Deutsche Bank

Annual Report 2017

Deutsche Bank

The Group at a glance

	2017	2016
Key financial information		
Post-tax return on average shareholders' equity	(1.2) %	(2.3) %
Post-tax return on average tangible shareholders' equity	(1.4) %	(2.7) %
Cost/income ratio[1]	93.4 %	98.1 %
Compensation ratio[2]	46.3 %	39.6 %
Noncompensation ratio[3]	47.0 %	58.5 %
Total net revenues, in € m.	26,447	30,014
Provision for credit losses, in € m.	525	1,383
Total noninterest expenses, in € m.	24,695	29,442
Adjusted Costs	23,891	24,734
Income (loss) before income taxes, in € m.	1,228	(810)
Net income (loss), in € m.	(735)	(1,356)
Basic earnings per share	€ (0.53)	€ (1.08)
Diluted earnings per share	€ (0.53)	€ (1.08)
Share price at period end	€ 15.88	€ 15.40
Share price high	€ 17.82	€ 19.72
Share price low	€ 13.11	€ 8.83

	Dec 31, 2017	Dec 31, 2016
CRR/CRD 4 Leverage Ratio (fully loaded)	3.8 %	3.5 %
CRR/CRD 4 Leverage Ratio (phase in)	4.1 %	4.1 %
Fully loaded CRR/CRD 4 leverage exposure, in € bn.	1,395	1,348
Common Equity Tier 1 capital ratio (fully loaded)	14.0 %	11.8 %
Common Equity Tier 1 capital ratio (phase in)	14.8 %	13.4 %
Risk-weighted assets, in € bn.	344	358
Total assets, in € bn.	1,475	1,591
Shareholders' equity, in € bn.	63	60
Book value per basic share outstanding	€ 30.16	€ 38.14
Tangible book value per basic share outstanding	€ 25.94	€ 32.42
Other Information		
Branches	2,425	2,656
Thereof: in Germany	1,570	1,776
Employees (full-time equivalent)	97,535	99,744
Thereof: in Germany	42,526	44,600
Long-term preferred senior debt rating		
Moody's Investors Service	A3	A3
Standard & Poor's	A-	-
Fitch Ratings	A-	A
Long-term non-preferred senior debt rating		
Moody's Investors Service	Baa2	Baa2
Standard & Poor's	BBB-	BBB+
Fitch Ratings	BBB+	A-
DBRS Ratings	A (low)	A (low)

[1] Total noninterest expenses as a percentage of net interest income before provision for credit losses, plus noninterest income.
[2] Compensation and benefits as a percentage of total net interest income before provision for credit losses, plus noninterest income.
[3] Noncompensation noninterest expenses, which is defined as total noninterest expenses less compensation and benefits, as a percentage of total net interest income before provision for credit losses, plus noninterest income.

Due to rounding, numbers presented throughout this document may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures.

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Letter from the Chairman of the Management Board

Dear Shareholders,

It goes without saying that we on the Management Board are not satisfied that we ended up reporting another net annual loss for 2017. Nonetheless, a great deal was achieved in the year. Despite a difficult environment, we made good progress restructuring our bank.

Our results were actually better than they may seem at first glance. Although we reported a loss of 735 million euros after income taxes, on a pre-tax basis we earned income of 1.2 billion euros – the first such profit since 2014. The difference was largely driven by a write down in the carrying value of our deferred tax asset relating to our US operations. This in turn was driven by the tax reform enacted in the US at the end of December 2017. The good news about the tax reform is that it lowers our future corporate tax rate in the US, the effect of which will improve our results in the coming years. The Management Board and the Supervisory Board will propose a dividend of 11 cents per share to the Annual General Meeting.

While we improved our pre-tax profitability and made further progress in lowering our costs, we are not satisfied with our financial performance in 2017. Revenues declined 12% year on year, reflecting the operating environment for our Corporate & Investment Bank, but also the conscious actions we took to sell a number of businesses, such as Abbey Life and the stake in Hua Xia Bank in line with our announcements in autumn 2015. Those sales drove costs lower but also eliminated revenues. Stripping out non-operating effects, such as business sales, revenues declined by 5% year on year. Reasons for the decline include the effects of persistent low interest rates, historically low levels of market volatility and low client activity levels.

Nonetheless, in 2017 we gained ground in core businesses following a difficult 2016. Even more importantly, we successfully took major steps towards establishing the foundation for long-term growth:

- We reorganized our business divisions to ensure that we serve our clients more effectively.
  - We retained Postbank and will combine it with Deutsche Bank's Private & Commercial Clients division in Germany. In so doing, we are creating a clear industry leader in our home market, serving more than 20 million clients. We intend to manage both brands from a single company by mid-year. We anticipate synergies to emerge gradually, generating around 900 million euros per year from 2022.
  - We continue to expand our German Wealth Management business following the integration of Sal. Oppenheim. We have also continued to extend our presence in key international markets, especially in Asia.
  - We are seeking a stock market listing of the shares in our asset manager DWS. This will make full use of the potential that increased autonomy will give this business. Following extensive preparations, we announced at the end of February that we are endeavoring to achieve the earliest possible date for the initial listing. Deutsche Bank plans to hold a long-term majority stake in the new company.
  - We reorganized our Corporate & Investment Bank – to combine corporate finance, transaction banking and capital markets under one umbrella. It now focuses more emphatically on the corporate sector and on our most important institutional clients. It is and will remain our ambition to be the leading European bank with an international network.
- We have further improved our financial strength with the successful 8 billion euro rights offering last year. Our fully loaded Common Equity Tier 1 capital ratio increased from 11.8 to 14 percent over the course of the year; this has placed us among the leading group of large international banks.
- We have further reduced legacy assets and have resolved significant litigation cases – 15 of the 20 cases that accounted for the major share of our financial risk at the start of 2016 have now been largely or fully concluded.
- We continue to withdraw from non-core businesses. For example, we reached an agreement to sell a significant portion of our retail business in Poland.
- We continue to tighten controls, with additional staff in the Anti-Financial Crime (AFC) department and in Compliance. The task now is to focus on automating our control processes step by step.
- We are modernizing our IT and pursuing the digitalization of our business. Today, our private clients can open an account online in a matter of minutes – and not seven days as before. Our mobile services are leaders in the German market. We have launched robo-advisers (WISE) in the asset management business and in the Private & Commercial Bank (ROBIN). WISE and ROBIN use algorithms to compile a suitable portfolio for our clients. In our other businesses, too, we are utilizing robotics and artificial intelligence to automate what were previously manual processes – this will minimize errors and lower costs.

The rebuilding is not yet over. Virtually everywhere in the bank there is still much to do, partly because of the constantly evolving regulatory landscape. As we look forward, the focus has to be trained squarely on revenues and profitability – without making any compromises in our risk management and controls. We have to achieve sustained earnings growth – in order to do this we have to continue investing, serve our existing clients better and win new clients for the bank.

Our business divisions all start 2018 from a position of strength, as illustrated by a number of examples from the past year:

– Our Corporate Finance business continues to strengthen. According to *Dealogic*, we climbed from tenth place to sixth in the global announced mergers and acquisitions ranking for 2017.
– In our home market Germany we have been the leading investment bank for over 15 years and grew our market share to 11.1% in 2017 (source: *Dealogic*).
– Our Transaction Banking business acquired numerous major mandates, especially in Europe and Asia, in the automotive sector and from large conglomerates.
– In the Private & Commercial Bank we succeeded in keeping operating revenues roughly stable in spite of extremely low interest rates. Two of the contributory factors were increased retail lending and higher advisory revenues. Last year we acquired approximately 2,500 new commercial clients, due also to the fact that we expanded our range of services for mid-caps, for example, in interest rate and currency management.
– Last year our clients worldwide entrusted a net 16 billion euros of new money to Deutsche Asset Management. In our home market, we remain the undisputed No.1 with a market share of about 27 percent in new business.

