future market values of each counterparty portfolio of transactions while taking netting and collateral management agreements into account. For transactions not included in the simulation model (<10%), the potential change in market value is determined as a percentage (add-on) of the nominal principal amount.

The Danish Financial Supervisory Authority (the FSA) has approved the simulation model for calculating the regulatory capital requirement for counterparty credit risk.

## *5.4 Active risk management*

In accordance with the Counterparty Credit Risk Policy, local credit departments set a credit line for counterparty credit risk on each counterparty. Counterparty credit risk is managed by PFE lines on a set of maturity buckets. Line checks are performed prior to trading.

Wrong-way risk is the risk that arises when credit exposure to a counterparty increases as the creditworthiness of that counterparty deteriorates. Specific wrong-way risk is a subtype of risk that arises because there is a legal connection between a counterparty and the issuer of the underlying instruments involved in a derivative or securities-financing transaction. The Group has set limitations on transactions entailing specific wrong-way risk. The limitations cover product range, counterparty rating and the rating of the underlying securities.

The Group manages its exposure to market risk on fair value adjustments (xVA), including CVA, under separate limits in the xVA framework as described in section 6, Market risk.

## *5.5 Monitoring and reporting*

The Group carries out counterparty credit risk measurement and monitoring as well as intraday line utilisation monitoring on a daily basis. Consolidated counterparty credit risk exposure is reported to senior management.

The internal model is subject to quarterly backtests of underlying risk factors and resulting exposures. It is also subject to an annual validation performed by an independent validation team.

## *5.6 Data and systems*

The Group has an integrated system covering all aspects of counterparty credit risk management. The system is integrated in all the trading systems, the master agreement management system, the collateral management system and market data systems.

Internal management and monitoring of counterparty credit risk are performed in the Group's line system. The system covers all aspects of the internal counterparty credit risk management process, including the assignment of lines, monitoring and control of line utilisations, registration of master agreements, measurement, and management reporting.

# *Market risk*

|    |       |   |
|----|-------|---|
| 48 | 6.1   | Market risk profile                                       |
| 48 | 6.1.1 | Trading-related market risk at Corporates & Institutions  |
| 49 | 6.1.2 | Market risk in relation to fair value adjustments         |
| 50 | 6.1.3 | Market risk in relation to asset and liability management |
| 51 | 6.2   | Governance and organisation                               |
| 51 | 6.3   | Methodologies and models                                  |
| 51 | 6.3.1 | Value-at-Risk   |
| 52 | 6.3.2 | xVA   |
| 52 | 6.3.3 | Portfolio analysis and stress testing                     |
| 53 | 6.3.4 | Regulatory capital for market risk                        |
| 53 | 6.3.5 | Model validation  |
| 54 | 6.4   | Active market risk management                             |
| 54 | 6.4.1 | Market risk appetite                                      |
| 54 | 6.4.2 | Limit framework   |
| 54 | 6.4.3 | Risk identification and assessment                        |
| 54 | 6.5   | Monitoring and reporting                                  |
| 55 | 6.6   | Data and systems  |
| 55 | 6.6.1 | Systems integration                                       |



Market risk is the risk of losses or gains caused by changes in the market values of the Group's financial assets, liabilities and off-balance-sheet items resulting from changes in market prices or rates. Market risk affects the Group's financial statements through the valuation of the on-balance sheet items; some of the Group's financial instruments, assets and liabilities are valued on the basis of market prices, while others are valued on the basis of market rates and by means of valuation models developed by the Group. In addition, net interest income at Personal Banking, Wealth Management and Business Banking is affected by the level of interest rates.

The Group's market risk management is intended to ensure proper oversight of all market risks, including both trading-related market risk and non-trading-related market risk as well as market risk in relation to fair value adjustments. The market risk framework is designed to systematically identify, assess, execute, monitor and report market risk.

## 6.1 Market risk profile

After the introduction of the dedicated xVA risk framework in September 2016, which supplemented the two existing frameworks for trading-related and non-trading-related market risks, the Group now manages its market risk by means of three separate frameworks for the following areas:

- Trading at Corporates & Institutions
- Fair value adjustments (xVA) at Corporates & Institutions
- Asset and liability management at Group Treasury

Market risk associated with activities at Personal Banking, Wealth Management and Business Banking is either hedged by Corporates & Institutions or managed as part of Group Treasury's market risk positions.

Market risk at Danica Pension and in the Group's defined benefit pension plans is managed separately. For more detailed information, see section 9, Insurance risk, and section 10, Other risks.

### 6.1.1 Trading-related market risk at Corporates & Institutions

The trading-related activities at Corporates & Institutions cover trading in fixed income products, derivatives, foreign exchange, money markets, debt capital markets, equities and commodities. Corporates & Institutions acts mainly as a market maker processing large client flows. Fixed income products represent by far the largest notional-trading and position-taking volumes. Corporates & Institutions is the leading Nordic provider in this segment, with a strong presence in Scandinavian and northern European products in both primary and secondary markets. The market-making activities entail keeping an inventory of assets to support the secondary market and short-term holdings of new issues at Capital Markets. As a result, the market-making activities involve both outright market risk exposure and spread risk from imperfect hedges.

The table below shows the VaR for the trading-related activities at Corporates & Institutions.

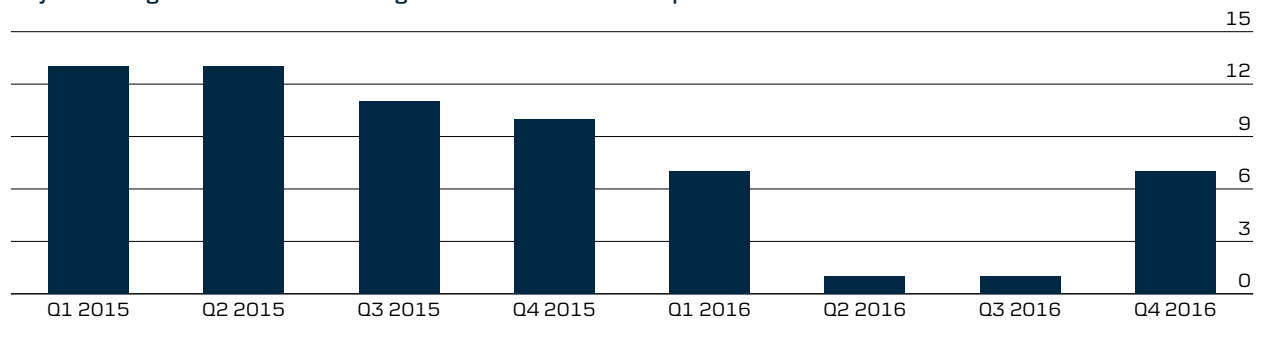
| Value-at-risk for trading-related activities at Corporates & Institutions |           |             |           |             |
|---|-----------|-------------|-----------|-------------|
| (DKK millions)  | 2016      |             | 2015      |             |
|   | Average   | 31 December | Average   | 31 December |
| Bond spread risk  | 40        | 50          | 44        | 51          |
| Interest rate risk  | 36        | 51          | 44        | 60          |
| Foreign exchange risk   | 3         | 3           | 3         | 2           |
| Equity risk   | 4         | 9           | 4         | 7           |
| Diversification effects   | -39       | -46         | -43       | -62         |
| <b>Total VaR</b>  | <b>44</b> | <b>67</b>   | <b>52</b> | <b>58</b>   |

Note: VaR is calculated at a confidence level of 95% for a 1-day horizon.

The Group continued de-risking its trading operations in 2016, reducing its average trading-related market risk from DKK 52 million in 2015 to DKK 44 million in 2016. Throughout the period, the risk related chiefly to fixed income products, which gave rise to interest rate risk and bond spread risk. Because of substantial diversification, however, the two main risk factors hedged each other well.

Stand-alone interest rate risk fell in 2016, owing mainly to reductions in positions during the first part of the year. Bond spread risk declined because of a reduction in bond holdings over the year. Foreign exchange risk and equity risk were largely unchanged.

**Days with negative income in trading-related activities at Corporates & Institutions**



In line with the transition of the business model towards a more customer-oriented strategy, day-to-day income from trading-related activities at Corporates & Institutions showed lower fluctuations in the second half of 2015 and in 2016 than in the first half of 2015 as a result of lower market volatility and reduced risk levels. The more stable P/L result led to significantly fewer days with losses in 2016 than in 2015, while the average daily P/L result was in fact higher in 2016 than in 2015.

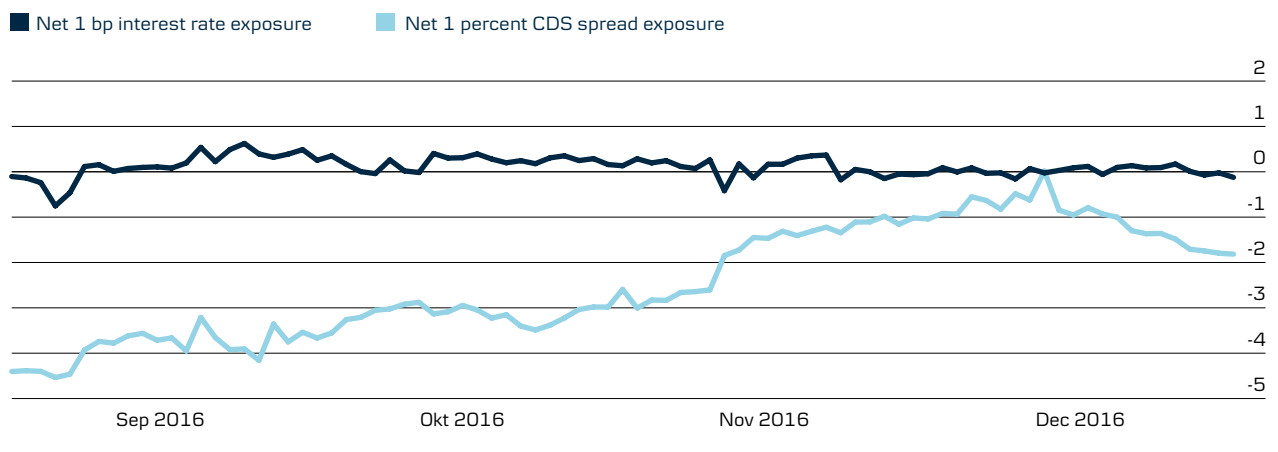
**6.1.2 Market risk in relation to fair value adjustments**

In the fourth quarter of 2015, the Group added funding value adjustment (FVA) to its range of fair value adjustments (xVA), which previously comprised credit value adjustment (CVA) and debit value adjustment (DVA). Along with other model changes introduced in the fourth quarter of 2015 as well as the change to a more market-implied approach in the third quarter of 2016, this made Danske Bank Group a best-practice financial institution among large international banks. The Group's strategy is to continue developing the xVA model so that it remains in line with best practices in the market.

Viewed in isolation, the change to a more market-implied approach has increased the overall P/L volatility compared with the previous approach. In order to reduce volatility, the Group successfully implemented a mitigation strategy in 2016 to hedge the risk in financial markets in order to increase income stability and predictability under this framework. In practice, the Group buys a hedge of offsetting interest rate swaps and CDS contracts in the financial markets. The Bank hedges open foreign exchange risk under this framework.

**xVA-related market risk**

(DKK millions)



The chart illustrates the sensitivity exposure to CDS spreads risk and interest rates risk since the introduction of the separate xVA-related risk framework. The net exposure to interest rate changes is rather low, while the net exposure to changes in CDS spreads is slightly higher.



### 6.1.3 Market risk in relation to asset and liability management

Most of the Group's exposure to non-trading-related market risk originates from the Group's funding and liquidity management activities at Group Treasury. In addition, the Group holds a portfolio of unlisted shares that relates mainly to private equity funds and banking-related investments. These activities involve mainly interest rate risk and bond spread risk as well as risk on unlisted shares.

#### Interest rate risk in the banking book

In recent years, the Group has reduced the market risk in its trading areas and partly moved it to Group Treasury. This has been driven by an increased focus on managing the interest rate risk associated with the Group's banking book and in particular on managing net interest income (NII).

Interest rate risk in the banking book (IRRBB) is included in the Group's overall interest rate risk calculations and thus in day-to-day monitoring and risk management. It relates primarily to the Group's funding activities, and it is hedged and treated according to fair value hedge accounting rules. Interest rate risk derives, to a lesser extent, from the Group's banking activities, which offer fixed rate products.

The All Risk Committee has delegated the tasks of monitoring and managing IRRBB to the Asset & Liability Committee (ALCO). Group Treasury provides the first line of defence for IRRBB, while Market Risk provides the second line of defence by monitoring daily risk utilisation.

The Group reviews its IRRBB framework on an ongoing basis in order to optimise its NII management in line with its asset and liability management procedures and to comply with regulatory requirements. Among other measures, this includes an ongoing assessment of its non-maturing demand deposit balance sheet and net free reserves.

In 2016, the Group applied a new IRRBB limit framework dedicated specifically to measuring the changes in the economic-value-based metric. The new limit framework is completely separate from the framework governing trading-related market risk. This will support Group Treasury's focus on managing the risk arising from the banking book, including the liquidity buffer and banking book hedge transactions.

The Group's total interest rate sensitivity in the banking book (value-based measure) is shown below.

#### Interest rate risk in the banking book (parallel yield curve shift of 100 points)

| At last business day (DKK millions) | 2016         |               |
|-------------------------------------|--------------|---------------|
|                                     | +100bp       | +100bp        |
| DKK                                 | 4,742        | -5,715        |
| EUR                                 | -1,160       | 2,744         |
| SEK                                 | 264          | -140          |
| GBP                                 | -29          | 122           |
| NOK                                 | 422          | -555          |
| USD                                 | 2            | -2            |
| Other                               | 0            | 0             |
| <b>Total</b>                        | <b>4,241</b> | <b>-3,546</b> |

Note: The Group introduced a new limit framework for interest rate risk in the banking book in 2016. Since comparable risk figures for 2015 are not available, only 2016 risk figures are shown above. See page 59 in Risk Management 2015 for 2015 figures for interest rate risk in the banking book.

The Group hedges interest rate risk on fixed rate lending and deposits mainly during the quarterly accounting process, while it manages the risk on the following fixed rate items on a daily basis according to delegated risk limits:

- Fixed rate mortgages in Denmark (estimated according to historical prepayment rates) and other fixed rate loans and advances provided by Personal Banking and Business Banking in Finland, Northern Ireland and the Baltics, including operating leases sold by the Group's leasing operations.
- Positions related to asset and liability management, including positions resulting from payments in advance on Realkredit Danmark loans (monthly payments that are not passed on to bondholders until the end of the quarter or year).
- Bonds held in the hold-to-maturity portfolios which the Group established in 2013 to stabilise net interest income by hedging its fixed rate liabilities.

- Interest rate risk exposure from unencumbered core funds, that is, zero rate demand deposits.
- Other interest rate risk exposures, that is, embedded contractual interest rate floors on assets (such as lending contracts) and fluctuations in risk from changes in the core banking balance sheet composition as well as risk migration from changes to behavioural assumptions.

IRRBB is capitalised as a Pillar II risk. The key techniques for measuring IRRBB fall under two main approaches: an earnings-based method and a value-based method. The former measures the risk that earnings (NII) will fall below the level predicted under a base case economic scenario as a result of changes in interest rates, while the latter calculates the effect on the present value of net asset and liability positions in various time buckets arising from a parallel yield curve shift.

In April 2016, the Basel Committee on Banking Supervision (BCBS) issued Standards for Interest Rate Risk in the Banking Book. These standards are expected to be implemented by 2018.

The standards reaffirm the BCBS's position that IRRBB is more appropriately captured in a Pillar II framework. The standards update the principles for the management and supervision of interest rate risk.

#### **Investments in unlisted equities**

In its risk management of unlisted shares, the Group makes a distinction between ordinary open positions (including positions in associated companies), exposure to private equity funds (including exposure in the form of commitments), and banking-related investments. Banking-related investments consist of equity holdings primarily in financial infrastructure businesses.