In this way, we have laid a strong foundation to continue to grow with our clients. The market environment for our business also improved at the beginning of the year. Although we expect low interest rates in Europe to persist in 2018, expectations for euro-zone interest rates to begin to normalize in 2019 and expectations for further rate rises in the US this year suggest the unusually quiet period on the capital markets may be coming to an end. When market volatility accelerates, clients will then increase their activity – and we will benefit from it.

At the same time costs remain an important issue. We reduced our adjusted costs by 3 percent in 2017 and by 2.6 billion euros in the last two years – in 2015 many people thought this would be beyond us.

We must, however, improve our cost culture, as the fourth quarter of 2017 demonstrated. We were unable to maintain the positive trend of the first three quarters – largely due to a very deliberate decision to return to a normal compensation system in 2017 after not paying individual variable compensation to most of our employees for 2016.

I recognize that this decision was highly contentious for many given the reported net loss in 2017. We on the Management Board, however, are responsible for acting in the best interests of our bank and thus also in your interests as shareholders. If we want to live up to our claim of being the leading European bank with a global network, we have to invest in our employees so that we can continue to provide the best solutions for our clients. In the interests of the bank we could not repeat our previous decision not to pay any individual variable compensation to most of our senior staff for 2016.

In this context, it should be noted that a large portion of any variable compensation awarded is paid over a period of three to six years with legally enforceable claw-backs, to ensure long-term incentives are provided and to retain staff within the Group.

As the Management Board wanted to send a clear signal and ensure its own remuneration remains aligned to the bank's net results, it decided unanimously to waive its variable compensation.

It is important to the Management Board to ensure that there is an appropriate balance between the interests of our employees and those of our shareholders. We therefore remain committed to our objective of delivering a net profit and a competitive dividend payout for 2018.

Dear shareholders, in autumn 2015 we said that the reorganization of our bank would not take two or three years, but longer. In the meantime we have established the basis for realizing the bank's full potential. All our energies can now be deployed. That is why I am optimistic about the future and look forward to what lies ahead.

Best regards,

John Cryan
Chief Executive Officer of Deutsche Bank AG

Frankfurt am Main, March 2018

Management Board

John Cryan, *1960
since July 1, 2015
Chairman of the Management Board (since May 19, 2016)

Marcus Schenck, *1965
since May 21, 2015
President (since March 5, 2017)
Co-Head of Corporate & Investment Bank (since July 1, 2017)

Christian Sewing, *1970
since January 1, 2015
President (since March 5, 2017)
Co-Head of Private & Commercial Bank (including Postbank)
(since September 1, 2017)

Kimberly Hammonds, *1967
since August 1, 2016
Chief Operating Officer

Stuart Lewis, *1965
since June 1, 2012
Chief Risk Officer

Sylvie Matherat, *1962
since November 1, 2015
Chief Regulatory Officer

James von Moltke, *1969
since July 1, 2017
Chief Financial Officer

Nicolas Moreau, *1965
since October 1, 2016
Head of Deutsche Asset Management

Garth Ritchie, *1968
since January 1, 2016
Co-Head of Corporate & Investment Bank (since March 16, 2017)

Karl von Rohr, *1965
since November 1, 2015
Chief Administrative Officer

Werner Steinmüller, *1954
since August 1, 2016
Regional CEO for Asia

Frank Strauß, *1970
since September 1, 2017
Co-Head of Private & Commercial Bank (including Postbank)

Management Board in the reporting year:

John Cryan
Chairman of the Management Board

Marcus Schenck
President (since March 5, 2017)
Chief Financial Officer (until June 30, 2017)
Co-Head of Corporate & Investment Bank
(since July 1, 2017)

Christian Sewing
President (since March 5, 2017)
Head of Private, Wealth & Commercial Clients
(until August 31, 2017)
Co-Head of Private & Commercial Bank
(including Postbank) (since September 1, 2017)

Kimberly Hammonds

Stuart Lewis

Sylvie Matherat

James von Moltke
(since July 1, 2017)

Nicolas Moreau

Garth Ritchie
Head of Global Markets (until March 15, 2017)
Co-Head of Corporate & Investment Bank
(since March 16, 2017)

Karl von Rohr

Werner Steinmüller

Frank Strauß
(since September 1, 2017)

Jeffrey Urwin
(until March 31, 2017)

Dear Shareholders,

In the financial year under review, we again monitored and advised the Management Board of Deutsche Bank AG on your behalf and together with the Management Board addressed the financial challenges in a dynamic, political, regulatory and competitive environment. We provided support to the Management Board in setting the bank's strategic course and deliberated with the Management Board intensively on business and risk strategies. We also continued to address issues from the past and were successful in taking a big step forward in resolving legacy items. In future, we will continue to make sure that the insights gained and lessons learned in dealing with the past are firmly embedded in the present and become part of our culture in our daily business operations so that Deutsche Bank AG can look forward to a successful future as a global bank committed to acting in a socially and environmentally responsible manner.

In the following, you will find detailed information on how your Supervisory Board performed its monitoring obligations and advised the Management Board intensively. Specifically, in the 2017 financial year:

Report of the Supervisory Board

The Supervisory Board performed the tasks assigned to it by law, administrative regulations, Articles of Association and Terms of Reference.

The Management Board reported to us regularly, without delay and comprehensively on business policies and strategy, in addition to other fundamental issues relating to the company's management and culture, corporate planning, coordination and control, compliance and compensation systems. It reported to us on the bank's financial development and earnings situation as well as the bank's risk, liquidity and capital management. Furthermore, the Management Board reported on material litigation cases and significant regulatory matters as well as transactions and events that were of significant importance to the bank. We were involved in decisions of fundamental importance. As in previous years, the Management Board provided, as we requested, enhanced reporting on specific litigation cases. Regular discussions concerning important topics and upcoming decisions were also held between the Chairman of the Supervisory Board, the chairs of the Supervisory Board committees and the Management Board.

There were a total of 59 meetings of the Supervisory Board and its committees. When necessary, resolutions were passed by circulation procedure between the meetings.

Meetings of the Supervisory Board in plenum

The Supervisory Board held ten meetings in plenum in 2017, where it addressed all topics with a special relevance for the bank.

To start off, we would like to report on two of these topics that are particularly important: strategy and dealing with the past.

The topic of strategy was especially important to us in 2017, and we again took sufficient time to deliberate on strategic matters with the Management Board at our meetings in February, March, September, October and December. In addition to the integration of Postbank, the capital increase, the initial public offering of a minority share of Deutsche Asset Management and expanding our digital banking services, we also addressed the consequences of the staff cuts in Germany. We focused on the progress made and the current challenges in the planned implementation of strategy as well as the adjustments of strategic targets and the measures resulting from this. To work through the strategy-related issues pending in the first quarter of 2017, we established an Ad Hoc Committee in February that conducted three meetings in total, in particular to prepare for our next Supervisory Board meeting. At one meeting, we intensively addressed the strategy for the integration of Postbank AG and the planned capital increase, and agreed to the Management Board's proposed resolution for the capital increase. We also delegated the approval of the specific further details of the capital increase to the Chairman's Committee.

We made significant progress in 2017 in putting legacy issues behind us and on July 27 concluded compensation settlement agreements with ten former Management Board members and one incumbent member of the Management Board. Based on the agreements, the Management Board members voluntarily waived, without acknowledging a breach of duty, a portion of their still unpaid compensation amounting to €38.4 million. Over the course of several years, the Supervisory Board had suspended a substantial portion of the variable compensation payable to the Management Board members as Deutsche Bank was facing a series of regulatory investigations and regulatory fines, in some cases with causes originating from the period before the 2007 financial crisis. The total amount of payable compensation not yet disbursed at the time the compensation settlements were reached came to €69.8 million. On the basis of the information available and after weighing up all relevant aspects, including the voluntary waiver of compensation by the Management Board members, the Supervisory Board decided not to pursue personal recourse claims against the Management Board members incumbent at the time by asserting claims for damages due to a potential breach of their Management Board duties. This decision was based on the results of extensive examinations by several leading law firms and forensic investigation advisors and took into account the findings of regulatory and supervisory authorities. According to the results of these investigations, there was not a sufficient factual and legal basis for enforceable claims for damages. Nonetheless, the Supervisory Board reserves the right upon the discovery of any new indications of possible breaches of duty to assert claims to compensation for damages against these Management Board members. The Chairman's Committee was mandated to monitor the relevant cases until the end of the statute of limitations periods for asserting the potential claims. At our meetings, we regularly addressed the significant litigation cases and regulatory proceedings.