At the end of 2016, the total value of the portfolio was about DKK 2.5 billion, against DKK 3.0 billion at the end of 2015.

## *6.2 Governance and organisation*

The governance framework for market risk in relation to the risk organisation, including the roles and responsibilities of the Board of Directors and committees and general risk management principles such as the three lines of defence and the segregation of duties, follows the Group's overall governance framework, which is described in section 2.

The Market Risk Policy set by the Board of Directors lays out the overall framework for market risk management and identifies the boundaries within which the Group's market risk profile and business strategy are defined. The Market Risk Policy is supported by the Market Risk Instructions, which defines the overall limits for various market risk factors and additional boundaries within which the trading activities operate. The Market Risk Policy and the Market Risk Instructions form the basis of written business procedures and daily control procedures for the Group's market risk management.

## *6.3 Methodologies and models*

The Group uses a range of measures to create a framework that captures the material market risks to which the Group is exposed. Both conventional risk measures, such as sensitivity and market value, and mathematical and statistical measures, such as Value-at-Risk (VaR), are used in the daily market risk management.

The Group also develops and maintains internal models that are used for the pricing and risk management of financial products that cannot be valued directly or risk-managed on the basis of quoted market prices.

### **6.3.1 Value-at-Risk**

VaR is a quantitative measure that shows, with a certain probability, the maximum potential loss that the Group will suffer at the calculation date within a specified horizon.

The following risk types are included in the Group's internal VaR model: interest rate, bond spread, interest rate options, inflation rate, foreign exchange, equity market and company-specific equity risks. In the day-to-day risk management of trading-related positions, the internal VaR model estimates the maximum potential loss from changes in market risk factors at a confidence level of 95%, assuming unchanged positions for one day.

In general, a VaR model enables an estimation of a portfolio's aggregate market risk by incorporating a range of risk factors and assets. As a result, the VaR measure takes portfolio diversification or hedging activities into account. VaR has well-known limitations, and the Group has a comprehensive stress testing framework in place to mitigate these limitations.

### Backtesting of the internal VaR model

Regulatory backtesting is conducted on a daily basis to document the performance of the internal VaR model. The backtesting procedure compares 1-day VaR calculated on trading book positions with the actual and hypothetical profit or loss.

#### Definition of actual and hypothetical profit and loss

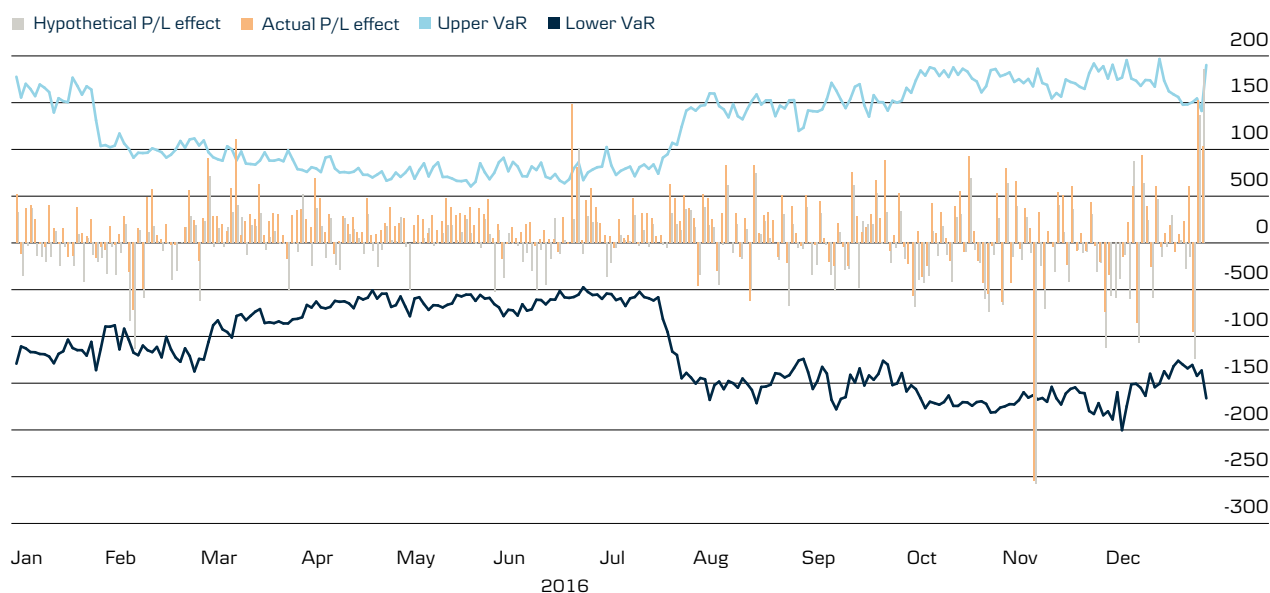
**Actual P/L** is defined as the loss or gain from actual changes in the market value of the trading book when daily closing values are compared with the subsequent business day's closing values (that is, intraday trades on the subsequent business day are included).

**Hypothetical P/L** is defined as the loss or gain calculated within the model framework resulting from keeping the portfolio unchanged for one business day (that is, no intraday trading is included, although market prices change).

If the hypothetical or actual loss exceeds the predicted possible loss (VaR), an exception has occurred. Since the VaR figures used for backtesting are based on a confidence level of 99% (as in the calculation of regulatory capital), the expected number of exceptions per year is two to three. The backtesting results for 2016 are shown in the chart below.

### Backtest results and P/L effect

(DKK millions)



The backtesting of the internal VaR model showed one exception in both actual and hypothetical P/L in 2016. The exception occurred in November and was the result of increasing interest rates in the wake of the United States presidential election.

#### 6.3.2 xVA

The volatility of the adjustments to fair value (xVA) has increased considerably over the past couple of years as the best practice – and with it the Group's model – for calculating xVA has changed to a more market-implied approach. The volatility is generated mainly by changes in interest rates, credit and funding spreads, and foreign exchange rates. In order to manage this volatility, the Group has developed a separate market risk framework for the xVA positions, including separate market risk limits.

#### 6.3.3 Portfolio analysis and stress testing

The Group performs market risk portfolio analyses and stress testing on a regular basis and in relation to specific events in trading and financial markets.

The Group regularly analyses the relationship between market risk and income for the trading sections in Corporates & Institutions.

The market risk stress testing programme is designed to underpin prudent market risk management. Efforts are made to ensure that the net effect under various stressed conditions is taken into account in the risk assessment and monitoring processes. The purpose of market risk stress testing is threefold:

- The primary purpose is to assess the adequacy of the Group's financial resources for periods of severe stress and develop contingency plans for the Group if the need arises
- A secondary purpose is to promote risk identification and add further insight into the need for setting new limits
- A third purpose is to serve as a supplement to the ongoing quality assurance for market risk management practices

The stress testing programme provides additional perspectives on market risk as a result of the use of multiple methodologies on scenarios with various degrees of severity. The complexity of the methodologies ranges from simple sensitivity analyses to complex scenario stress testing proportionally suited to the purpose of the stress test.

#### 6.3.4 Regulatory capital for market risk

The Group uses the internal VaR model to measure the regulatory capital for market risk in its trading book. The trading book covers trading-related market risk at Corporates & Institutions and hedging in relation to fair value adjustments of interest rate risk and the part of the CDS spread risk hedging that is not eligible under regulatory capital calculations for CVA risk.

The Group also uses the internal VaR model for calculating the stressed VaR capital charge. The stressed VaR is calculated for current positions and historical market data from September 2008 to August 2009, which represents a period of significant financial stress for the current positions in the Group's trading book.

Incremental risks, such as default and rating migration risks on bond issuers and CDS names, are estimated in the incremental risk model.

Regulatory capital for the Group's minor exposures to commodity risk and collective investment undertakings are calculated according to the standardised approach.

#### Approval of internal models for regulatory capital

In 2007, the Danish FSA approved the Group's internal VaR model for the calculation of regulatory capital for general market risk.

In June 2015, the Danish FSA approved an expansion of the internal VaR model to include bond spread risk and company-specific equity risk (that is, specific market risk) and also approved the Group's incremental risk model.

#### 6.3.5 Model validation

The Group conducts a variety of activities to maintain well-performing models in the market risk area. The activities can be divided into the validation of valuation and behavioural models used in daily risk management and validation of internal models used to calculate regulatory capital.

Group Risk Management is responsible for validating valuation and behavioural models independently of the development process. A model must be validated before the trading unit can trade in any new type of product that is priced or risk-managed according to that model. The purpose of the validation process is to evaluate, independently of the business unit, whether the stability and quality of the model are sufficient to enable the Group to price and risk-manage the financial products in question in a satisfactory manner.

To supplement the initial validation of valuation and behavioural models, Group Risk Management has established an ongoing monitoring process in which the crossing of specific thresholds (such as indications of a deterioration in model quality or an increase in the magnitude of risk involved) calls for additional validation activities.

An independent validation unit carries out the validation of internal models used for the regulatory capital calculations, including the validation of material changes to existing internal models and recurring validations of the major model assumptions. The standards for these validations are set forth in a validation policy for internal risk models. As with valuation and behavioural models, these guidelines are in line with the best practices presented in the US Office of the Comptroller of the Currency guidelines.

In addition, the Group conducts a number of activities to monitor the internal VaR model on an ongoing basis. These activities include an annual review of the model in accordance with regulatory requirements, quarterly risk factor reviews and daily backtesting of the model. The quarterly risk factor reviews include an assessment of the materiality of risk

factors that are not included in the model. Currently, the internal VaR model contains all significant risk factors.

## 6.4 Active market risk management

The Group actively manages the market risk in its trading activities in the financial markets. Most notably, Corporates & Institutions hedges the market risk incurred from its market-making activities and client flows by taking positions in financial instruments, assets and liabilities that offset this market risk.

### 6.4.1 Market risk appetite

The Group operates with a market risk appetite for its trading-related activities. The market risk appetite is determined in a risk mandate assessment that is based on the business strategy and the market environment expected in the near future. The purpose of the risk mandate assessment is to measure the effect of proposed limits by quantifying the expected upside of using the limits (that is, expected earnings) and the potential downside (that is, the potential loss if the expectations do not materialise). The Market Risk Appetite for trading-related activities is approved by the Board of Directors and reassessed at least once a year.

The Group's exposure to the risk on fair value adjustments is managed under separate limits for changes in CDS spreads and interest rates supplemented by a zero appetite for exposure to foreign currency rate changes.

The Group's exposure to non-trading-related market risk is managed under selected limits and operational targets that govern and control the market risk on these activities in relation to specific capital, liquidity, operational and earnings objectives.

### 6.4.2 Limit framework

Market risk limits are set in terms of various metrics so that activities subject to market risk are covered from several perspectives. The Group operates with three levels in the limit hierarchy for market risk (encompassing trading-related, xVA-related and non-trading-related market risks):

1. Board limits
2. All Risk Committee limits
3. Detailed operational limits

Board limits are set by the Board of Directors in the Market Risk Instructions, which defines overall limits for specific major risk factors. The overall limits are supplemented by a VaR limit for trading-related market risk. The All Risk Committee delegates the Board limits to the business areas (Corporates & Institutions and Group Treasury) and assigns additional limits for less significant risk factors. Detailed operational limits are set at business area and trading section levels for relevant risk categories and metrics. The operational limit structure is sufficiently granular to facilitate effective control of market risk and to provide an overview and understanding of activities undertaken by the various business units under the three distinct market risk frameworks.

### 6.4.3 Risk identification and assessment

The Group markets, trades and takes positions in products entailing a variety of market risk components. Most of the Group's market risks involve relatively simple products. The Group does not take on risk exposure to complex securitisation instruments for which it cannot measure and monitor the embedded market risks.

New initiatives and products are systematically reviewed in relation to the current product and market risk models. New products and business proposals are assessed in relation to current risk management practices and IT systems.

Furthermore, the Group may identify a need to take into account new risk factors through a review of the strategy. If the Group wants to expand its business into specific products or instruments, there may be a need for additional metrics and limits.

## 6.5 Monitoring and reporting

The Group carries out market risk controlling and reporting on a daily basis. The controlling process involves continuous intraday monitoring of limit utilisations with a full portfolio update every 30 minutes. The monitoring system is linked directly to front office trading systems and automatically flags any limit excess. The business areas and trading sections must comply with limits at all times. If a limit is breached, the business unit responsible must document the cause and

submit an action plan to rectify the situation. All limit breaches are reported to the relevant authority within the limit structure.

The Group produces a range of internal market risk reports and provides input to other reports in which market risk figures are presented. The reports provide sufficient information to create transparency about the Group's market risk.

The Board of Directors and senior management receive regular reports that provide an understanding of the Group's portfolios, main risk drivers, stress testing results and regulatory capital in order to support decision-making. This also includes information on the allocation of regulatory capital to the various business units and trading activities. Furthermore, daily and weekly detailed reporting provides granular metrics to senior management at Corporates & Institutions and Group Treasury for day-to-day risk management.

## *6.6 Data and systems*

IT systems pertaining to market risk are highly integrated within the Group. Traders and customers book trades directly in the relevant trade-entry systems. The trade-entry systems are connected to the operational systems and enriched with additional static, market and reference data. The operational systems feed both risk and finance systems. The Group performs an extensive set of regular reconciliations across the system portfolio.

### **6.6.1 Systems integration**

The Group's front office trade-entry systems are designed to capture all trade types used by the Group. Only necessary trade-related data are entered into the trade-entry systems. Product, customer and other related static data are maintained in the Group's Master Files. Trade data are automatically fed into the Group's operational layers of other related systems (straight-through processing). Since all systems and their processes have been designed to support straight-through processing, only exceptions need to be handled manually.

In addition, trades from systems configured for straight-through processing are regularly monitored in order to identify trades that require manual intervention. The monitoring is part of the back office processes, and regular reports are sent to a broad selection of stakeholders across the Group. An extensive programme of reconciliations between the Group's internal systems and reconciliations against external accounts are performed on a regular basis.

# *Liquidity Risk*

|    |       |   |
|----|-------|---|
| 57 | 6.1   | Liquidity risk profile                            |
| 57 | 7.1.1 | Risk indicators                                   |
| 59 | 7.1.2 | Ratings of Danske Bank A/S and Realkredit Danmark |
| 59 | 7.1.3 | Funding   |
| 61 | 7.1.4 | Liquidity reserves                                |
| 62 | 7.1.5 | Asset encumbrance                                 |
| 63 | 7.2   | Liquidity risk framework                          |
| 63 | 7.2.1 | Governance and organisation                       |
| 63 | 7.2.2 | Models and methodologies                          |
| 64 | 7.2.3 | Liquidity risk management                         |
| 65 | 7.2.4 | Monitoring and reporting                          |



## 7.1 Liquidity risk profile

Liquidity risk is inherent in basic banking activities such as accepting deposits and providing loans and credits. The transformation of short-term deposits into long-term loans exposes banks to maturity mismatches that cannot be eliminated. The Group manages this liquidity risk by holding sufficient liquidity to meet its obligations and follow its strategies – in particular regulatory obligations, business plans and rating ambitions – even in stressed situations. Liquidity risk is broken down into two key elements, and the Group addresses each element through a Liquidity Risk Appetite statement. The Group's liquidity risk appetite is conservative, and the Group must maintain both a strong liquidity position and a strong funding position.

| Key element         | Risk appetite   |
|---------------------|---|
| Distance to default | Management must have sufficient time to respond to events and developments in order to avoid financial or regulatory default.   |
| Market reliance     | The Group's reliance on wholesale funding and liquidity reflects its loan-to-deposit shortfall and maturity transformation profile. Excessive market reliance makes Danske Bank Group vulnerable to investor sentiment, market stress and market dysfunction. |

By ensuring sufficient time to respond, management will, in case of a prolonged crisis, be able to adjust to changed conditions in a controlled manner, thus avoiding any costly and hasty reactions to short-term market volatility. By reducing market reliance, the Group reduces the effects of market volatility and ensures the sustainability of its long-term business model. This allows it to serve customers at any time during the business cycle.

Realkredit Danmark and Danica Pension manage their own liquidity risks. Realkredit Danmark, which issues mortgage bonds, is substantially self-financing, and its liquidity management is conducted separately from the rest of the Group. Danica Pension's balance sheet includes long-term life insurance liabilities and assets, and the majority of these items are investments in readily marketable bonds and shares. Both companies are subject to statutory limits on their exposures to Danske Bank A/S. In the following sections, "Group" refers to the banking units only; that is, it does not include Realkredit Danmark and Danica Pension.

The Group monitors the two key elements through a set of risk indicators which together make up the liquidity risk profile. For an overview of these risk indicators, see 7.2.4, Monitoring and reporting, at the end of this section.

### 7.1.1 Risk indicators

#### Distance to default

The risk indicators used for managing the distance to default allow the Group to adjust the size and composition of its liquidity reserve to meet its obligations in case of a stressed liquidity situation. The indicators consist of the liquidity coverage ratio (LCR), internal stress tests and the operational two-week and four-week liquidity curves. The LCR covers a 30-day stressed period, while the internal stress tests cover a three-month stressed scenario. As a Danish SIFI bank, the Group as well as Danske Bank A/S must maintain an LCR above 100%. The table below provides a breakdown of the Group's LCR at the end of 2016.

| Liquidity Coverage Ratio           | Danske Bank Group <sup>1</sup> |                               |                               | Danske Bank A/S |
|------------------------------------|--------------------------------|-------------------------------|-------------------------------|-----------------|
|                                    | Total                          | Portion from EUR <sup>2</sup> | Portion from USD <sup>2</sup> | Total           |
| At 31 December 2016 (DKK billions) |                                |                               |                               |                 |
| HQLA level 1                       | 490                            | 189                           | 14                            | 387             |
| HQLA level 2                       | 18                             | 5                             | -                             | 17              |
| Limits due to cap                  | -                              | -                             | -                             | -               |
| <b>A. Liquid assets, total</b>     | <b>509</b>                     | <b>194</b>                    | <b>14</b>                     | <b>404</b>      |
| Customer deposits <sup>3</sup>     | 101                            | 26                            | 7                             | 84              |
| Market funding <sup>4</sup>        | 141                            | 29                            | 43                            | 121             |
| Other cash outflows <sup>5</sup>   | 132                            | 218                           | 217                           | 152             |
| Derivative currency adjustment     | -                              | -15                           | -8                            | -               |
| <b>B. Cash outflows, total</b>     | <b>373</b>                     | <b>258</b>                    | <b>258</b>                    | <b>357</b>      |

<sup>1</sup> Includes Realkredit Danmark.

<sup>2</sup> According to the Danish FSA's guidance on currency-specific LCR calculations.

<sup>3</sup> Includes retail deposits, operational deposits, correspondent banking/ prime brokerage accounts and non-operational deposits covered by deposit guarantees.

<sup>4</sup> Includes non-operational deposits, unsecured debt issuances and secured funding.

<sup>5</sup> Includes Realkredit Danmark's additional outflow requirement, which is equal to 2.5% of lending.



## Liquidity Coverage Ratio

| At 31 December 2016 (DKK billions)             | Danske Bank Group <sup>1</sup> |                               |                               | Danske Bank A/S |
|--|--------------------------------|-------------------------------|-------------------------------|-----------------|
|  | Total                          | Portion from EUR <sup>2</sup> | Portion from USD <sup>2</sup> | Total           |
| Lending to non-financial customers             | 7                              | 2                             | 0                             | 4               |
| Other cash inflows                             | 45                             | 179                           | 241                           | 50              |
| <b>C. Cash inflows total</b>                   | <b>52</b>                      | <b>181</b>                    | <b>241</b>                    | <b>55</b>       |
| <b>Liquidity coverage ratio (A/(B-C)), (%)</b> | <b>158</b>                     | <b>254</b>                    | <b>83</b>                     | <b>134</b>      |

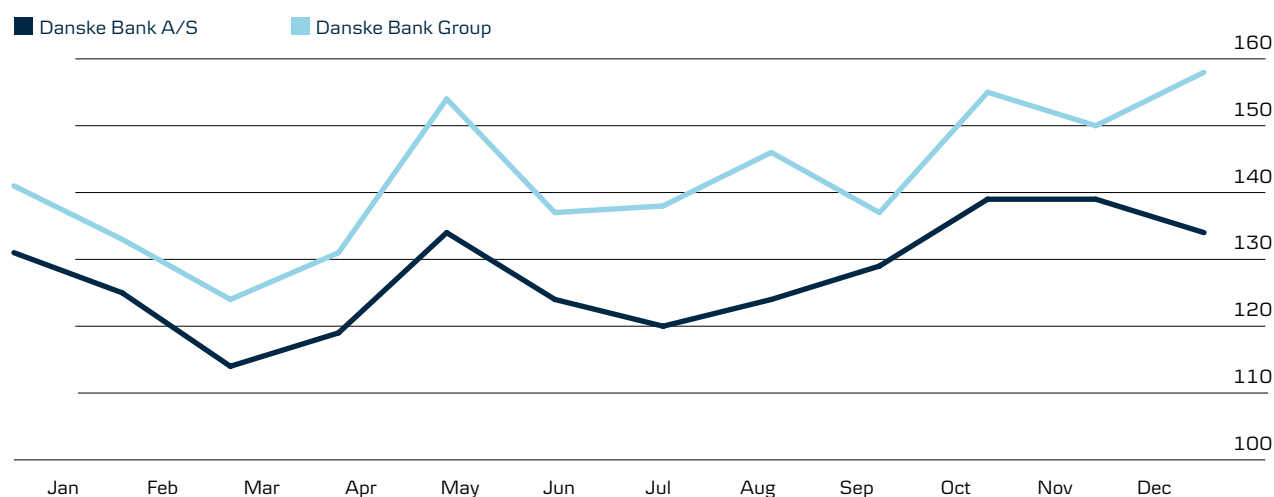
<sup>1</sup> Includes Realkredit Danmark.

<sup>2</sup> According to the Danish FSA's guidance on currency-specific LCR calculations.

The following chart shows the monthly LCR figures for the Group and Danske Bank A/S through 2016. Both LCRs improved throughout 2016 as a result of the Group's increased focus on managing its dynamics. Furthermore, the improvements reflect the current low-yield environment in which central banks across the world are flooding the markets with liquidity through quantitative easing programmes.

## Liquidity coverage ratio for Danske Bank Group and Danske Bank A/S, 2016

(%)

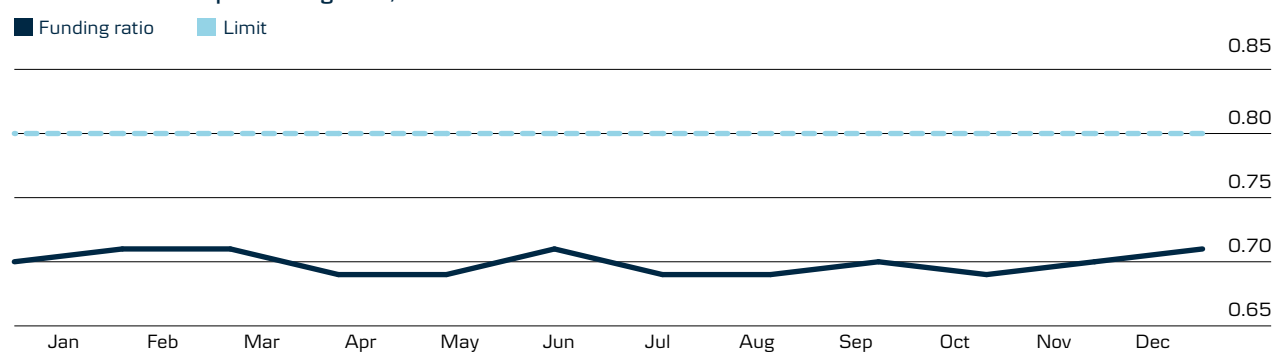


In 2016, the Danish Financial Supervisory Authority (the FSA) implemented the LCR by introducing currency requirements for Danish SIFI banks. The initial requirement is a minimum LCR of 60% in EUR and USD. When fully implemented in 2017, the minimum requirement will be an LCR of 100% in both EUR and USD.

## Market reliance

The risk indicators used for managing market reliance enable the Group to have a prudent composition of its liabilities because they ensure that there is sufficient long-term funding for maturing long-term assets. This reduces any pressure on the Group in a situation involving a liquidity crisis. Until the introduction of the net stable funding ratio (NSFR) in 2018, the funding ratio shown below is the key indicator for market reliance. The risk appetite is set at 0.8, and the historical development reflects the fact that the Group maintains a conservative balance between loans and working capital.

## Danske Bank Group's funding ratio, 2016



The Group also monitors the diversification of its funding sources by product, currency, maturity and counterparty to ensure that its funding base provides the best possible protection. The Group oversees the maturity profile of its long-term funding to keep the portions of long-term funding maturing within a twelve-month horizon at an acceptable level.

### 7.1.2 Ratings of Danske Bank A/S and Realkredit Danmark

Danske Bank A/S's senior debt ratings from all three rating agencies were unchanged at the A level during the first nine months of 2016.

On 8 July 2016, S&P Global upgraded Danske Bank A/S's standalone credit profile (SACP) from A- to A as a result of Danske Bank A/S's improved capitalisation. Consequently, Danske Bank A/S's subordinated tier 2 debt rating improved from BBB to BBB+, and the rating of Danske Bank A/S's additional tier 1 capital instruments improved from BB+ to BBB-. Also, Danica Pension's rating improved from A- to A, and the rating of Danica Pension's tier 2 subordinated debt instruments improved from BBB to BBB+.

On 12 October 2016, Moody's upgraded Danske Bank A/S's long-term deposit rating from A2 to A1 and changed the outlook on Danske Bank A/S from stable to positive as a result of the Group's continued improvements in earnings, capitalisation and credit quality.

#### Danske Bank's ratings

|                        | Moody's  | S&P Global | Fitch Ratings |
|------------------------|----------|------------|---------------|
| Long-term deposits     | A1       |            |               |
| Long-term senior debt  | A2       | A          | A             |
| Short-term deposits    | P-1      |            |               |
| Short-term senior debt | P-1      | A-1        | F1            |
| Outlook                | Positive | Stable     | Stable        |

Mortgage bonds and mortgage-covered bonds issued by Realkredit Danmark are rated AAA by S&P (stable outlook). Fitch assigns separate ratings to capital centre S (AAA, stable outlook) and capital centre T (AA+, positive outlook). Capital centre S is used for the issue of fixed-rate mortgage bonds, while capital centre T is used for the issue of variable-rate and interest-reset mortgage bonds.

Covered bonds issued by Danske Bank A/S are rated AAA by both S&P Global and Fitch Ratings, while covered bonds issued by Danske Bank Plc are rated AAA by Moody's.

The following table shows the Group's loss of liquidity under four scenarios involving downgrades of the Group's long- and short-term debt. It also shows how much the Group would have to prepay under the contracts or provide as supplementary collateral under the various scenarios. The figure in parentheses after the individual ratings indicates the number of notches by which the rating drops from its current level in the scenarios.

#### Loss of liquidity if the Group's ratings are downgraded, end of 2016

| Assumed rating             | Short-term |         |        | Long-term |          |          | Supplementary collateral [DKK billions] |
|----------------------------|------------|---------|--------|-----------|----------|----------|---|
|                            | Moody's    | S&P     | Fitch  | Moody's   | S&P      | Fitch    |   |
| Present rating             | P-1        | A-1     | F1     | A2        | A        | A        | 2.0                                     |
| Scenario 1                 | P-1        | A-1     | F1     | A3(▼1)    | A-(▼1)   | A-(▼1)   | 3.2                                     |
| Scenario 2 (mild crisis)   | P-2(▼1)    | A-2(▼1) | F2(▼1) | A3(▼1)    | A-(▼1)   | A-(▼1)   | 3.4                                     |
| Scenario 3                 | P2-(▼1)    | A-2(▼1) | F2(▼1) | Baa1(▼2)  | BBB+(▼2) | BBB+(▼2) | 4.1                                     |
| Scenario 4 (severe crisis) | P2-(▼1)    | A-2(▼1) | F2(▼1) | Baa2(▼3)  | BBB(▼3)  | BBB(▼3)  | 4.2                                     |

### 7.1.3 Funding

In 2016, Danske Bank Group issued DKK 62.6 billion worth of senior debt and DKK 19.2 billion worth of covered bonds (a total of DKK 81.8 billion) and redeemed DKK 62.9 billion worth of long-term debt.

At the end of 2016, the total nominal value of outstanding long-term funding, excluding additional tier 1 capital and debt issued by Realkredit Danmark, was DKK 339 billion, against DKK 323 billion at the end of 2015.

**Realkredit Danmark's funding**

Realkredit Danmark funds its mortgage lending activities by issuing covered bonds on the basis of the pass-through principle as stated in Danish mortgage banking regulations. Realkredit Danmark complies with the balance principle by applying a pass-through structure. This implies that

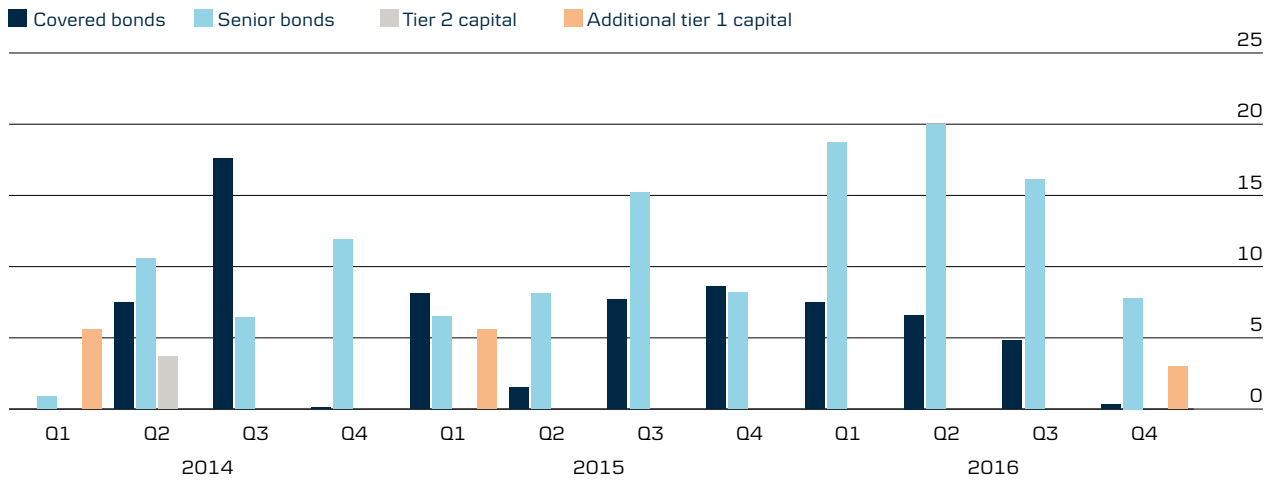
- all mortgages are funded by means of covered bonds with a matching cash flow
- all funding costs are absorbed by the borrowers
- amounts of interest, redemptions and margins from borrowers fall due in advance of interest payments and principal repayments to bondholders
- covered bonds are issued on tap when the mortgages are originated

The balance principle allows for interest-reset loans with maturities ranging up to 30 years, while the underlying bonds are typically issued with maturities ranging from one to five years. The refinancing risk is mitigated by caps on the volume of interest-reset loans to be refinanced each quarter and each year. Ultimately, Realkredit Danmark has the option to extend the maturity of maturing covered bonds in case of a refinancing failure.