At the first meeting of the year on February 1, we discussed the development of bank's business in the 2016 financial year, along with a comparison of the plan-actual figures for 2016. We held discussions with the Management Board on the progress of key projects as well as regulatory assessments. We received a report from representatives of the European Central Bank (ECB) on their evaluation of the bank in 2016 and on the regulatory planning for 2017. Furthermore, the monitor assigned by the U.S. Department of Justice based on the settlement reached with the U.S. Department of Justice in IBOR-related matters, StoneTurn Group, LLP (StoneTurn), presented its report along with its recommendations. We concluded our assessment of the Supervisory Board and the Management Board for 2016 and addressed the Corporate Governance Statement, which is also the Corporate Governance Report. We discussed the structure of Management Board compensation and topics for the Supervisory Board's further training in 2017.

At the meeting on March 5, we intensively addressed the strategy for the integration of Postbank AG and the planned capital increase.

At our meeting on March 16, after the Management Board's reporting and a discussion with the auditor, and based on the Audit Committee's recommendation, we approved the Consolidated Financial Statements and Annual Financial Statements for 2016 and agreed to the Management Board's proposal for the appropriation of distributable profit. Together with the Management Board, we discussed the development of the bank's business, the corporate planning 2017-2021, the structure of the compensation systems, the Human Resources Report for 2016 and regulatory topics. We addressed the preparations for the General Meeting and approved proposals for the agenda. Furthermore, we dealt with internal organizational and Management Board matters.

The appointment of the new Chief Financial Officer, Mr. von Moltke, was the topic of our meeting on April 28.

At the meeting on May 17, we addressed the development of the bank's business and the key topics of the pending General Meeting. The Management Board reported to us on its brand strategy, the effects of Brexit on the bank and regulatory topics.

At the meeting following the General Meeting on May 18, we re-elected Dr. Achleitner as Chairman of the Supervisory Board. We also adopted the Nomination Committee's succession proposal for the Integrity Committee and Audit Committee and elected Professor Dr. Simon as a member of both of these committees. We also resolved on issuing the audit mandate for the auditing of the financial statements to KPMG Aktiengesellschaft, Berlin, for the year 2017.

On July 27, we addressed, in addition to the development of the bank's business and the Interim Report as of June 30, 2017, the effects of Brexit on the bank as well as topics relating to Compliance and Anti-Financial Crime. The Management Board reported to us on the results of the employee survey and governance topics. We approved a proposal of the Nomination Committee and increased the target ratio for the percentage of women on the Management Board by June 30, 2022, to at least 20%, with a rounding up or down to a whole number of persons according to the general rules of mathematics.

On September 18 and 19, a two-day strategy workshop was conducted with the Management Board in Berlin where businesses and key functions presented their self-assessed strengths and weaknesses. In addition, we addressed a report by Group Audit on the management of liquidity risks as well as the capital rating. Together with the Chairman of the Management Board and the Chief Human Resources Officer, we discussed succession planning for the Management Board and for the management level below the Management Board.

On October 26, in addition to the development of business, we discussed the Interim Report for the third quarter, the implementation of the second European Union (EU) Markets in Financial Instruments Directive (MiFID II) within the bank as well as Management Board compensation. We received an updated report from StoneTurn and addressed the profile of requirements for the Supervisory Board in accordance with the recommendation of the German Corporate Governance Code as well as adjustments for our Terms of Reference. Furthermore, we approved the Declaration of Conformity for 2017.

At the last meeting of the year on December 15, we discussed together with the Management Board the development of the bank's business, Brexit effects and the bank's know-your-customer processes, i.e. processes that facilitate our identification of customers and our understanding of their business, as well as regulatory topics. We addressed the insurance policy program 2018 and internal governance. We approved a proposal of the Integrity Committee and resolved to adjust the reporting on selected regulatory and legal proceedings accordingly. Furthermore, we elected Professor Dr. Simon as the new Chairman of the Integrity Committee with effect from January 1, 2018, in order to achieve a smooth transition in the chairing of the Integrity Committee.

The Committees of the Supervisory Board

Chairman's Committee

The Chairman's Committee held seven meetings. It worked intensively on preparing recommendations for decisions of the Supervisory Board on pursuing claims for damages or taking other measures against ten former Management Board members and one incumbent Management Board member. The Chairman's Committee also had the legal consequences of case matters, which were processed by the bank in eleven legal proceedings subject to the close monitoring of the Supervisory Board, assessed by independent external advisors mandated by the Supervisory Board. They produced an overall assessment. On the basis of these analyses, the Supervisory Board weighed up the aspects and came to its assessment described above with regard to not asserting claims to compensation for damages against Management Board members incumbent at the time. The Chairman's Committee also had the recommendation of the Chairman's Committee to conclude a compensation settlement reviewed in legal opinions of renowned, independent legal experts. Finally, it established a process for the further monitoring of the cases. In this context, the Chairman's Committee will continue to receive the assistance of independent, external legal advisors.

Furthermore, the Chairman's Committee regularly handled the preparations for the meetings of the Supervisory Board and took care of ongoing matters. The Chairman's Committee issued the approval of current and former Management Board members' acceptance of mandates, honorary offices or special tasks outside of Deutsche Bank Group. The Committee also took note of the mandates of the Supervisory Board Chairman. The Chairman's Committee supported the Supervisory Board in preparing current Supervisory Board topics for the General Meeting and addressed the legal actions to contest the resolutions of the General Meeting.

Risk Committee

The Risk Committee held nine meetings, including one jointly each with the Compensation Control Committee, the Audit Committee and the Integrity Committee, and addressed the current and future overall risk appetite and strategy of Deutsche Bank, and in particular credit, liquidity, refinancing, country, market and operational risks. The Risk Committee supported us in monitoring the implementation of strategy by the upper management level and in the related advising of the Management Board. At each of its meetings, the Risk Committee addressed the financial and non-financial risks of the bank, their identification and their management as well as the measures to reduce them. In addition, the Risk Committee regularly received reports from the Management Board about the appropriateness of risk, capital and liquidity as well as corresponding changes in risk-weighted assets. The Risk Committee was also informed of the macroeconomic environment as well as the development of business and risks from the perspective of the bank's first and second lines of defense. The Committee also regularly received reports from the Risk Management function concerning key issues and initiatives, including Strategy 2021 and the budget for the Risk Management function, strategic stress scenarios, recovery and resolution plans ("living wills") and risks in the banking book. While monitoring non-financial risks, the Risk Committee also addressed, together with the Audit Committee, know-your-customer risk as well as measures to reduce this risk. The Management Board's reporting also covered current topics such as Brexit and other political developments, including elections, and the related impacts on the bank's risk profile. Furthermore, the Risk Committee dealt with findings and recommendations from regulators on risk-related topics.

The Risk Committee monitored whether conditions in the client business are in line with the bank's business model and risk structure. It made decisions on the bank's credit exposures and participations requiring approval under German law, the Articles of Association and Terms of Reference.

The Risk Committee supported the Compensation Control Committee in assessing the effects of the compensation systems on the bank's risk, capital and liquidity situation. It also examined whether the compensation systems are aligned to the bank's business strategy focused on the institution's sustainable development. In this context, the Risk Committee monitored whether the derived risk strategies and compensation strategy are also aligned to this at the institution and Group level.