Consequently, Realkredit Danmark is exposed to limited funding and liquidity risks.

**Debt issuance, by quarter**

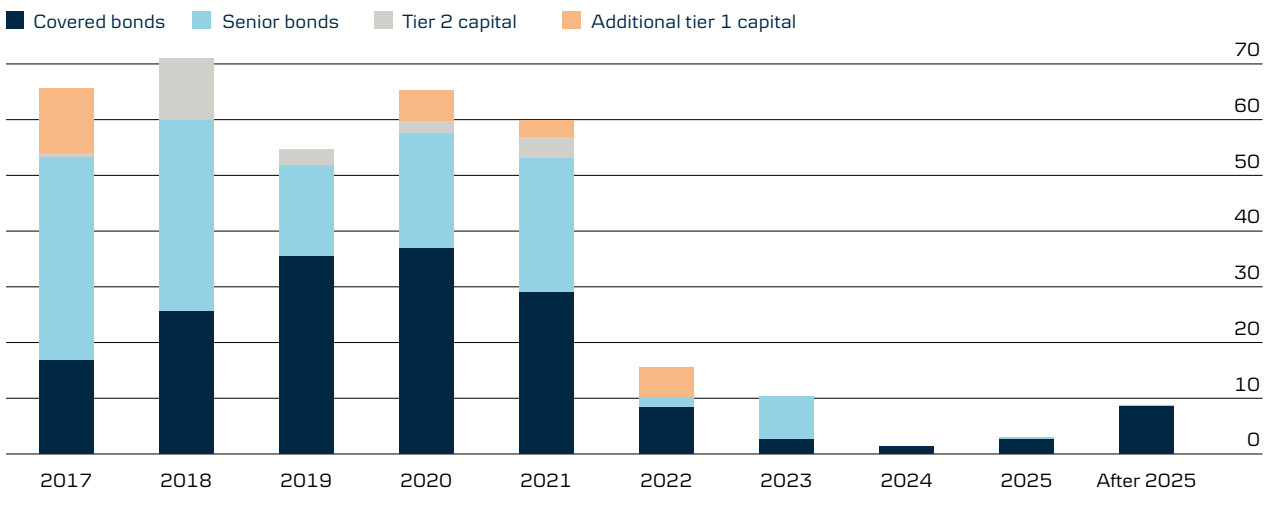
(DKK billions)



The Group monitors the maturity profile of its long-term funding to ensure that the portions of long-term funding maturing within a year and within a quarter are maintained at an acceptable level.

**Danske Bank Group's redemption profile at 31 December 2016**

(DKK billions)



Total wholesale funding consists of debt issues as well as deposits received from credit institutions and central banks. A detailed breakdown is shown below.

#### Breakdown of wholesale funding by contractual maturity

| At 31 December (DKK billions)                       | 0-1 month  | 1-3 months | 3-12 months | 1-5 years  | > 5 years | Total 2016 | Total 2015 |
|---|------------|------------|-------------|------------|-----------|------------|------------|
| Deposits from credit institutions and central banks | 261        | 36         | 20          | 13         | -         | 330        | 336        |
| CDs and CP  | 3          | 28         | 42          | -          | -         | 73         | 61         |
| Senior unsecured MTNs                               | -          | 10         | 26          | 96         | 10        | 142        | 113        |
| Covered bonds                                       | 3          | 6          | 22          | 148        | 38        | 217        | 221        |
| Subordinated liabilities                            | -          | 7          | 5           | 21         | 1         | 34         | 35         |
| <b>Total</b>  | <b>267</b> | <b>88</b>  | <b>115</b>  | <b>278</b> | <b>49</b> | <b>797</b> | <b>766</b> |
| Breakdown   |            |            |             |            |           |            |            |
| Secured instruments                                 | 122        | 27         | 14          | 13         | -         | 177        | 184        |
| Unsecured instruments                               | 145        | 61         | 101         | 265        | 49        | 620        | 582        |

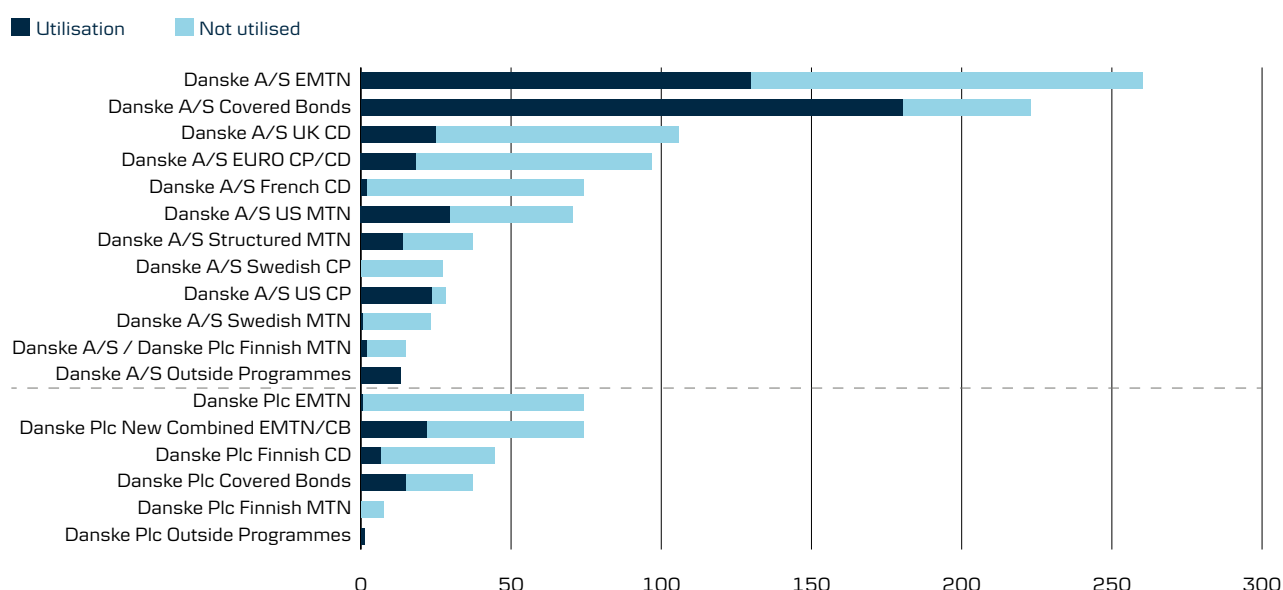
Note: In this table wholesale funding is measured at nominal value, while it is measured at amortised cost in section 7.1. Covered bonds issued to enhance the Group's liquidity reserve are included. Repo transactions are not netted.

In 2016, the Group focused on investor diversification and on obtaining funding directly in its lending currencies. The Group issued notes for a total of USD 3 billion under its US MTN programme and also established a portfolio of LCR level 1b NOK-eligible covered bonds under which bonds for a total of NOK 13 billion were issued with three maturity profiles. The Group also submitted an application for the establishment of a Swedish covered bond programme, Danske Hypotek, similar to the covered bond subsidiaries operated by Swedish banks. From 2017, the new entity will issue covered bonds under Swedish law, primarily in the domestic SEK market. The initiatives in SEK and NOK will reduce the Group's dependency on cross-currency swaps.

The increase in local funding, in combination with our enhanced focus on asset and liability management, will ensure that the Group can stay within the risk appetite while executing its growth strategy for Norway and Sweden.

#### Utilisation of available long- and short-term programmes at 31 December 2016

(DKK billions)



#### 7.1.4 Liquidity reserves

The Group's liquidity reserve is defined as all unencumbered liquid assets that are available to the Group in a stressed situation. Assets received as collateral are included in the reserve, whereas assets used as collateral are excluded.

The following table shows the value of the liquidity reserve in the LCR framework. The current low-yield macro environment caused by the quantitative easing programmes launched by central banks around the world has also had an effect on the composition of the Group's liquidity reserve. The low-yield environment means that a greater proportion is held in cash at the expense of government bonds. Other things being equal, this increases the counterbalancing capacity of the liquidity reserve because a smaller portion needs to be monetised.

| <b>Group liquidity reserve – LCR definition</b> |                                      |            |            |
|---|--------------------------------------|------------|------------|
| At 31 December (DKK billions after haircut)     |                                      | 2016       | 2015       |
| <b>Total high-quality liquid assets</b>         |                                      | <b>509</b> | <b>434</b> |
| Level 1a assets                                 | Central bank reserves                | 167        | 63         |
|   | Central government debt              | 62         | 128        |
|   | Other level 1a assets                | 27         | 29         |
| Level 1b assets                                 | Extremely high-quality covered bonds | 234        | 197        |
| Level 2a assets                                 | High-quality covered bonds           | 15         | 10         |
|   | Other level 2a assets                | 3          | 5          |
| Level 2b assets                                 |                                      | -          | 1          |

A large number of the bonds held in the reserve are central-bank-eligible instruments, which are vital for intraday liquidity needs, for overnight liquidity facilities and for defining liquidity in financial markets during stressed periods.

The internal stress tests use different parameters than the LCR to determine the liquidity value of bonds, so the value of the liquidity reserve differs depending on the risk indicator chosen.

#### 7.1.5 Asset encumbrance

Regulators, rating agencies, investors and others are increasingly directing their attention to asset encumbrance (the percentage of assets pledged or mortgaged as collateral) and the resulting structural subordination of senior unsecured creditors and depositors.

The Group's asset encumbrance has three main sources:

- Loans and securities serving as collateral for covered bond issuance. Covered bond issuance is a strategic long-term funding measure that entails ring-fencing assets according to statutory regulation.
- Securities provided as collateral in repo and securities-lending transactions. The Group's repo activities consist of business-driven transactions that can be wound up relatively quickly and transactions for short- or long-term funding purposes. In repo transactions, the securities remain on the Group's balance sheet, and the amounts received are recognised as deposits.
- Cash and securities provided as collateral for derivatives and clearing transactions when the pledging or mortgaging of collateral is an operational requirement to support business activities.

The Group's asset encumbrance reporting follows the method described in "Implementing Technical Standards", issued by the European Banking Authority. The following table shows the encumbrance of assets on the balance sheet and the encumbrance of collateral received, broken down by source of encumbrance.

## Asset encumbrance and encumbrance ratio

| At 31 December 2016 (DKK billions) | Danske Bank A/S | Danske Bank Group <sup>1</sup> |
|------------------------------------|-----------------|--------------------------------|
| Assets on balance sheet            |                 |                                |
| Derivatives                        | 87              | 87                             |
| Deposits (repos)                   | 201             | 193                            |
| Covered bonds                      | 166             | 1,002                          |
| - Portion from RD                  | 0               | 797                            |
| Other                              | 25              | 32                             |
| Total encumbrance                  | 479             | 1,314                          |
| Total assets                       | 2,168           | 3,217                          |
| Collateral received                |                 |                                |
| Derivatives                        | 18              | 18                             |
| Deposits (reverse repos)           | 225             | 213                            |
| Total encumbrance                  | 242             | 230                            |
| Total assets                       | 466             | 443                            |
| Asset encumbrance ratio (%)        | 27              | 42                             |

<sup>1</sup> Includes Realkredit Danmark.

## 7.2 Liquidity risk framework

### 7.2.1 Governance and organisation

The Group manages its liquidity on a daily basis by using a combination of risk indicators, risk triggers and risk policy. Two documents lay the foundation of the Group's liquidity risk management: (1) the Liquidity Policy and Appetite and (2) the Liquidity Instructions. The Liquidity Policy and Appetite contains the overall principles and standards of the Group's liquidity risk management. It covers both the liquidity risk profile and the governance structure. The Liquidity Instructions define the limits and the methods of calculating liquidity risk. Both documents are issued by the Board of Directors.

In 2016, the liquidity risk organisation was expanded with the establishment of the Asset & Liability Committee (ALCO). The purpose of the ALCO is to manage the Group's balance sheet and funding mix in accordance with the Group's Liquidity Risk Appetite approved by the Board of Directors.

As a subcommittee of the All Risk Committee, the ALCO has a strategic focus on asset and liability management components such as the following:

- Net interest income
- Funds transfer pricing
- Funding mix
- Interest and currency risk on the balance sheet

The Group Liquidity Risk Committee (GLRC) is an ALCO subcommittee. The GLRC is responsible for overseeing the management of liquidity risk and funding at the group level. Both the ALCO and the GLRC consist of representatives from Group Risk Management, the CFO area, Personal Banking, Business Banking, Corporates & Institutions, and Wealth Management.

The GLRC is empowered to challenge the way the Group manages its liquidity risk profile. Group Treasury is responsible for the Group's liquidity and funding. This includes executing the funding plan and managing the liquidity reserve. Short-term liquidity is managed by Danske Markets under the supervision of Group Treasury.

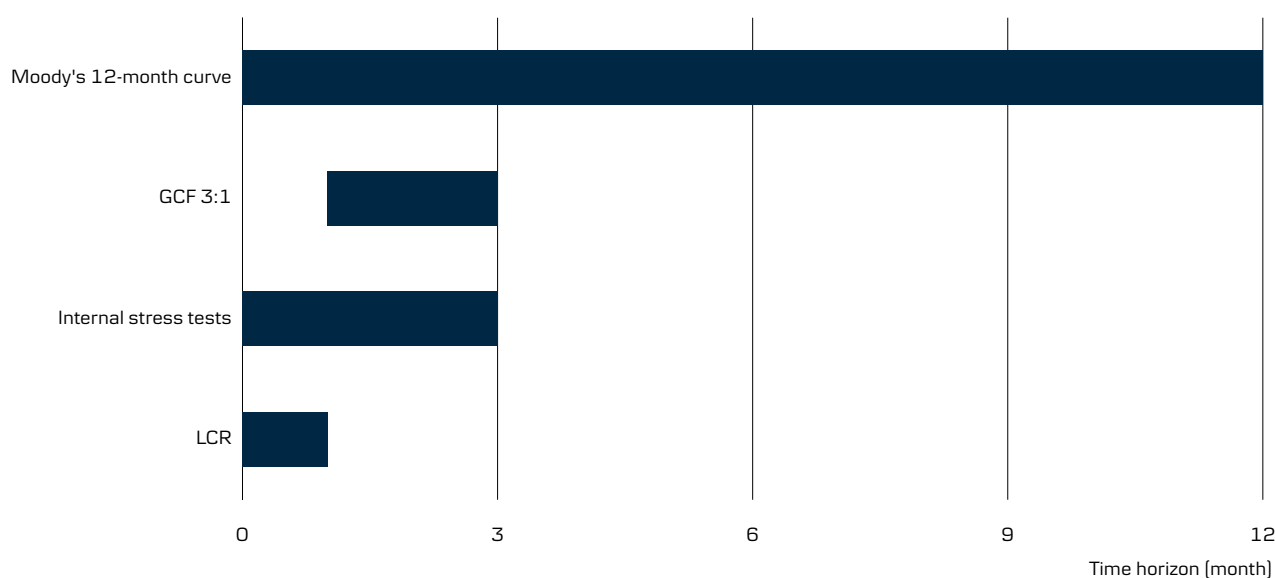
Liquidity management is centralised and conducted on a consolidated basis to ensure regulatory compliance at the group level and compliance with internal requirements. Regulatory compliance and the maintenance of adequate liquidity reserves at subsidiaries are managed locally.

### 7.2.2 Models and methodologies

#### Stress testing

Stress tests are a core element of the models and methodologies used by the Group to manage liquidity risk. Four of the seven risk indicators making up the risk profile are based on stressed liquidity scenarios.

### Liquidity risk stress tests time horizons



The Group conducts stress tests to measure its immediate liquidity risk so that it has sufficient time to respond to possible crises. The stress tests are conducted for various scenarios, including three standard scenarios: a scenario specific to the Group, a general market crisis and a combination of the two. A “stress-to-failure” test is also conducted.