Audit Committee

The Audit Committee held eight meetings, including one together with the Risk Committee. The Audit Committee supported us in monitoring the financial reporting process and intensively addressed the Annual Financial Statements and Consolidated Financial Statements, the interim reports as well as the Annual Report on Form 20-F for the U.S. Securities and Exchange Commission. Within the context of the financial reporting process, it supported us in monitoring the recognition of provisions as well as tax-related matters, including in particular the U.S. tax reform and the process of implementing the new International Financial Reporting Standard 9. The Audit Committee also addressed the further development of valuation methods for financial instruments. Furthermore, the Audit Committee had the Management Board report to it regularly on the “available distributable items” and the capacity to service Deutsche Bank’s Additional Tier 1 capital instruments.

The Audit Committee monitored the effectiveness of the risk management system, in particular with regard to the internal control system and internal audit. This also covered, among other things, the reporting on the ongoing development of controls to combat money laundering and to prevent financial crime, the three lines of defense model and initiatives for the ongoing strengthening of the compliance function and internal audit function. The Committee was kept up-to-date on the work of Group Audit and its resources. The Audit Committee addressed measures taken by the Management Board to remediate deficiencies identified by the auditor, Group Audit and regulatory authorities and regularly received updates on the status and progress in this context.

In accordance with the Audit Committee’s proposal, we issued the mandate to an independent auditor and set the amount of the auditor’s remuneration. The auditor additionally reviewed the legally required non-financial reporting. The Audit Committee dealt with the measures to prepare for the audit of the Annual Financial Statements and Consolidated Financial Statements for 2017, specified its own areas of focus for the audit and approved a list of permissible non-audit services. The Audit Committee was regularly provided with reports on the engagement of accounting firms, including the auditor, for non-audit-related services. The Committee also handled the implementation of the requirements for the extended auditor report and the separate Non-Financial Report of the Group as well as the Non-Financial Statement of Deutsche Bank AG (hereinafter referred to together as: Non-Financial Reporting). Furthermore, in light of the new European Union (EU) Regulation and amendments to the EU Directive on statutory audits, the Audit Committee initiated a tendering procedure for the audit of the 2020 financial statements.

Representatives of the bank’s auditor as well as the Head of Group Audit attended all of the Audit Committee meetings.

Integrity Committee

The Integrity Committee held seven meetings, including one together with the Risk Committee. In January, the Integrity Committee resolved to conclude the internal forensic investigations carried out with the assistance of independent external advisors. In light of the sustained progress achieved in the Management Board’s reporting on material litigation cases and regulatory proceedings and to avoid duplications, the Integrity Committee submitted a proposal to us in January to adjust the reporting process. The Management Board will continue to report to the Integrity Committee on the cases with the biggest risks and on cases with a special relevance. Furthermore, the Integrity Committee addressed the follow-up commitments resulting from the concluded settlements.

The topics covered intensively by the Integrity Committee included governance, and it received reports from the Management Board on reputational risks. Together with the Management Board, the Integrity Committee discussed measures related to internal policies and monitored their implementation. Additional focal points of the Integrity Committee’s work included monitoring the implementation of cultural initiatives as well as one standard bank-wide “lessons learned” process. Environmental and social issues were also addressed regularly at the Integrity Committee meetings. This primarily involved the bank’s corporate social responsibility and contribution to the preservation of the environment.

Compensation Control Committee

The Compensation Control Committee held ten meetings, including one together with the Risk Committee. The Compensation Control Committee monitored the appropriate structuring of the compensation systems for the Management Board and employees, along with the compensation for the heads of control functions and material risk takers. It dealt with the Compensation Report 2016 and the Compensation Officer’s Compensation Control Report, which concluded the bank’s compensation system is appropriately structured and in accordance with the requirements of the Remuneration Ordinance for Institutions (InstitutsVergV). The Compensation Control Committee concurred with this assessment. Furthermore, the Committee addressed the determination and distribution of the total amount of variable compensation for the bank’s employees, in particular in consideration of affordability. It received reports on strategy and on the alignment of variable compensation requirements to strategy. The Management Board reported to the Committee on adjustments to share-based compensation for employees in light of the capital increase.

The Compensation Control Committee also dealt with changes in the regulatory framework conditions based on the new version of the Remuneration Ordinance for Institutions (InstitutsVergV) and discussed the actions required by the Supervisory Board as a result. The Committee submitted proposals regarding the compensation of the Management Board and deliberated on the new compensation structure as well as the status report on determining the variable compensation of the Management Board members. In this context, the Committee received support from the Compensation Officer. The Compensation Control Committee supported us in monitoring the involvement of the internal control area as well as all other material areas in the structuring of the compensation systems and assessed the effects of the compensation systems on the risk, capital and liquidity situation of Deutsche Bank and Deutsche Bank Group.

Nomination Committee

The Nomination Committee met eight times. It addressed, in particular, issues related to succession and appointments while taking into account statutory requirements, and it nominated specific candidates for the Management Board and Supervisory Board. Furthermore, the Nomination Committee prepared the annual assessment of the Supervisory Board and Management Board and was supported in this by an external advisor. Within the framework of this assessment, the Nomination Committee also took into account the European Central Bank's findings from the Thematic Review on Risk Governance and Appetite from 2016 and the follow-up thematic review in 2017.

Furthermore, the Nomination Committee gave recommendations to the Management Board concerning the principles for selecting and appointing people to the senior management level, while also considering on an ongoing basis the consultations on the drafts of the European Banking Authority's new Guidelines on Internal Governance and its Guidelines on the Assessment of the Suitability of Members of the Management Body and Key Function Holders.

Mediation Committee

Meetings of the Mediation Committee, established pursuant to the provisions of Germany's Co-Determination Act (MitbestG), were not necessary.

Participation in meetings

The Supervisory Board members participated in the meetings of the Supervisory Board and of the committees in which they were members as follows:

	Meetings (incl. committees)	Meetings (plenary sessions)	Participation (plenary sessions)	Meetings (committees)	Participation (committees)	Participation in % (all meetings)
Achleitner	59	10	10	49	43	90
Böhr	19	10	9	9	9	95
Bsirske	38	10	9	28	25	89
Dublon	22	10	9	12	12	95
Duscheck	10	10	10	-	-	100
Eschelbeck	5	5	5	-	-	100
Garrett-Cox	18	10	10	8	7	94
Heider	17	10	10	7	7	100
Irrgang	17	10	10	7	7	100
Kagermann	38	10	9	28	27	95
Klee	17	10	9	7	6	88
Löscher	9	5	4	4	4	89
Mark	18	10	9	8	7	89
Meddings	29	10	10	19	18	97
Parent	28	10	9	18	15	86
Platscher	18	10	10	8	6	89
Rose	18	10	9	8	5	78
Rudschäfski	38	10	9	28	25	89
Schütz	5	5	5	-	-	100
Simon	17	10	10	7	6	94
Teyssen	21	10	9	11	10	90

Corporate governance

The composition of the Supervisory Board and its committees is in accordance with good corporate governance standards and meets the requirements of key regulatory authorities. This is reflected in the atmosphere of trust on the Supervisory Board and in the cooperation founded on trust between the representatives of employees and of shareholders. The Chairman of the Supervisory Board and the chairpersons of the committees coordinated their work continuously and consulted each other regularly and – as required – on an ad hoc basis in order to ensure the exchange of information necessary to capture and assess all of the relevant risks for the performance of their tasks.

At the Supervisory Board's meetings, the committee chairpersons reported regularly on the work of the committees. Regularly before the meetings of the Supervisory Board, the representatives of the employees and the representatives of the shareholders conducted preliminary discussions separately. At the beginning or end of the Supervisory Board and committee meetings, discussions were regularly held in executive sessions without the participation of the Management Board.

Based on recommendations from the respectively responsible committees, we determined that Ms. Garrett-Cox, Mr. Meddings, Dr. Achleitner and Professor Dr. Simon are financial experts in accordance with the definition of the implementation rules of the U.S. Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002 as well as Section 100 of Germany's Stock Corporation Act (AktG). Dr. Achleitner and Professor Dr. Kagermann are compensation experts in accordance with the requirements of Section 25d (12) of the German Banking Act (KWG). Furthermore, we confirmed the independence, as defined by U.S. regulations, of all members of the Audit Committee and determined that the Supervisory Board has what we consider to be an adequate number of independent members.

Dr. Achleitner and the chairpersons of the committees met regularly with representatives of the key regulators and informed them about the work of the Supervisory Board and its committee and about the cooperation with the Management Board.

In preparing for the voting on the structure of Management Board compensation at the General Meeting in 2017, Dr. Achleitner, in his function as Chairman of the Supervisory Board, engaged in discussions with representatives of investors about the new compensation model for the Management Board. The topics at these discussions also covered the Supervisory Board's priorities and composition as well as its interaction with the Management Board regarding the strategy of Deutsche Bank.

At several meetings of the Nomination Committee and of the Supervisory Board in plenum, we addressed the assessment prescribed by law of the Management Board and the Supervisory Board. The final discussion of the results took place on February 1, 2018, and the results were set out in a final report. We are of the opinion that the Supervisory Board and Management Board achieved a high standard and that there are no reservations, in particular, regarding the professional qualifications, personal reliability and time available of the members of the Management Board and the Supervisory Board. Nonetheless, we identified additional potential for improvement. This relates, for example, to a stronger focus on topics with a relevance for the future, the reputation of the bank and its sustainable development in a digital environment.

The Declaration of Conformity pursuant to Section 161 of the Stock Corporation Act, which we last issued with the Management Board on October 27, 2016, was reissued at the meeting of the Supervisory Board on October 26, 2017. The text of the Declaration of Conformity, along with a comprehensive presentation of the bank's corporate governance, can be found beginning on page 372 of the Annual Report 2017 and on the bank's website at https://www.db.com/ir/en/documents.htm. Our Declarations of Conformity since 2007 are also available there, in addition to the currently applicable versions of the Terms of Reference for the Supervisory Board and its committees as well as for the Management Board.

Training and Further Education Measures

Members of the Supervisory Board completed the training and further education measures required for their tasks on their own. Furthermore, numerous further education measures were conducted with the Supervisory Board in plenum and with its committees to maintain the required specialized knowledge. These covered a total of more than 20 topics, such as digitalization, information security, non-financial reporting, developments in the eurozone, compensation and the new version of the Remuneration Ordinance for Institutions (InstitutsVergV).

For the new members that joined the Supervisory Board, extensive induction courses were held to facilitate their induction into office.

Conflicts of Interest and Their Handling

In his capacity as Chairman of the Nomination Committee and as Chairman of the Supervisory Board, Dr. Achleitner did not participate in the discussions of and the voting on the resolutions regarding the proposal for his re-election at the General Meeting.

Annual Financial Statements, Consolidated Financial Statements, the separate Consolidated Non-Financial Report and Non-Financial Statement

KPMG audited the Annual Financial Statements, including the accounting and Management Report, as well as the Consolidated Financial Statements with the related Management Report for the 2017 financial year and issued in each case an unqualified audit opinion on March 12, 2018. The Auditor's Reports were signed jointly by the Auditors Mr. Pukropski and Mr. Böth. Mr. Pukropski signed the Auditor's Report for the Annual Financial Statements and Consolidated Financial Statements for the first time for the 2013 financial year and Mr. Böth for the first time for the 2017 financial year.

Furthermore, KPMG performed a review to obtain a limited assurance in the context of the Non-Financial Reporting and in each case issued an unqualified opinion.

The Audit Committee examined the documents for the Annual Financial Statements and Consolidated Financial Statements for 2017 as well as the Non-Financial Reporting for 2017 at its meeting on March 9 and 14, 2018. The representatives of KPMG provided the final report on the audit results. The Chairman of the Audit Committee reported to us on this at today's meeting of the Supervisory Board. Based on the recommendation and advance handling of the Audit Committee and after inspecting the Annual Financial Statements and Consolidated Financial Statements documents as well as the documents for the Non-Financial Reporting, we agreed to the results of the audits following an extensive discussion on the Supervisory Board and with representatives of KPMG AG Wirtschaftsprüfungsgesellschaft. We determined that, also based on the final results of our inspections, there are no objections to be raised.

Today, we approved the Annual Financial Statements and Consolidated Financial Statements prepared by the Management Board. The Annual Financial Statements are thus established. We agree to the Management Board's proposal for the appropriation of distributable profit.

Personnel issues

Mr. Herling was a member of the Supervisory Board until the end of 2016. For the remainder of his term of office, he was replaced by Mr. Rudschäfski, who was also elected as Deputy Chairman.

With the conclusion of the General Meeting in May 2017, Mr. Löscher and Professor Dr. Trützschler left the Supervisory Board. The General Meeting elected Mr. Eschelbeck and Mr. Schütz as new members.

On March 5, 2017, we appointed Dr. Schenck and Mr. Sewing as Presidents (Deputy Chairmen of the Management Board).

Over the course of 2017, we also extended the appointments of Ms. Matherat, Mr. von Rohr, Dr. Schenck and Mr. Sewing as members of the Management Board, in each case by five years. Mr. von Moltke and Mr. Strauß were appointed as members of the Management Board for the first time in each case for three years. (See the "Corporate Governance Statement / Management Board" starting on page 354 of the Annual Report.)

Mr. Urwin left the Management Board at the end of March 2017.

We thank the members who left last year for their dedicated work and for their constructive assistance to the company during the past years.

We would also like to thank the bank's employees for their great personal dedication.

Frankfurt am Main, March 15, 2018

The Supervisory Board

Dr. Paul Achleitner
Chairman

Supervisory Board

Dr. Paul Achleitner
– Chairman
Munich

Stefan Rudschäfski*
– Deputy Chairman
Kaltenkirchen

Wolfgang Böhr*
Dusseldorf

Frank Bsirske*
Berlin

Dina Dublon
New York

Jan Duscheck*
Berlin

Gerhard Eschelbeck
since May 18, 2017
Cupertino

Katherine Garrett-Cox
Brechin, Angus

Timo Heider*
Emmerthal

Sabine Irrgang*
Mannheim

Prof. Dr. Henning Kagermann
Königs Wusterhausen

Martina Klee*
Frankfurt am Main

Peter Löscher
until May 18, 2017
Munich

Henriette Mark*
Munich

Richard Meddings
Sandhurst

Louise M. Parent
New York

Gabriele Platscher*
Braunschweig

Bernd Rose*
Menden

Gerd Alexander Schütz
since May 18, 2017
Vienna

Prof. Dr. Stefan Simon
Schwyz

Dr. Johannes Teyssen
Dusseldorf

Prof. Dr. Klaus Rüdiger Trützschler
until May 18, 2017
Essen

* Employee representatives

Committees

Chairman's Committee

Dr. Paul Achleitner
– Chairman

Frank Bsirske*

Prof. Dr. Henning Kagermann

Stefan Rudschäfski*

Mediation Committee

Dr. Paul Achleitner
– Chairman

Wolfgang Böhr*

Prof. Dr. Henning Kagermann

Stefan Rudschäfski*

Audit Committee

Richard Meddings
– Chairman

Dr. Paul Achleitner

Katherine Garrett-Cox

Henriette Mark*

Gabriele Platscher*

Bernd Rose*

Prof. Dr. Stefan Simon
since May 18, 2017

Prof. Dr. Klaus Rüdiger Trützschler
until May 18, 2017

Risk Committee

Dina Dublon
– Chairperson

Dr. Paul Achleitner

Wolfgang Böhr*

Richard Meddings

Louise M. Parent

Nomination Committee

Dr. Paul Achleitner
– Chairman

Frank Bsirske*

Prof. Dr. Henning Kagermann

Stefan Rudschäfski*

Dr. Johannes Teyssen

Integrity Committee

Prof. Dr. Stefan Simon
since May 18, 2017
– Chairman
since January 1, 2018

Louise M. Parent
– Chairperson
until December 31, 2017

Dr. Johannes Teyssen
– Vice Chairperson
until December 31, 2017

Dr. Paul Achleitner

Sabine Irrgang*

Timo Heider*

Martina Klee*

Peter Löscher
until May 18, 2017

Compensation Control Committee

Dr. Paul Achleitner
– Chairman

Frank Bsirske*

Prof. Dr. Henning Kagermann

Stefan Rudschäfski*

* Employee representatives

Our Business Strategy

We are a leading European bank with global reach supported by a strong home base in Germany, Europe's largest economy. We provide services in commercial and investment banking and retail banking as well as wealth and asset management products to corporations, governments, institutional investors, small and medium-sized businesses, and private individuals.