All stress tests are based on the assumption that the Group does not reduce its lending activities. This means that existing lending activities continue and require funding. The degree of possible refinancing of the Group’s funding base varies depending on the scenario in question and on the specific funding source. To assess the stability of its funding, the Group considers the maturity and makes behavioural assumptions.

#### 7.2.3 Liquidity risk management

The Group is in the process of implementing a new asset and liability management system. Combined with other initiatives, this has already resulted in enhancements of the Group’s liquidity risk management. The enhancements include an improvement of the LCR and currency-specific LCR calculations as well as monitoring of intraday liquidity, which is described in more detail below.

The governance process was also improved in 2016 with a modification of the control and validation setup for reporting liquidity risk measures.

#### Liquidity by currency

A major focus point in 2016 was to improve the Group’s ability to manage and report liquidity by currency. The Group now meets the currency-specific LCR requirements introduced by the Danish authorities in October 2016. The increased focus on liquidity by currency is also incorporated in the funding plan and the ongoing balance sheet optimisation. This has led to the strategic decision to issue more debt in local currencies such as NOK and SEK and to set up a separate funding vehicle in Sweden. The project on intraday liquidity has also improved the Group’s ability to monitor and report real-time intraday liquidity by currency. This allows reporting in accordance with the guidelines issued by the Basel Committee. Overall, these improvements have enhanced liquidity risk management capabilities and enabled the Group’s to reduce its cross-currency liquidity risk.

#### Net stable funding ratio

With the successful implementation of the currency-specific LCR, the next milestone in liquidity risk management will be the final implementation of the net stable funding ratio (NSFR). While the LCR focuses on short-term liquidity risk, the NSFR measures the structural composition of the balance sheet. Adjustments to the balance sheet to meet the NSFR thus require a longer implementation period. An internal NSFR steering committee is in charge of the implementation of the NSFR, including analysis and reporting of the expected effects on the balance sheet.

#### Funds transfer pricing

The Group’s Funds Transfer Pricing (FTP) model is the central management tool used by the Group to adjust and manage the balance sheet composition at the business units. Business activity at the banking units is encouraged by assigning

internal funding prices that adhere to the matched-maturity principle. The FTP charged on loans and credited to deposits reflects the distinct characteristics of the individual balance sheet items, with a focus on product and customer type, including maturity, currency, amortisation profile, modelled behaviour and underlying interest rate risk. Credits are reduced by any charges against contingent commitments, such as expected stressed deposit run-off, and specific charges apply to contingent commitments, such as committed facilities.

FTP links the balance sheet composition directly to the income statement, and it is a key component in determining the Group's overall funding position. FTP is fundamental in evaluating the profitability of the Group's balance sheet composition, and it has therefore been included in the profitability analysis at the customer level in order to facilitate consistency between liquidity risk assessment, product pricing and balance sheet valuation. Mortgage loans provided through Realkredit Danmark are excluded from FTP because they are match-funded in accordance with Danish mortgage legislation and thus do not contain any liquidity risk.

The Group's trading activities at Danske Markets are also subject to FTP in a model that assigns term funding costs to trading and collateral management activities in order to ensure LCR compliance.

#### 7.2.4 Monitoring and reporting

Monitoring and reporting are conducted separately according to the principle of three lines of defence. Group Treasury, as the first line of defence, is responsible for reporting the risk measures, whereas Group Risk Management, as the second line of defence, is responsible for monitoring compliance with the internal limits. Furthermore, Group Risk Management validates and challenges the models and assumptions used by the first line of defence for reporting risk measures

Liquidity Risk Management and Market Risk Management share the task of monitoring compliance with the risk limits set in the Liquidity Risk Appetite. The LCR and operational liquidity are monitored and reported on a daily basis, while the other risk indicators are reported on a monthly basis to the GLRC and the All Risk Committee. Risk indicators are reported to the Board of Directors on a quarterly basis.

#### Distance to default

| Indicator | Requirement  | Frequency | Monitoring unit   |
|-----------|--|-----------|-------------------|
| KRI 1     | The most severe internal stress tests must be positive three months ahead  | Monthly   | Group Treasury    |
| KRI 2     | The Group LCR must be 105% or higher, and each legal entity must comply with local LCR requirements  | Daily     | Group Treasury    |
| SRI 1     | The Group's total liquidity in all currencies may not fall below DKK 100 billion four weeks ahead, and total liquidity in all currencies except DKK must be positive two weeks ahead | Daily     | Group Market Risk |

#### Market reliance

| Indicator | Requirement  | Frequency | Monitoring unit |
|-----------|--|-----------|-----------------|
| KRI 3     | The Group's funding ratio must be below 0.8  | Monthly   | Group Treasury  |
| SRI 3     | To ensure a suitable funding profile, at least 75% of the funding longer than one month must be funding over at least three months | Monthly   | Group Treasury  |
| SRI 4     | Long-term funding maturing within 12 months may not exceed DKK 90 billion  | Monthly   | Group Treasury  |
| SRI 5     | Twelve-month liquidity must be positive one year ahead   | Monthly   | Group Treasury  |

Liquidity Risk Management is responsible for reporting all limit breaches to the relevant parties and committees. Board limit breaches are reported to the Board of Directors and other relevant stakeholders (such as the GLRC, the All Risk Committee and the Executive Board). All Risk Committee limit breaches are reported to the Executive Board, the All Risk Committee and other relevant stakeholders, including the business units. Lower-level limit breaches are reported to the head of Liquidity Risk Management.

Liquidity risk reporting consists of overviews, analyses and forecasts for the most critical risk indicators such as the LCR. They outline the drivers and causes of changes in liquidity and give senior management at Corporates & Institutions and Group Treasury a clear understanding of the Group's day-to-day liquidity risk profile.



# *Operational risk*

|    |       |                                    |
|----|-------|------------------------------------|
| 67 | 8.1   | Operational risk profile           |
| 67 | 8.1.1 | Operational risk events and losses |
| 68 | 8.1.2 | Operational risk exposures         |
| 68 | 8.2   | Operational risk framework         |
| 68 | 8.3   | Operational risk management        |
| 69 | 8.4   | Risk appetite                      |
| 69 | 8.5   | Risk classification                |
| 70 | 8.6   | Cybersecurity risk                 |
| 70 | 8.7   | Compliance risk                    |



Operational risk is defined as the risk of losses resulting from inadequate or failed internal processes, people and systems or from external events, including legal events. Operational risk events are operational risks which have occurred and have caused a monetary loss (a loss event), or a reputational effect (a reputational event), or may have caused a loss that was rapidly recovered or may give rise to a future potential loss (a near-miss event).

Operational risks can arise from all the Group's activities. Danske Bank Group takes on additional operational risks whenever it accepts new business, originates new transactions, introduces new products, enters new markets, out-sources activities and hires new staff. New operational risks may also arise from a variety of changes to internal processes, people and systems and from changes to the Group's external environment.

The Group's operational risk management approach serves to continually improve its ability to anticipate all material risks and to reduce, with a high degree of confidence, potential failures in processes. This helps to improve the customer experience and reinforces the need for clear ownership and accountability for all risks across Group processes.

While priority is given to risks in order of their materiality, the Group must seek to continually improve its processes to improve cost efficiency and to maintain an optimal balance between risks related to the customer experience and the costs of control.

## 8.1 Operational risk profile

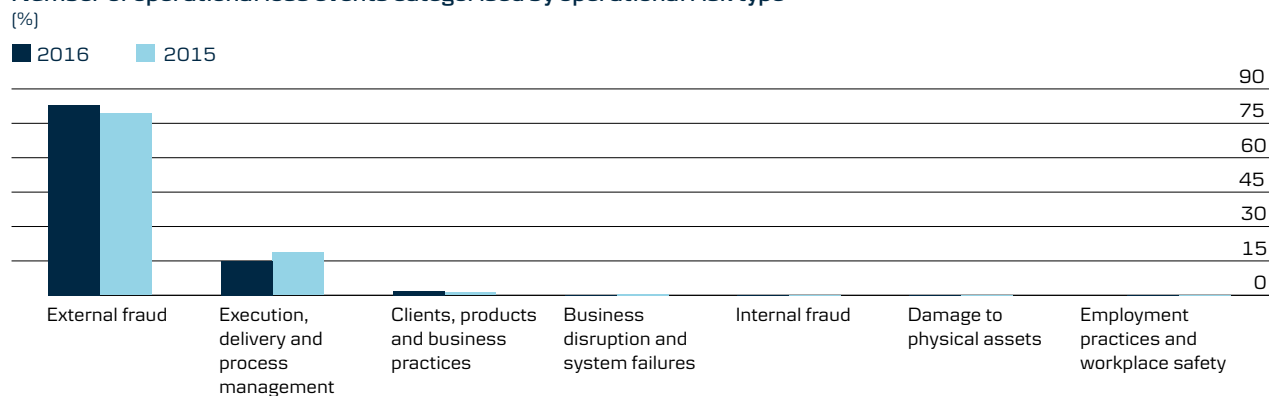
The Group's operational risk profile is its overall exposure to operational risk at a given point in time, covering all applicable operational risk types. The operational risk profile encompasses (1) operational risk events and losses and (2) the current exposure to potential operational risks.

### 8.1.1 Operational risk events and losses

Event follow-up takes place to ensure that each event is analysed for root causes, appropriate remedial action is taken and risk mitigation is implemented. A Group operational loss profile is prepared to ensure that loss trends are communicated to the relevant areas in order to prevent a repetition of events. Significant losses are also reported to the Executive Board and the Board of Directors.

The following chart summarises the Group's profile of operational loss events in 2016 and 2015 by breakdown of the number of events in proportion by risk type.

Number of operational loss events categorised by operational risk type

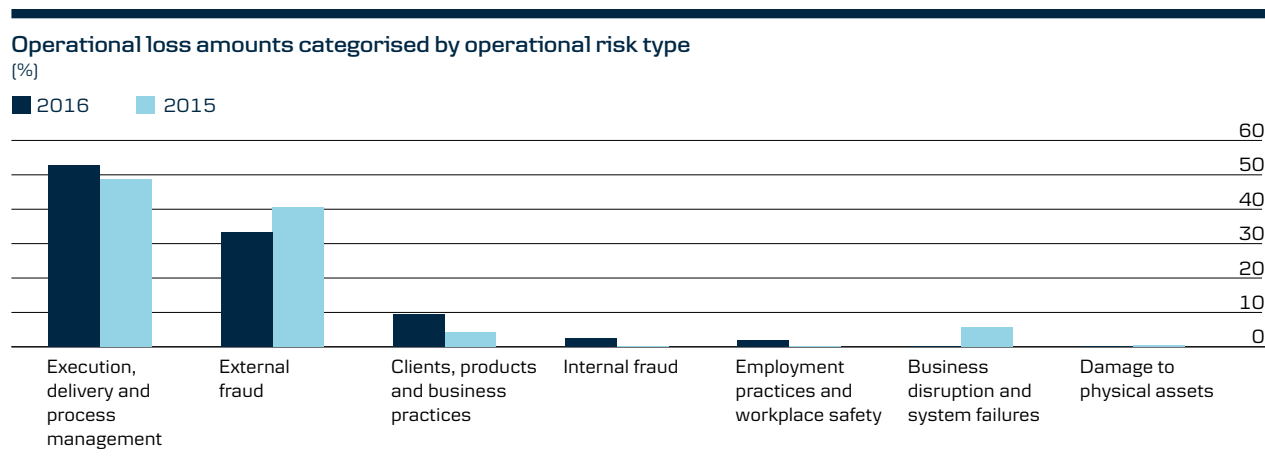


Note: The chart shows the distribution by Basel operational risk type categories, as reported for COREP reporting. Internal risk type categories are stated in Section 8.5 Risk classification.

Measured by the number of loss events, two risk types accounted for the majority of loss events in 2016: External Fraud was 83% and Execution, Delivery and Process Management was 15%. This is similar to 2015 where External Fraud accounted for 79% and Execution Delivery and Process Management accounted for 19%.

Measured by loss amount, similarly External Fraud and Execution, Delivery and Process Management accounted for the majority of loss amounts. Compared to 2015, loss amounts for External Fraud improved significantly (from 41% in 2015 to 33% in 2016).

The following chart summarises the Group's profile of operational loss events in 2016 and 2015 by breakdown of the gross loss amounts in proportion by risk type.



Note: The chart shows the distribution by Basel operational risk type categories, as reported for COREP reporting. Internal risk type categories are stated in Section 8.5 Risk classification.

The decrease in External Fraud loss amount is driven by a number of initiatives implemented by the Group in 2016. External Fraud events continue to be primarily card fraud, online fraud and falsified documents. The majority of events are high frequency, low value events with low monetary impact.

### 1.1.2 Operational risk exposures

The Group monitors its operational risk exposures for both inherent risk and residual risk. The operational risks are measured using a standard set of risk assessment matrices, measuring financial risk, regulatory risk, customer risk and reputational risk. These matrices are calibrated to measure the severity of impact and the likelihood of occurrence.

## 8.2 Operational risk framework

In 2016 the Group enhanced the operational risk framework with a common operational risk taxonomy and risk assessment methodology to be used across the three lines of defence. The enhanced framework was approved by the Board of Directors and the Group Operational Risk function is responsible for the independent oversight and establishment of the framework. The Group's approach to operational risk identification and assessment is in accordance with the Group's operational risk framework. It is consistent with the three lines of defence and enhances the Group's risk culture.

The Board of Directors approves the principles and standards for the operational risk management approach. The Executive Board has set up the Operational Risk Committee ("ORCO") with responsibility for overseeing the implementation and maintenance of the Group-wide framework for managing operational risk.

As a sub-committee of the All Risk committee, the ORCO is a risk governance committee reporting directly to the All Risk Committee. The ORCO may make decisions within the authority of the All Risk Committee as set out in the All Risk Charter. As required and on behalf of the All Risk Committee, the ORCO reports and makes recommendations to the All Risk Committee, the Executive Board and the Board of Directors.

## 8.3 Operational risk management

The operational risk management approach is a more frequent and granular forward-looking activity designed to identify potential breakdowns in the Group's business and function processes.

The risk identification and assessment process takes place on an ongoing basis with a view to identifying all material operational risks to which the Group is exposed. The approach is an end-to-end risk assessment of the Group with the following output:

- A full set of identified risks, with risk type descriptions and where they occur in the customer value chain.
- Each risk identified is assessed for the severity of impact based on the realistic worst outcome of the business

process failing. Justified rationales are agreed upon with each second-line control function assigned to the specific risk types.

- The highest inherent risks are prioritised for residual risk assessment.
- Each prioritised risk has a residual risk rating, with rationales to justify the impact and likelihood, taking the following into consideration:
  - The process and control design
  - The current process quality-control effectiveness indicators mapped to the causes of risk
- Group-level residual risk ratings are determined for each prioritised risk using the residual risk rating from the country.
- An aggregate report on the full profile of inherent and residual risks, available by business, function, country (first line of defence) and by risk type (second line of defence).
- Priority is given to the highest residual risks requiring risk treatment.

## 8.4 Risk appetite

The Group aims to control operational risks within tolerances set to ensure that financial and non-financial exposures do not cause material damage to the Group.

Top operational risks and events are monitored to check that they are within the risk appetite tolerances and reports are submitted through the risk governance process to the Board of Directors.

## 8.5 Risk classification

Operational risks are identified and categorised by risk type. The Group uses operational risk types principally as a method to ensure comprehensive and consistent identification of operational risks wherever they may arise.

The following table lists the Group's operational risk types.

| Operational risk types: categories and definition |  |
|---|--|
| Operational risk type                             | Definition   |
| Internal fraud                                    | Risk that a person or persons, involving at least one internal party, act dishonestly or deceitfully for advantage or gain   |
| External fraud                                    | Risk that a person or persons, not involving any internal party, acts dishonestly or deceitfully for advantage or gain   |
| Employment practices and workplace safety         | Risk arising from acts inconsistent with employment, health or safety laws or agreements   |
| Clients, products and business practices          | Risk of breaching financial services rules and regulations relating to client treatment, market behaviour, business practices and financial crime  |
| Execution, delivery and process management        | Risk of failure of operational processes   |
| Damage to physical assets                         | Risk of damage to physical assets  |
| Systems and data failure                          | Risk of deficiency or failure of systems or compromise of data integrity   |
| Information technology security                   | Risk of breach of information technology security arising from the malicious act or unauthorised use of computer(s) or computer systems with an adverse effect on information or systems |
| Model Risk  | Risk of loss due to a significant discrepancy between the output from internal models and actual experience  |

## 8.6 Cybersecurity risk

Operational cybersecurity risks are categorised as information technology security risks that have consequences for the confidentiality, availability or integrity of information or information systems.

Cybersecurity management aims at handling and mitigating cybersecurity risks and establishing a robust cybersecurity platform that is a key component of the Group's IT strategy.

Group IT Security participates in and oversees the implementation of robust cybersecurity measures across the organisation. The unit is headed by the chief information security officer (CISO), who reports functionally to the CTO with a secondary reporting line to the CRO.

For the past two years, the Group has made major investments and improvements in the IT security area in order to increase resilience to and controls in relation to cybercrime and other cybersecurity threats.

The Group addresses cybersecurity through four disciplines:

- **Detection:** Be aware of, understand and predict security risks and gaps.
- **Prevention:** Ensure the best security knowledge from international and external experts for the benefit of both the Group and its customers.
- **Response:** Have the agility to react quickly to identify and mitigate security threats.
- **Recovery:** Have resilience to recover efficiently and effectively from a cybersecurity breach.

Automation and new digital offerings increase customers' exposure to cybercrime. Moreover, cybercriminals believe that customers are likely to be less vigilant and more susceptible to cybercrime and social engineering attacks than to other attack vectors. As a consequence, cybercriminals are increasingly targeting customers.

The Group is committed to disrupting the efforts of cybercriminals and protecting its customers from cybercrime. In 2016, the Group ran campaigns to inform customers of the possible negative consequences of using online services. It also offered security kits to increase customers' own security awareness.

The Group also promotes cybersecurity awareness internally. In 2016, it held security awareness courses throughout the Group and for specific employee groups, such as administrators, in order to ensure sufficient knowledge on administrator access. The Group also held secure programming courses for developers to reduce the risk of programming errors that can cause system compromise.

Two new units with dedicated resources focus on cybersecurity management: the Security Operation Centre (SOC) and the Security Incident Response Team (SIRT). The SOC and the SIRT work according to the best-practice playbooks under the National Institute of Standard and Technology (NIST) framework on security incidents.

The Group is investing in several technology upgrades, and in 2016 it increased perimeter protection such as anti-DDoS and intrusion detection and prevention mechanisms, which provide a high level of protection against external threats.

In 2016, the Group improved its layered defence by upgrading its intrusion detection and prevention systems. In essence, this means that the Group automatically receives threat intelligence in its protective systems on an almost real-time basis, and this contributes to faster detection and prevention. Preventive measures include the isolation of infected servers, end-point protection and detection of zero-day vulnerabilities in sandbox environments, among other things.

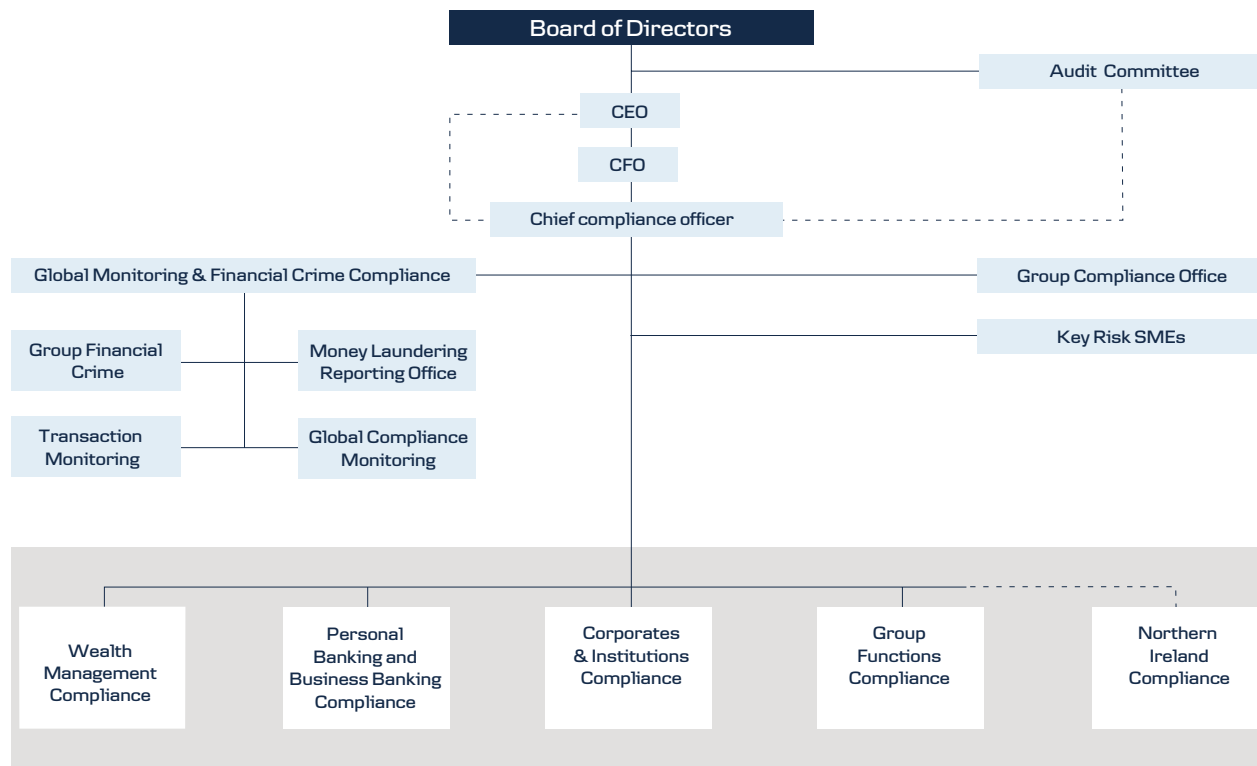
## 8.7 Compliance risk

Compliance risk is defined as the risk of legal or regulatory sanctions, material financial loss or loss of reputation that the Group may suffer as a result of its failure to comply with laws, including the spirit of the law, regulations, generally accepted practices and standards, and financial industry codes of conduct applicable to the Group's activities.

Group Compliance is an independent function accountable for identifying, assessing, monitoring and reporting on whether Danske Bank Group complies with applicable laws, regulations and internal requirements. Furthermore, Group Compliance is accountable for providing advice to first-line-of-defence units in relation to the mitigation of compliance risks.

Group Compliance contributes to a strong compliance culture and a high degree of integrity within the Group and ensures that customers are treated fairly. Group Compliance thus supports the Group's vision of becoming the most trusted financial partner.

## Danske Bank Group's compliance organisation



Group Compliance is headed by the chief compliance officer, who reports to the Group CFO with a dotted reporting line to the Group CEO and the chairman of the Audit Committee. The Group Compliance organisation reflects the Group's operational model and entails a segregation of roles and responsibilities into units of compliance officers for Wealth Management, Personal Banking, Business Banking and Corporates & Institutions. Additionally, Group Compliance has teams of compliance officers for Group Functions and Financial Crime and for the compliance framework, awareness and training.

In 2016, the compliance organisation was further strengthened by the establishment of the Global Monitoring & Financial Crime Compliance function, which is accountable for group-wide transaction monitoring to identify possible money laundering, terrorism financing, customer tax evasion and market abuse. The current organisation enables Group Compliance to foster the proper awareness and understanding of compliance among managers and employees across the Group and to meet the standards of the European banking industry.

Business units and operational units own the compliance risks associated with their processes. Group Compliance is accountable for the implementation of an effective compliance framework, and its key activities are as follows:

- identifying and assessing compliance risks
- providing advice on risk mitigation to compliance risk owners in the first line of defence
- monitoring the adequacy of risk mitigation and controls in the first line of defence and reporting on the compliance risk status for the Group

In 2016, Group Internal Audit, Group Risk Management, the COO area and Group Compliance created a uniform operational risk taxonomy and risk assessment methodology in order to obtain an enhanced management overview of the Group's risk profile and control environment and to build a risk management culture by means of a consistent risk terminology throughout the Group. Additionally, Group Compliance has a group-wide approach to risk assessment that also contributes to the enhanced management overview.

To ensure a high degree of expertise at Group Compliance and to meet the increasing requirements from regulators, the Group has launched a compliance certification programme in cooperation with the University of Manchester and under the auspices of the International Compliance Association.

The Group makes substantial efforts to comply with regulation and prevent criminals from exploiting the Group for money laundering or other financial crime activities. In 2016, the Group focused on developing its existing Know Your Customer (KYC) systems and processes, increased transaction monitoring, improved the training of employees, and coordinated an extensive update of the Group's customer database.

In March 2016, the Group was given eight orders as a result of an on-site anti-money laundering inspection conducted by the Danish Financial Supervisory Authority (the Danish FSA) in 2015. In May 2016, the Group submitted a plan for complying with the orders to the Danish FSA, and in September 2016, Group Compliance submitted a statement to the Danish FSA on the Group's compliance with the orders.

The final statement on the inspection from the Danish FSA included a notification to the Danish Public Prosecutor for Serious Economic and International Crime, and Danske Bank was reported to the police for non-compliance with AML legislation on correspondent banks. At the end of 2016, the authorities had not yet approached the Group to instigate further investigations.

Shortly after the Danish FSA had issued its final statement, the Swedish FSA conducted a similar on-site anti-money laundering inspection. The Swedish FSA had no significant comments on the outcome of the inspection at this point.

In 2016, Group Compliance supported the Group's implementation of a robust setup to address the new Market Abuse Regulation and ensure a high degree of integrity and transparency throughout the Group. This will entail a robust arrangement of insider lists and investment recommendations and a group surveillance system for detecting and reporting on suspicious orders and transactions

The EU regulation on the protection of individuals as regards the processing of personal data (the EU Data Protection Regulation) takes effect in May 2018. It will impose stricter requirements on the Group to document data flows and personal data processing activities. This will improve security for the Group's customers.

# *Insurance risk*

|    |       |  |
|----|-------|--|
| 74 | 9.1   | Danica Pension's risks                       |
| 75 | 9.2   | Insurance risk profile                       |
| 75 | 9.2.1 | Developments                                 |
| 75 | 9.2.2 | Risk related to Danish with-profits products |
| 76 | 9.2.3 | Risk related to other products               |
| 76 | 9.2.4 | Sensitivities                                |
| 76 | 9.3   | Capital and solvency                         |
| 77 | 9.4   | Insurance risk framework                     |





## 9.1 Danica Pension's risks

Insurance risk consists of the risks originating from Danske Bank Group's ownership of Danica Pension. Operating under the Solvency II rules, Danica Pension provides pensions as well as life and health insurance products in Denmark, Norway and Sweden.

### Two types of life insurance products in Denmark

#### With-profits policies

Danish with-profits policies have a guaranteed benefit based on a technical rate of interest (currently 0.5%). The policyholders earn interest at a rate that is set for each year at the discretion of the life insurance company, and the rate can be changed at any time.

The difference between the actual (set) interest rate and the return on the policyholders' savings in a given year is added to the collective bonus potential and can be used as a buffer.

At Danica Pension, the with-profits policies are called *Danica Traditionel*.

#### Unit-linked policies

Unit-linked policies are policies in which investments are allocated to the policyholders, who can decide how to invest their pension savings themselves or let the life insurance company invest the savings.

For unit-linked policies, the policyholders receive the actual return on the investments rather than a fixed interest rate. The policyholders carry the entire investment risk unless a guarantee is attached to the policy.

In our main unit-linked product, Danica Balance, customers can choose to have their benefits guaranteed.

As part of its product offerings, Danica Pension provides guaranteed life annuities; insurance against death, disability and accident; and cover against adverse investment returns. This exposes Danica Pension to underwriting risks such as longevity and disability risk as well as to market risk. In addition, Danica Pension is exposed to operational and business risk like the rest of Danske Bank Group.

Underwriting risk is the risk of losses from the insurance business. At Danica Pension, these risks are almost exclusively life insurance risks and they arise naturally out of the business model. Most underwriting risks materialise over long time horizons during which the gradual changes in biometric factors deviate from those assumed in contract pricing. Danica Pension has a large offering of life annuities that will pay a set pension during a policyholder's lifetime, and this makes longevity risk the most prominent type of underwriting risk for Danica Pension. Most pension products come with life and disability insurance, which entails exposure to mortality and disability risk. Health and accident insurance contracts are typically shorter, so slowly materialising risks can be handled by means of repricing.

Market risk is the risk of losses because of changes in prices of traded assets, and it arises from various sources within the business. Shareholders' equity and funds ensuring insurance guarantees in which the shareholders bear all the risk are invested in relatively low-risk instruments that nevertheless are subject to some market risk. In with-profits pensions, the customers bear the market risk, but in case of large losses where the customer buffers are depleted, the shareholders will have to step in with funds to ensure the benefits guaranteed to the customers. If the customers bear all the investment risk, losses may reduce assets under management and thus deplete future asset management fees in the long term.

### Main risk factors affecting Danica Pension

| Market risks  | Life insurance risks | Operational risks | Business risks |
|---------------|----------------------|-------------------|----------------|
| Interest rate | Longevity            | IT                | Reputation     |
| Equity        | Mortality            | Legal             | Strategy       |
| Credit spread | Disability           | Administrative    |                |
| Currency      | Concentration        | Fraud             |                |
| Liquidity     |                      | Model             |                |
| Counterparty  |                      |                   |                |
| Concentration |                      |                   |                |

## 9.2 Insurance risk profile

### 9.2.1 Developments

The Danish market for pension products continues to be competitive, with little prospect of increases in total market volume. The market is dominated by a small number of large commercial and mutual pension insurance companies with similar product offerings.

The low-yield market environment does not directly influence the short-term financial stability of Danica Pension because the interest rate risk on all liabilities is hedged, and there are no major differences in the interest rate sensitivities for accounting and solvency purposes. The main difficulty lies in a slower build-up of assets under management and customer buffers since this may adversely affect income in the longer run.

#### Danica Pension's balance sheet broken down by business segment

| At 31 December 2016 (DKK billions)                       | With-profits contracts |               |                  |                | Unit-linked  | Health and accident insurance | Other       |
|--|------------------------|---------------|------------------|----------------|--------------|-------------------------------|-------------|
|  | New customers          | Low guarantee | Medium guarantee | High guarantee |              |                               |             |
| Profit margin  | -                      | -             | -                | -              | 6.4          | -                             | -           |
| Collective bonus potential                               | 2.0                    | 0.7           | 0.9              | 2.4            | -            | -                             | 0.3         |
| Individual bonus potential                               | 0.7                    | 0.1           | 0.1              | -              | -            | -                             | 0.0         |
| Other provisions   | 38.6                   | 17.0          | 13.4             | 63.1           | 175.2        | 9.3                           | 11.3        |
| <b>Provisions for insurance and investment contracts</b> | <b>40.6</b>            | <b>17.8</b>   | <b>14.3</b>      | <b>65.6</b>    | <b>181.6</b> | <b>9.3</b>                    | <b>11.7</b> |

In the past few years, Danica Pension has taken several initiatives to improve investment results and to retain and attract customers. Asset management has been reorganised to focus on internal management and developing a new investment strategy, thus increasing the flexibility to react faster to market developments. In addition, Danica Pension introduced a new unit-link fund at the beginning of 2016, Danica Pension Mix, which makes use of this flexibility to operate within a broader set of asset classes.