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

During the course of 2016, we made significant improvements to our control systems and reduced our legal risks, including some of our most significant litigation matters such as the then pending investigation by the U.S. Department of Justice (DOJ) of our U.S. residential mortgage-backed securities (RMBS) business. We also completed the disposal of several non-strategic assets, including the sale of our stake in the Hua Xia Bank and the sales of Abbey Life and the U.S. Private Client Services. Furthermore, we prepared or completed previously announced country exits and accelerated the wind down of Non-Core Operations Unit, which was then closed at the start of 2017.

In March 2017, we took additional measures to further strengthen the bank and place it in a better position to pursue growth opportunities. Most notably this included the raising of € 8 billion of additional equity capital through a rights offering. The main goals of these measures included:

– maintaining high CET 1 capital, supported by the capital raise, as well as high levels of liquidity,
– having a leading Corporate & Investment Bank (CIB) franchise with the scale and strength to successfully compete and grow globally,
– occupying the number one private and commercial banking position in our home market of Germany, serving more than 20 million clients in with our Private & Commercial Bank (PCB)
– giving our world class Deutsche Asset Management (Deutsche AM) division operational segregation that can support accelerated growth,
– reducing the size of our corporate center and cost base in part through more front-to-back alignment and shifting large portions of infrastructure functions to the business divisions, and
– shifting our earnings and business mix more towards stable businesses.

Geographically, we intend to retain our global capabilities where our management believes our franchise is the strongest, the growth potential the largest, and the potential risk adjusted returns the highest.

– PCB is primarily focused in Germany, with wealth management businesses around the world.
– Given the global nature of our core corporate clients, we intend to retain and build CIB capabilities across Germany and EMEA (ex- Germany), the U.S. and Canada, and in Asia Pacific (APAC). While we intend to have a global institutional client footprint, we expect to be focused primarily on Germany and EMEA (ex-Germany) where our competitive franchise is the strongest. We also intend to maintain a strong, but more focused U.S. footprint.
– Deutsche AM continues to provide a full suite of investment management services in Germany and the wider EMEA region, while enhancing its specialist capabilities in the U.S. and APAC.

Financial Targets

»In 2017 we recorded the first pre-tax profit in three years despite a challenging market environment, low interest rates and further investments in technology and controls. Only a charge related to US tax reform at the end of the year meant that we had to post a full-year after-tax loss. We believe we are firmly on the path to producing growth and higher returns with sustained discipline on costs and risks. The Postbank merger and partial flotation of DWS are both advancing well. We have made progress, but we are not yet satisfied with our results.«

John Cryan, Media Release, February 2, 2018

	Group financial targets	
CET 1 ratio (1)	Comfortably above 13%	
Leverage ratio	4.5%	
Post-tax RoTE	~10% in a normalized operating environment	
Dividend per share	Aspiration to deliver competitive dividend payout ratio for FY 2018 and thereafter	
Adjusted costs (2)	~€ 22 bn(3) by 2018	~€ 21 bn by 2021

(1) Full implementation of Basel 3
(2) Total noninterest expenses excluding restructuring and severance, litigation, impairment of goodwill and other intangibles
(3) We recently announced our expectation that adjusted costs in 2018 will be approximately € 23 bn, versus our target of € 22 bn. The difference largely reflects € 900 m of costs associated with businesses that are being sold. Those sales had been expected to have been completed by 2018 but have now been delayed or suspended.

Our Financial Targets

Our financial targets are:

- Adjusted costs of € 22 billion in 2018, and € 21 billion by 2021, which includes the adjusted costs of Postbank; we expect adjusted costs in 2018 to be approximately € 23 billion, which reflects our € 22 billion target plus the cost impact of the delayed and suspended business sales
- Achieve a Post-tax Return on Average Tangible Equity of approximately 10 % in a normalized operating environment
- Maintain a CRR/CRD 4 Common Equity Tier 1 capital ratio (fully loaded) of comfortably above 13 % at all times
- Achieve a CRR/CRD 4 leverage ratio of 4.5 %, and
- Targeting a competitive dividend payout ratio for the financial year 2018 and thereafter.

We are committed to our goal of further reducing our adjusted costs. In October 2015 we established a € 22 billion annual target in adjusted costs for 2018. Achieving that cost target assumed savings of € 900 million of annual expenses associated with planned business disposals. However, those disposals have been delayed or suspended and as a result the € 900 million in cost savings will not materialize in 2018 as originally planned. There-fore, we now expect to achieve adjusted costs of approximately € 23 billion in 2018. The € 900 million in adjusted costs associated with these businesses is expected to be more than offset by the corresponding revenues retained leading to a net positive IBIT impact in 2018.

Update on Strategy Execution

In 2017, we made material progress towards our goals announced at the start of the year. Major achievements in 2017 included:

- We substantially strengthened our capitalization through a capital raise, resulting in net proceeds of approximately € 8 billion. Our Common Equity Tier 1 ratio (CRR/CRD 4, fully loaded) was 14.0 % at the end of 2017, up from 11.8 % at the end of 2016
- We successfully reorganized our business divisions into three distinct units, with the goals of strengthening the businesses of each, enhancing client coverage, improving market share and driving efficiencies and growth:
  - The new Corporate & Investment Bank (CIB) that combines our markets, advisory, financing and transaction banking businesses
  - Private & Commercial Bank (PCB) that combines Postbank and our existing private, commercial and wealth management businesses
  - An operationally and legally segregated Deutsche Asset Management (Deutsche AM).
- We are in the process of combining Postbank and our existing Private & Commercial Client business in Germany with the goal of creating a market leading retail presence in Germany, driving greater efficiency through scale and better earnings and funding stability for Deutsche Bank
- Meanwhile, we continued the execution of existing strategic initiatives in PCB and we have virtually completed our target to close 188 retail branches in Germany
- We are progressing well in the preparation of the planned initial public offering of Deutsche AM; we have aligned the organizational structure more closely by bringing our Active, Passive and Alternative capabilities into one globally integrated investment platform and created a single global coverage group. The majority of the dedicated Asset Management legal entities were already grouped under has been transferred under a common German Asset Management holding company DWS SE during the year 2017 and the first quarter of 2018 with the remaining Asset Management legal entities, including the U.S. holding company, to re-parented in the first half of 2018. The conversion of the holding company DWS SE into a partnership limited by shares has been completed successfully in the first quarter 2018. The DWS Group GmbH & Co. KGaA is managed by a general partner (DWS Management GmbH) whose managing directors have been formally appointed in March 2018. In addition, Asset Management business activities and employees were transferred to AM-dedicated entities and new European branches of DeAM International GmbH will be set-up in the course of 2018
- We are progressing with our program of business disposals and have completed and signed a number of transactions in 2017, including the agreement to sell most of our Polish Private & Commercial Bank business in line with our effort to continue to sharpen our focus and reduce complexity
- We also continued to reduce complexity in our IT landscape by decommissioning nearly 30% of our key operating systems since 2015