#### How Danica Pension's results affect the Group's income statement

Danske Bank owns Danica Pension, and Danske Bank's financial results are affected by Danica Pension's financial position. Earnings from Danica Pension consists mainly of the risk allowance from with-profits policies, the investment return on Danica Pension's equity capital and income from the administration of unit-linked policies.

The risk allowance is the annual return that Danica Pension may book from its with-profits business. The policyholders are grouped according to the technical interest rate, and for each group Danica Pension may book a percentage of assets under management. These percentages range from 0.6% to 0.9%. The risk allowance can be booked only as long as there is a buffer above the value of the benefits guaranteed.

### 9.2.2 Risk related to Danish with-profits products

The main source of risk at Danica Pension is the Danish with-profits pension product. This product offers policyholders an annuity of a guaranteed minimum amount in nominal terms, but lets customers participate in a fund whose returns may lead to higher benefits than those guaranteed. The present value of the guaranteed benefits depends on the level of interest rates used for discounting. Should the fund's value fall below this level, then the shareholders' equity will have to cover the shortfall. Managing this product thus involves a combination of managing the risks on behalf of the policyholders and managing the risk that the shareholders will have to cover losses.

Danica Pension uses interest rate hedging to maintain customer buffers and considers any duration mismatch between assets and liabilities to be an active investment decision. The interest rate used for discounting of technical provisions is the Solvency II discount curve. It is based primarily on the EUR swap rate and also takes into account the yields on Danish mortgage bonds and government bonds. Because of market liquidity and efficiency, it is not possible for Danica Pension to invest in instruments that completely hedge the liabilities on this discount curve, and therefore some basis risk remains. The level of the long end of the discount curve, for which no reliable market data is available, is determined by a methodology that is currently under revision by the European Insurance and Occupational Pensions Authority (the EIOPA). The review of this methodology is likely to lead to a lowering of the level of the long end of the discount curve, but the effects on customer buffers and Danica Pension's shareholders are limited.

Derivatives used for hedging may give rise to counterparty credit risk, but this is mitigated by requiring counterparties to provide full collateral and by using many well-rated counterparties.

The guaranteed life annuities included in the with-profits product give rise to longevity risk. Danica Pension generally does not hedge this risk since it is a natural element of the business model but rather focuses on prudent pricing of the risk. Danica Pension manages longevity risk with an internal model approved by the Danish FSA for use in solvency reporting. This model is based on the FSA life expectancy benchmark and Danica Pension's own longevity observations.

### 9.2.3 Risk related to other products

Approximately 80% of unit-linked policies have no financial guarantees. For these policies, the policyholders bear all the investment risk. For the rest of the unit-linked policies, which consist mainly of Danica Balance policies, the policyholders have investment guarantees. The guarantees do not apply until the time of retirement and are paid for by an annual fee. Danica Pension manages the risk on these guarantees by adjusting the allocation of equities and alternative investments for each individual policy. The adjustments ensure that the investments can withstand a substantial decline in equities and alternative investments.

Danica Pension's activities in Norway and Sweden account for about 1.7% of its total provisions. In these markets, Danica Pension offers mainly unit-linked products without guarantees, and this gives rise to relatively little risk.

### 9.2.4 Sensitivities

Danica Pension continues to monitor its sensitivity to various shocks from market and underwriting risk, and a subset of these shocks are provided below. Losses borne by the shareholders in these scenarios are generally limited since most of the losses are absorbed by buffers or borne by the policyholders themselves.

#### Sensitivity analysis for Danica Pension

| At 31 December 2016 (DKK billions)                        | Effect on shareholders' equity |
|---|--------------------------------|
| Interest rate increase of 0.7 - 1.0 of a percentage point | -0.3                           |
| Interest rate decrease of 0.7 - 1.0 of a percentage point | 0.1                            |
| Decline in equity prices of 12%                           | -0.1                           |
| Decline in property prices of 8%                          | -0.3                           |
| Foreign exchange risk (VaR 99.0%)                         | 0.0                            |
| Loss on counterparties of 8%                              | -0.2                           |

## 9.3 Capital and solvency

The Solvency II framework came into force on 1 January 2016 and introduced EU-harmonised solvency rules in the insurance sector. This caused a change in the levels of both capital and capital requirements because the new rules differed somewhat from the previous rules. Danish authorities had already implemented most aspects of Solvency II. The main change was the requirement to include future earnings in the valuation of technical provisions. For Danica Pension, this meant increases in both capital and capital requirements, leaving the solvency ratio largely unchanged.

#### Danica Pension's solvency ratio

| At 31 December 2016 (DKK billions)                               |      |
|--|------|
| Shareholders' equity   | 17.2 |
| Differences in valuation between accounts and Solvency II        | 4.3  |
| Subordinated liabilities   | 3.9  |
| Foreseeable dividends  | -1.7 |
| Eligible own funds for covering the solvency capital requirement | 23.7 |
| Solvency capital requirement                                     | 9.6  |
| Solvency ratio (%)   | 246  |

Danica Pension's solvency ratio at the end of 2016 was 246%, against 199% at the beginning of 2016, when Solvency II came into force. The difference is attributable mainly to larger customer buffers and the transitional measure for

equity risk, which was introduced in April 2016. Danica Pension performs both daily solvency monitoring and a monthly best-effort solvency calculation, and past calculations show that the solvency ratio was stable from April 2016 to the end of the year.

## *9.4 Insurance risk framework*

Danica Pension has worked for several years to strengthen its insurance risk framework and has steadily improved the enterprise-level coordination of various sources and types of risk. Many aspects of the framework are governed by Solvency II, and the strengthening of the risk framework has eased the transition to the new regime.

The insurance risk framework is governed by Danica Pension's Board of Directors. The Board of Directors decides on the general strategic goals and on the risk management framework at Danica Pension. It identifies the material risks to which Danica Pension is exposed and sets limits on measures of aggregate risk. The daily risk management activities are based on Danica Pension's risk management policy issued by its Board of Directors.

Danica Pension's risk management activities are overseen by its All Risk Committee, which is responsible for monitoring the complete risk profile across risk types and undertakings. Reporting to the Board of Directors and the Executive Board, the All Risk Committee is chaired by Danica Pension's chief risk officer. Monitoring and reporting on individual risks are performed by specialised functions but coordinated by the All Risk Committee.

The All Risk Committee is supplemented by the Asset and Liability Management (ALM) Committee, which manages the risks arising from the differences in exposures between assets and liabilities and ensures that lines from the Board of Directors are not breached. The ALM Committee is chaired by Danica Pension's CFO, and it has representatives from three units: the Risk Function, the Actuarial Function and the Investments Function.

## *Other risks*

|    |        |                        |
|----|--------|------------------------|
| 79 | 10.1   | Pension risk           |
| 79 | 10.1.1 | Pension plans          |
| 79 | 10.1.2 | Control and management |
| 80 | 10.1.3 | Liability recognition  |
| 80 | 10.2   | Business risk          |

# *10.*

## 10.1 Pension risk

Pension risk arises from Danske Bank Group's liability for defined benefit pension plans that were established for current and former employees. For accounting purposes, defined benefit pension plans are valued in accordance with IFRSs (IAS 19).

### 10.1.1 Pension plans

The Group's defined benefit pension obligations consist of pension plans in Northern Ireland, the Republic of Ireland and Sweden as well as a number of small pension plans in Denmark. In addition, the Group has unfunded defined benefit pension plans that are recognised directly on the balance sheet. All the plans are closed to new members. The table below gives an overview of the various plans.

#### Overview of the Group's pension plans

| At 31 December 2016                         | Northern Ireland              | Ireland                       | Denmark               | Sweden                        |
|---|-------------------------------|-------------------------------|-----------------------|-------------------------------|
| Pension plan for new employees              | Defined contribution          | Cash balance                  | Defined contribution  | Defined contribution          |
| Status of defined benefit pension plan      | Closed to new members in 2004 | Closed to new members in 2008 | Closed to new members | Closed to new members in 2013 |
| Gross liability (DKK millions)              | 10,775                        | 4,205                         | 1,607                 | 1,633                         |
| Assets at fair value (DKK millions)         | 11,098                        | 4,876                         | 1,687                 | 1,934                         |
| Net assets (net liabilities) (DKK millions) | 322                           | 671                           | 80                    | 301                           |
| Number of members:                          |                               |                               |                       |                               |
| Active                                      | 879                           | 56                            | 126                   | 899                           |
| Deferred                                    | 1,771                         | 1,263                         | -                     | 1,399                         |
| Pensioners                                  | 2,159                         | 537                           | 194                   | 620                           |
| <b>Total</b>                                | <b>4,809</b>                  | <b>1,856</b>                  | <b>320</b>            | <b>2,918</b>                  |

Note: In Norway, Finland and the Baltics, the Group operates defined contribution plans under which it pays fixed contributions into separate, legally independent entities and afterwards has no further obligations. After winding up the Norwegian defined benefit plan in 2005, the Group still has an early retirement pension obligation. The obligation amounted to DKK 25 million at 31 December 2016.

### 10.1.2 Control and management

The Group's defined benefit plans are funded by contributions from the Group and individual contributions from employees. Each pension plan is managed by a separate supervisory board.

A key element of the Group's risk management strategy is maintaining a relatively close match between the assets and liabilities of each plan. According to this strategy, the Group uses derivative instruments to mitigate interest rate risk.

Because of the complexity of the pension obligations, the Group does not use its normal limit structure for monitoring pension risk. Instead, it manages market risk on pension plans according to special follow-up and monitoring principles called "business objectives".

The Group has established procedures to be followed in case of deviations from these objectives. The All Risk Committee has defined risk targets for the Group's pension funds. To follow up on the objectives, the Group prepares quarterly risk reports that analyse the individual plans' net obligations calculated on the basis of swap rates, sensitivity analyses and the VaR measure. It sets specific limits for the acceptable levels of risk exposure.

At the end of 2016, the Group's VaR was DKK 1,594 million (2015: DKK 2,384 million).

The Group's aggregate net pension obligation at the end of 2016 was DKK -1,349 million (that is, it had net pension assets of DKK 1,349 million), against DKK -2,107 million a year before.

#### Defined benefit pension plans

| At 31 December (DKK millions)                               | 2016          | 2015          |
|---|---------------|---------------|
| Present value of unfunded pension obligations               | 156           | 164           |
| Present value of fully or partly funded pension obligations | 18,089        | 16,770        |
| Fair value of plan assets                                   | 19,595        | 19,041        |
| <b>Net pension obligation</b>                               | <b>-1,349</b> | <b>-2,107</b> |

At 31 December 2016, the net present value of pension obligations was DKK 18,245 million (31 December 2015: DKK 16,934 million), and the fair value of plan assets was DKK 19,595 million (31 December 2015: DKK 19,040 million). The present value of obligations under defined benefit plans less the fair value of pension assets is recognised for each plan under Other assets and Other liabilities. Pension plan net assets amounted to DKK 1,595 million (2015: DKK 4,681 million), and pension plan net liabilities amounted to DKK 246 million (2015: DKK 229 million). The Group recognises service costs and interest on the net defined benefit assets and liabilities in the income statement, whereas actuarial gains or losses are recognised under Other comprehensive income.

### 10.1.3 Liability recognition

The Group's defined benefit pension plans contain provisions stipulating the pension benefits that the individual employee will be entitled to receive on retirement. The Group's obligation is thus recognised as a balance sheet liability subject to valuation. As the pension benefits will typically be payable for the rest of the employee's life, this increases the Group's uncertainty about the amount of future obligations since the liability and pension expenses are measured actuarially.

Various assumptions need to be made. Some are financial (such as the discount rate used for calculating the net present value of the pension cash flows and rates of salary and pension increases); and some are demographic (such as rates of mortality, ill health, early retirement and resignation).

The Group calculates market risk on defined benefit plans on a quarterly basis. The risk is expressed as VaR at a confidence level of 99.97% and on a one-year horizon. In this scenario, equity price volatility and the correlation between interest rates and equity prices are set at values reflecting normal market data. The duration of the pension obligations is reduced by half to take into account inflation risk. This is a widely accepted proxy that is also used by the Danish Financial Supervisory Authority (the Danish FSA), among others. The calculations are subject to ongoing review in order to ensure that the values of the volatility and correlation parameters are set appropriately.

Danske Bank Group uses the VaR model when advising life insurance and pension customers. The model discounts expected future pension payments on the basis of a "risk-free" swap rate rather than the high-quality corporate bond yield currently used under IFRSs. The model also incorporates actuarial assumptions about longevity, salary growth and inflation in the calculation. The assets in the plan portfolio as well as their duration and the convexity are also included in the model.

In addition, for each pension plan, the calculations include the sensitivity of the net obligation to changes in interest rates, equity prices and life expectancy (see the table below).

#### Sensitivity analysis of net obligation

| (DKK millions)  | Change  | Effect, 2016 | Effect, 2015 |
|-----------------|---------|--------------|--------------|
| Equity prices   | -20%    | -581         | -866         |
| Interest rates  | +1%/-1% | +847/-470    | +722/-479    |
| Life expectancy | +1 year | -442         | -396         |

Pension obligations are measured in the Group's solvency calculation at fair value. Pension risk is covered by the ICAAP, and it is measured by VaR at a confidence level of 99.9% and on a one-year time horizon.

## 10.2 Business risk

Business risk is the risk that income cannot cover losses caused by events affecting the Group's profit before loan impairment charges, market losses and operational losses. Business risk exists throughout the Group. It reflects possible changes in general business conditions, such as market environment, customer behaviour, the Group's reputation and technological progress, to which the Group may not be able to adjust quickly enough.

The Group believes that capital for business risk should serve as a buffer only when income cannot cover losses arising from other risk types. This is known as the "absolute loss" approach. Unexpected losses arising from other risk types are already covered by capital allocated for credit, market and operational risks.

The method used for calculating a possible Pillar II capital add-on for the Group's business risk involves two steps. First, the quarterly earnings before credit, market, and operational losses over the past five years are used for estimating the likelihood of a loss based on current earnings, the historical volatility of the earnings, and expected losses from other risk types. The second step entails an additional strategic risk estimate of the effects of possible future events. For this

purpose, the Group has identified strategic scenarios that could cause the largest declines in earnings. As the Group expands into new areas of business and technology, it considers the costs of failure in terms of both the costs of the failed business and the possible reputational effects on the rest of the business.

When the Group's earnings were stressed according to the absolute loss approach in 2016, the result was positive, and no capital was required for business risk.



# *Definitions*

# *11.*

**Additional tier 1 (AT1) capital**

Additional tier 1 capital consists of loans that form part of tier 1 capital. This means that it can be used to cover a loss of shareholders' equity.

**Advanced internal ratings-based approach (A-IRB)**

The advanced internal ratings-based approach entails using parameters that are based on internal and statistical data for PD, LGD and CF.

**Allowance account**

The allowance account comprises all impairment charges against loans at amortised cost, loans at fair value, amounts due from credit institutions and central banks, loan commitments, and guarantees. The total allowance account includes total accumulated individual impairment charges plus total accumulated collective impairment charges.

**Asset encumbrance**

Asset encumbrance is defined as the percentage of a counterparty's assets pledged as collateral.

**Bond spread risk**

A bond spread reflects the additional net return required by an investor on securities with a given credit quality and liquidity compared with the return on liquid securities without credit risk or a reference rate (such as a swap rate). Bond spread risk thus measures the change in a bond's market value due to changes in the market's assessment of credit quality and liquidity.

**Business risk**

Business risk is the risk that income will not be able to cover losses caused by events affecting the Group's profit before loan impairment charges, market losses and operational losses.

**Business unit**

The Group's banking operations are organised in five business units – Personal Banking, Business Banking, Corporates & Institutions, Wealth Management – each of them spanning all of the Group's geographical markets and then Northern Ireland.