Corporate Profile

»Simultaneous with the capital increase we also announced a realignment of our business divisions:

– We have formed an integrated Corporate & Investment Bank focused especially on international corporates. It has a leading position in Europe and a global network.
– We are in the process of creating by far the largest private and commercial bank in Germany with more than 20 million clients – a clear commitment to our home market. Key to this was our reversing the decision made in spring 2015 to sell Postbank. Economies of scale are becoming increasingly important – especially in the light of digitalisation. Over 11 million clients are already using our digital offerings. In future we will have two brands – but with one legal entity, one IT system and a single management team. The integration is making progress as planned. […]
– Our Asset Management business is well on the way to regaining its previous strength – supported by the prospect of greater autonomy that is already generating new impetus. In the course of the upcoming IPO the entire Asset Management business worldwide will be rebranded as DWS. This, too, represents a commitment to our home market and our roots.«

John Cryan's speech at the Annual Media Conference, February 2, 2018

Corporate divisions	Operating business divisions	Infrastructure
Corporate & Investment Banking	Global Transaction Banking	Control and service functions Group-wide, supra-divisional resource-planning, steering and control Risk, liquidity and capital management
	Origination & Advisory	
	Financing	
	Sales & Trading Fixed Income and Currencies	
	Sales & Trading Equities	
Private & Commercial Bank	Private & Commercial Clients Germany	
	Private & Commercial Clients International	
	Postbank	
	Wealth Management	
Deutsche Asset Management	Asset Management	

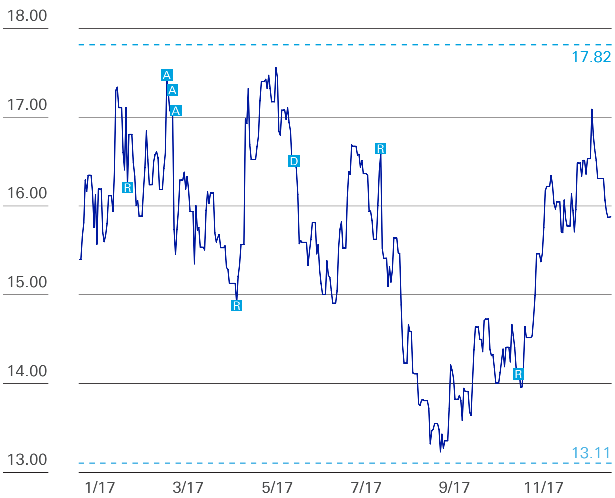
Deutsche Bank share and bonds

– Successful capital increase
– Five large shareholders
– Issuance spreads narrowing

Share price information

1 – 1
Share price 2017

Xetra, in €
A Ad Hoc R Results D Dividend
Deutsche Bank
Maximum (Jan 26, 2017, intraday)
Minimum (Sep 06, 2017, intraday)

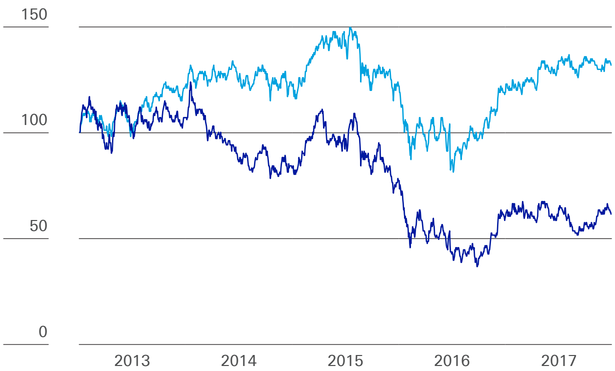


Dec 31, 2016	Deutsche Bank share closes at € 15.40
Jan 26, 2017	Deutsche Bank share reaches year high at € 17.82 (intraday) benefitting from expectations of banking deregulation
Mar 5, 2017	Deutsche Bank announces new financial targets, capital increase and additional actions
Mar 19, 2017	Deutsche Bank fixes total proceeds from capital increase at € 8.0 bn. Share count increased to 2,067 m shares
May 23, 2017	Dividend payment of € 0.19 per share for 2015/2016
Sep 6, 2017	Deutsche Bank share reaches year low at € 13.11 (intraday) on the back of earnings revisions post Q2 2017 results
Dec 29, 2017	Closing price of € 15.88; increase of 3.1 % versus prior year-end. DAX 30 closed +12.5 % and STOXX Europe 600 Banks +8.1 % versus prior year-end.

Source: Bloomberg

1 – 2
Long-term total return index

Total return index, beginning of 2013 = 100
STOXX Europe 600 Banks
Deutsche Bank

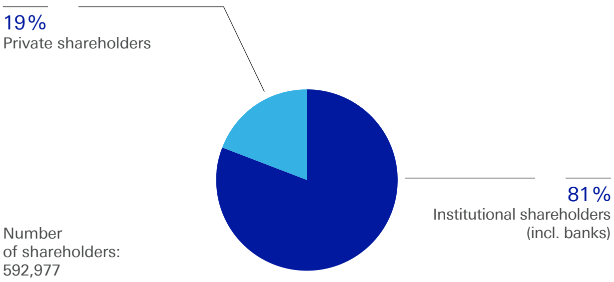


An investor who bought Deutsche Bank shares for € 10,000 at the start of 2013, reinvested dividends and subscribed to capital increases without injecting additional funds would have held a portfolio worth € 6,150 at the end of 2017. This corresponds to an average annual loss of 9.3 % per year. For the STOXX Europe 600 Banks, an annual increase of 5.8 % was recorded for the same period; the DAX 30 recorded a gain of 11.2 % per year.

Source: Bloomberg

1–3
Shareholders by group in % of share capital

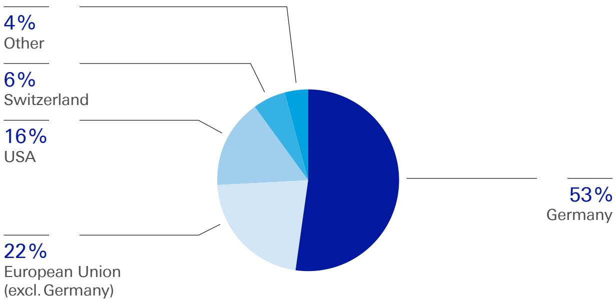
2,066.8 m shares at year end 2017



Figures rounded
Source: share register

1–4
Regional distribution of share ownership

Regional breakdown in % of share capital



Figures rounded
Source: share register

Large shareholders

1– 5
Large shareholders acc. to Art. 33, Sec. 1 German Securities Trading Act

6.55%	held by BlackRock, Inc., Wilmington, DE	February 23, 2018
3.50%[1]	held by C-QUADRAT Special Situations Dedicated Fund, Cayman Islands	February 13, 2018
3.05%	held by Paramount Services Holdings Ltd., British Virgin Islands	August 20, 2015
3.05%	held by Supreme Universal Holdings Ltd., Cayman Islands	August 20, 2015
3.001%	held by Stephen A. Feinberg, date of birth: March 29, 1960, New York, (Cerberus)	November 14, 2017

[1] Total percentage of voting rights: 9.06% (voting rights attached to shares: 3.50%, voting rights through financial instruments: 5.56%)

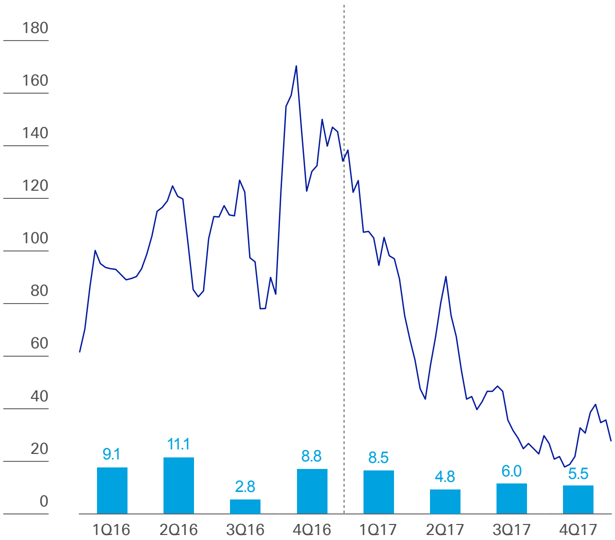
Share buybacks for compensation plans

The General Meeting in 2017 granted the Management Board the authorization to buy back up to 10% of the share capital (206.7 million shares) by the end of April 2022. A maximum of 5% of the share capital (103.3 million shares) can be purchased using derivatives. These authorizations replaced the authorizations of the 2016 General Meeting. During the period between the 2017 General Meeting and December 31, 2017, 14.1 million shares were bought back. The shares purchased were used for equity compensation purposes in the same period or were to be used in the upcoming period. The number of shares held in Treasury from buybacks was 0.2 million as of December 2017.