**Collateral**

Collateral is assets provided as security by a debtor to safeguard the interests of the creditor. The Group uses a number of measures to mitigate credit risk, including collateral, guarantees and covenants, and the main method is obtaining collateral. Collateral is monitored and re-evaluated by advisers, internal or external assessors, and automatic valuation models. Danske Bank Group's Collateral System supports the process of reassessing the market value to ensure that the Group complies with regulatory requirements. The market value of collateral is subject to a haircut. The haircut reflects the risk that the Group will not be able to obtain the estimated market value upon the sale of an asset in a distressed situation. The amount of the haircut depends on the collateral type. For regulatory purposes, the Group also uses a downturn haircut.

**Collective impairment charges**

Collective impairment charges are impairment charges calculated for loans with similar credit characteristics, for example when the expected cash flow from a customer group deteriorates but no adjustment has been made to the credit margin. The charges are based on changes in customers' rating classifications over time. Collective impairment charges are calculated as the difference between the carrying amount of the loans in the portfolio and the present value of expected future cash flows. Management makes judgements to adjust the collective impairment charges if the Group becomes aware of market conditions on the balance sheet date that are not fully reflected in the Group's models.

**Commodity risk**

Commodity risk is the risk of losses caused by changes in commodity prices.

**Company-specific equity risk**

Company-specific equity risk is an unsystematic risk that affects only a small group of assets of a particular company. It thus arises from equity exposure to a specific company as opposed to equity market risk, which arises from general changes in the equity market.

**Conversion factor**

A conversion factor expresses the percentage of an unutilised facility or credit line that will be converted into utilised exposure at the time of default.

**Common equity tier 1 (CET1) capital**

CET1 capital consists of shareholders' equity after certain statutory supplements and deductions.

**Common equity tier 1 capital ratio**

The CET1 capital ratio is defined as CET1 capital as a percentage of the total risk exposure amount (REA).

**Concentration risk**

Concentration risk is the risk of losses arising as a result of a large exposure to a single asset type, a client group or region, among other things. The Group has implemented a set of frameworks to manage concentration risk. The frameworks cover single-name concentrations, industry concentrations and geographical concentrations.

**Counterparty credit risk**

Counterparty credit risk is the risk of losses resulting from a customer's default on over-the-counter (OTC) derivatives contracts and securities-financing instruments.

**CRD**

The European Union's Capital Requirements Directives (2006/48/EC and 2006/49/EC), including amendments (CRD II and CRD III). In Denmark the rules are incorporated in the Danish Financial Business Act and associated executive orders, including the Executive Order on Capital Adequacy, and the Executive Order on the Calculation of the Capital Base. The rules in CRD II and CRD III have been revised (CRD IV 2013/36/EU) as a consequence of the implementation of Basel III. CRD IV was implemented in Denmark in March 2014.

**CRR**

The European Union's Capital Requirements Regulation (No. 575/2013) is based on the Basel III guidelines. The rules took effect on 1 January 2014.

**Credit risk**

Credit risk is the risk of losses arising because debtors or counterparties fail to meet all or part of their payment obligations. The Group uses collateral, guarantees and covenants to mitigate credit risk.

**Credit exposure**

Credit exposure consists of on-balance-sheet items and off-balance-sheet items that carry credit risk. Most of the exposure derives from direct lending activities, including repo transactions; counterparty risk on OTC derivatives; and credit risk from securities positions.

**Credit exposure from lending activities**

Credit exposure from lending activities derives from loans and advances, repo loans, amounts due from credit institutions and central banks, guarantees and irrevocable loan commitments.

**Default**

Customers are designated as being in default when they have a material credit facility that is 90 days past due or when the Group assesses that they are unlikely to comply with their payment obligations to the Group.

**Defined benefit pension plans**

In defined benefit plans, the pension agreement contains a provision stipulating the pension benefit that the employee will be entitled to receive on retirement. The benefit is typically stated as a percentage of the employee's salary immediately before retirement, but it can also be a percentage of the average salary during the entire period of employment. The pension benefit will typically be payable for the rest of the employee's life, and this increases the employer's uncertainty about the amount of the future obligations.

**Defined contribution pension plans**

A defined contribution plan is a post-employment benefit plan under which the employer pays fixed contributions into a separate entity and has no further obligations. The pension entitlement accumulated by the employee depends on the size of the contributions agreed upon, the performance of invested pension funds and associated expenses.

**Exposure at default (EAD)**

Exposure at default is the expected utilisation of a given credit facility at the time of default of a borrower, and it is used in the calculation of regulatory capital.

**Forbearance measures**

Forbearance measures are concessions made for a debtor facing or about to face financial difficulties. The Group has

implemented the European Banking Authority's (EBA's) definition of loans subject to forbearance measures, which states that a minimum two-year probation period must pass from the date forbore exposures are considered to be performing again. The Group adopts forbearance plans to assist customers in financial difficulty. Concessions granted to customers include interest-reduction schedules, interest-only schedules, temporary payment holidays, term extensions, cancellation of outstanding fees, waiver of covenant enforcement and settlements. Forbearance plans must comply with the Group's Credit Policy. Forbearance leads to objective evidence of impairment (OEI), and impairments relating to forbore exposures are handled according to the principles described in the Group's basis of preparation for the measurement of loans.

**Foreign exchange risk**

Foreign exchange risk is the risk of losses on the Group's foreign currency positions caused by changes in exchange rates.

**Foundation internal-ratings based approach (F-IRB)**

The foundation internal-ratings based approach entails using internal and statistical data only for PD, while LGD and CF are set forth in the CRD.

**Gross credit exposure**

Gross credit exposure is credit exposure before the deduction of any individual impairment charges.

**ICAAP**

The Group's Internal Capital Adequacy Assessment Process (ICAAP) entails an evaluation of the capital needed under Pillar II. In the ICAAP, the Group identifies and measures its risks and ensures that it has sufficient capital in relation to its risk profile. The process also ensures that adequate risk management systems are used and further developed. As part of the ICAAP, the Group calculates the solvency need and performs stress tests to ensure that it has sufficient capital to support the chosen business strategy. Once a year, the full ICAAP report is submitted to the Board of Directors for approval, and the report is updated quarterly in a condensed format for approval.

**IFRSs**

International Financial Reporting Standards.

**Impairment**

Impairment is the reduction in the value of an asset from the value stated on the company's balance sheet. If objective evidence of impairment (OEI) of a loan exists, and the effect of the impairment event or events on the expected cash flow is reliably measurable, the Group determines an impairment charge individually. Loans without OEI are included in an assessment of collective impairment at the portfolio level. An impairment charge equals the difference between the carrying amount of the individual loan and the present value of the most likely future cash flows from the loan. For collectively assessed loans, collective impairment charges are calculated as the difference between the carrying amount of the loans of the portfolio and the present value of expected future cash flows.

**Incremental risk**

Incremental risk is the risk of losses caused by the default or credit rating migration of bond issuers and CDS entities.

**Individual impairment charges**

Individual impairment charges are charges booked for individual customers. If a customer facility is past due 90 days or more, the customer is considered to be in default and an impairment charge is recognised for the customer's total exposure. Significant loans and amounts due are tested individually for impairment at the end of each reporting period. Loans without objective evidence of impairment (OEI) are included in a collective assessment of the need for impairment charges. The collective assessment also includes customers with OEI but without a need for impairment.

**Insurance risk**

Insurance risk is defined as all types of risk at Danica Pension, including market risk, life insurance risk and operational risk..

**Interest rate risk**

Interest rate risk is the risk of losses caused by changing yields in the financial markets.

**Leverage ratio**

The leverage ratio is defined as tier 1 capital as a percentage of total exposure calculated according to the CRR. The leverage ratio does not take into account that various items on credit institutions' balance sheets may have differing degrees of risk.

**Liquidity risk**

Liquidity risk is the risk of losses arising because funding costs become excessive, lack of funding prevents the Group

from maintaining its business model, or lack of funding prevents the Group from fulfilling its payment obligations.

**Loss given default (LGD)**

Loss given default is the expected loss on an exposure calculated as the percentage of the expected facility utilisation that will be lost if a customer defaults. Downturn LGD is calculated by making a downturn adjustment that reflects the most severe economic conditions in the estimation period.

**Market risk**

Market risk is the risk of losses because the fair value of financial assets, liabilities and off-balance-sheet items varies with market conditions.

**Model risk**

Model risk is defined as the risk of losses resulting from decisions based mainly on output from internal models because of errors in the development, implementation or use of the models.

**Non-performing loans (NPL)**

The Group defines non-performing loans as facilities with objective evidence of impairment for which individual impairment charges have been booked. For non-retail exposures with any non-performing loans, the entire amount of the customer's exposure is considered to be non-performing. For retail exposures, only impaired facilities are included in non-performing loans. The Group's definition of non-performing loans differs from the EBA's definition by excluding fully covered exposures in default and performing forbore exposures under probation but more than 30 days past due.

**NPL coverage ratio**

The NPL coverage ratio is defined as accumulated individual impairment charges relative to gross NPL net of collateral (after haircuts).

**Net credit exposure**

Net credit exposure is gross credit exposure less individual impairment charges.

**Objective evidence of impairment (OEI) of loans**

Objective evidence of impairment exists if any of the following events has occurred:

1. The borrower is experiencing significant financial difficulty.
2. The borrower's actions, such as default on or delinquency in interest or principal payments, lead to a breach of the contract.
3. The Group, for reasons relating to the borrower's financial difficulty, grants the borrower a concession that the Group would not otherwise have granted.
4. It is likely that the borrower will enter into bankruptcy or another form of financial restructuring.

**Operational risk**

Operational risk is defined as the risk of losses resulting from inadequate or failed internal processes, people and systems or from external events, including legal events. Operational risk events are operational risks which have occurred and have caused a monetary loss (a loss event), or a reputational effect (a reputational event), or may have caused a loss that was rapidly recovered or may give rise to a future potential loss (a near-miss event).

**Pension risk**

Pension risk is the risk that the Group will be liable for additional contributions to defined benefit pension plans for current and former employees. Pension risk includes risks of the following:

- Lower-than-expected returns on invested funds
- Changes in actuarial assumptions, including the assumptions about the discount rate and inflation, that cause an increase in the pension obligations
- Longer-than-expected longevity among members

**Probability of default (PD)**

Point-in-time (PIT) probability of default represents the PD within the next 12 months. This type of PD is cyclical and tends to fluctuate with the underlying business cycle. Through-the-cycle (TTC) PD measures the average annual default rate over the business cycle and tends not to fluctuate much with the underlying business cycle.

**Risk exposure amount (REA)**

The total risk exposure amount (formerly designated as "risk-weighted assets") is calculated for credit risk, market risk and operational risk in accordance with the Danish FSA's rules on capital adequacy.

**Risk policies**

The Board of Directors has adopted overall risk policies regulating the scope of risk-taking by the Group. On the basis of the overall risk policies, detailed risk policies and procedures are prepared for the various business areas.

**SIFI**

Systemically important financial institution.

**Solvency II**

The new risk-based solvency regime for European insurance companies.

**Solvency need**

The solvency need is the amount of capital that is adequate in terms of size and composition to cover the risks to which an institution is exposed.

**Solvency need ratio**

The solvency need as a percentage of the total risk exposure amount (REA).

**Standardised approach**

The term "standardised approach" refers to banks' use of external ratings to quantify the required capital for credit risk. Depending on the external ratings, the risk is subject to a risk weight of either 0%, 20%, 50%, 100% or 150%. For exposures for which an external rating is not available, standard risk weights of 100% for corporates and of 75% for retail customers apply. If covered by eligible collateral, risk weights are reduced to 50% or 35%. Eligible collateral is restricted to real estate and financial collateral. Unlike the IRB approaches, the standardised approach does not allow the use of internal models or parameters.

**Tier 1 capital (T1)**

Tier 1 capital consists of shareholders' equity after certain statutory supplements and deductions and additional tier 1 capital less statutory deductions.

**Tier 1 capital ratio**

Tier 1 capital as a percentage of the total risk exposure amount (REA).

**Tier 2 capital (T2)**

Tier 2 capital consists of subordinated debt subject to certain restrictions.

**Total capital**

Total capital consists of tier 1 and tier 2 capital, less certain deductions. Tier 2 capital may not account for more than half of the total capital (see section 3 for full descriptions of both types).

**Value-at-Risk (VaR)**

Value-at-Risk is a risk measure used to calculate risk exposure over a defined period at a given confidence level.

**Write-off**

A write-off is the removal of a balance sheet item from the accounts. Loans that are considered uncollectible are written off. Write-offs are debited to the allowance account. Loans are written off after the usual collection procedure has been completed and the loss on the individual loan can be calculated. If the full loss is not expected to be realised until after a number of years, for example in the event of administration of complex estates, the Group recognises a partial write-off that reflects the Group's claim less collateral, estimated dividend and other cash flows.

**Wrong-way risk (WWR)**

Wrong-way risk is defined as the additional risk deriving from an adverse correlation between counterparty credit exposure and the credit quality of the counterparty.

# *Management declaration*

89 12.1 Management declaration

# *12.*

## 12.1 Management declaration

According to section 435(1) of the Capital Requirements Regulation (CRR), Danske Bank must publish a declaration and a risk statement approved by its management body (the Board of Directors):

- **Board Declaration:** a declaration approved by the management body on the adequacy of the risk management arrangements of the institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy.
- **Risk Statement:** a concise risk statement approved by the management body succinctly describing the institution's overall risk profile associated with the business strategy. This statement shall include key ratios and figures providing external stakeholders with a comprehensive view of the institution's management of risk, including how the risk profile of the institution compares with the risk tolerance set by the management body.

### Board Declaration

In accordance with the responsibilities of a company's board of directors as stipulated in the Danish Executive Order on Management and Control of Banks, Danske Bank's Board of Directors assesses the Group's individual and overall risks on an ongoing basis and at least once a year in the form of a comprehensive report from the Executive Board. It is the Board of Directors' assessment that the Group has adequate risk management arrangements in place with regard to the Group's risk profile and strategy.

### Risk Statement

Danske Bank is a Nordic universal bank offering a full range of banking services in the international financial markets to our home market customers. As such, we have a diversified business model spread across several industries, customer types and countries.

At the end of 2016, the Group's total solvency need amounted to 10.6% of the total risk exposure amount (REA).

Credit risk is managed in accordance with the Credit Risk Appetite, which encompasses credit quality (as measured by expected loss) and credit risk concentrations (limits on single names, industries and geographical regions).

The Group's market risk consists mainly of interest rate risk and bond spread risk. Market risk is managed in accordance with risk limits set in the Market Risk Instructions and the levels indicated in the part of the Market Risk Appetite related to trading.

The Group manages its liquidity on a daily basis by means of risk indicators and risk triggers defined in the Liquidity Instructions and the Liquidity Policy and Appetite, which defines the overall principles and standards of liquidity management. The Group increased its liquidity reserve throughout 2016 and executed its funding plan. At the end of 2016, the liquidity coverage ratio was 158%, well above the regulatory requirement. The Group's long-term debt was rated A/A/A2 (S&P/Fitch/Moody's) at the end of 2016.

Operational risk management involves a structured and uniform approach across the Group entailing risk identification, risk assessment, monitoring of risk indicators, risk mitigation and event follow-up. Events related to execution, delivery and process management errors and events related to external fraud accounted for the majority of losses in 2016.

In light of regulatory uncertainty the Group revived the capital targets in 2016; the target for the common equity tier 1 (CET1) capital ratio is in the range of 14-15% in the short-to-medium term. The target for the total capital ratio is around 19%. With substantial capital in excess of both the regulatory requirements and above the internal targets, the Group considers itself well capitalised. At the end of 2016, the Group's total capital ratio was 21.8%, and the CET1 capital ratio was 16.3%.

### BOARD OF DIRECTORS

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Trond Ø. Westlie  
*Vice Chairman*

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Lars-Erik Brenøe

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Other Danske Bank Group publications, available at [danskebank.com/ir](http://danskebank.com/ir):



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Corporate Responsibility 2016

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