Deutsche Bank debt

1–6
Issuance and average spreads

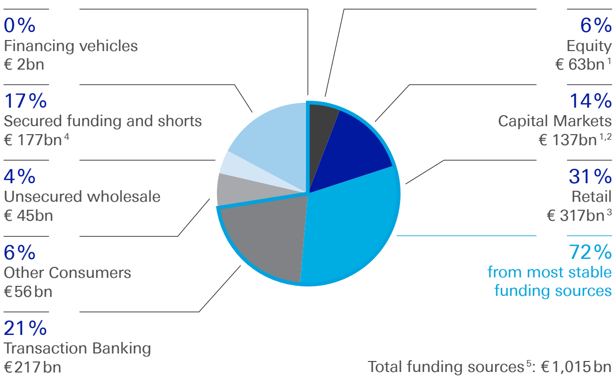
DB debt issuance, in € bn
DB average issuance spread in bps[1]



[1] Based on the 4-week moving average issuance spread vs. 3-month Euribor. AT1 instruments excluded from spread calculation

1–7
External funding profile

As of 31 December 2017, in € bn



Figures may not sum due to rounding differences
[1] AT1 instruments are included in Capital Markets
[2] Capital markets issuance differs from long-term debt as reported in our Group IFRS accounts
[3] Includes Wealth Management deposits
[4] Includes €26bn of TLTRO funding with a residual maturity of up to 2020
[5] Funding sources exclude derivatives and other non-funding liabilities

Overall, Deutsche Bank's issuance activities are well diversified across markets, instruments, currencies and investor types. The most significant transactions in 2017 included a €1.5 billion senior unsecured issuance in January with a 5 year maturity, a U.S. $2.25 billion senior unsecured dual tranche issuance in July with a 3 year maturity and a €1 billion Tier 2 issuance in November with a 15 year maturity callable in year 10.

Information on the Deutsche Bank share

Structural Data

		2017	2016	2015
Number of shareholders		592,977	598,122	561,559
Shareholders by type in % of share capital[1]	Institutional (including banks)	81	77	81
	Private	19	23	19
Regional breakdown in % of share capital[1]	Germany	53	56	56
	European Union (excluding Germany)	22	20	22
	Switzerland	6	4	4
	USA	16	18	15
	Other	4	1	3

Key Figures

	2017	2016	2015
Total return of Deutsche Bank share[2]	4.3%	(23.4%)	(7.5%)
Share price high (in €)	17.82	19.72[3]	29.83[3]
Share price low (in €)	13.11	8.83[3]	18.46[3]
Dividend per share for the financial year (in €)	0.11[4]	0.11	0.08
Market capitalization (in € bn)	32.8	23.8	31.1

	Dec 31, 2017
Issued shares	2,066,773,131
Outstanding shares	2,066,402,041
Share capital (in €)	5,290,939,215.36
Share price[5] (in €)	15.88
Weighting in the DAX	2.84%
Weighting in the Euro STOXX 50	1.24%
Selected index memberships	DAX, Euro STOXX 50, STOXX Europe 600

Securities identification codes

Deutsche Börse		New York Stock Exchange	
Type of issue	Registered share	Type of issue	Global Registered Share
Symbol	DBK	Currency	US$
WKN	514000	Symbol	DB
ISIN	DE0005140008	CINS	D 18190898
Bloomberg	DBK GR	Bloomberg	DBK US
Reuters	DBKGn.DE	Reuters	DB.N

[1] Figures rounded
[2] Share price based on Xetra
[3] Historical share prices have been adjusted on March 20, 2017 with retroactive effect to reflect the capital increase by multiplying a correcting factor of 0.8925.
[4] Proposal for the Annual General Meeting on May 24, 2018
[5] Xetra closing price

Our Brand

We are here to enable economic growth and societal progress, by creating positive impact for our clients, our people, our investors and our communities.
Now, more than ever, we need to demonstrate the value of what we do. That we are a bank whose business is productive, meaningful and sustainable. A bank that is dependable, high performing and human. A bank that balances economic success with environmental and social responsibility. A bank that has positive impact.

We use hashtags to invite conversation and engage our stakeholders across markets. Positive impact is about what we make happen for others.

#PositiveImpact

1

Management Report

Operating and Financial Review

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes to them. Our Operating and Financial Review includes qualitative and quantitative disclosures on Segmental Results of Operations and Entity Wide disclosures on Net Revenue Components as required by International Financial Reporting Standard (IFRS) 8, "Operating Segments". This information, which forms part of and is incorporated by reference into the financial statements of this report, is marked by a bracket in the margins throughout this Operating and Financial Review. For additional Business Segment disclosure under IFRS 8 please refer to Note 4 "Business Segments and Related Information" of the Consolidated Financial Statements. Forward-looking statements are disclosed in our Outlook section and elsewhere in this report.

Executive Summary

The Global Economy

Economic growth (in %)[1]	2017[2]	2016	Main driver
Global Economy	**3.8**	3.2	Global economic growth and global trade with strong momentum. The global economy surprised to the upside despite gradual tightening of monetary policy.
Thereof:			
Industrialized countries	2.2	1.6	The global momentum plus market-friendly results of European elections pushed growth in industrialized countries.
Emerging markets	4.9	4.3	Emerging markets benefitted from higher crude oil prices and the strong Asian economies.
Eurozone Economy	**2.5**	1.8	Results of European elections impacted markets positively. Both consumption and investment activity lifted economic growth, in particular in the second half of the year.
Thereof: German economy	2.2	1.9	The German economy also surprised to the upside, almost solely driven by the domestic economy. A very tight labor market, an expansionary monetary policy and additional fiscal stimuli led to growth above trend.
U.S. Economy	**2.3**	1.5	The U.S. economy performed almost as expected. The key driver of the U.S. economy remains consumer spending backed by a well-functioning labor market.
Japanese Economy	**1.8**	0.9	The Japanese economy had a balanced growth mix, where both the domestic and foreign sector contributed to GDP growth.
Asian Economy[3]	**6.1**	6.2	Strengthening intra-Asian trade is a key driver of the growth. Emerging markets Asia remains the global powerhouse in terms of GDP growth.
Thereof: Chinese Economy	6.9	6.7	The Chinese economy expanded slightly stronger than expected. Risks from the overvalued real estate sector did not materialize.

[1] Annual Real GDP Growth (% YoY). Sources: National Authorities unless stated otherwise.
[2] Sources: Deutsche Bank Research.
[3] Including China, India, Indonesia, Republic of Korea, and Taiwan, ex Japan.

The Banking Industry

Lending to the private sector in the Eurozone saw greater divergence in 2017. On the one hand, the outstanding corporate lending volumes continued to stagnate, as they have since summer of 2014, with increased purchases of distressed debt portfolios and further robust issuance of corporate bonds also playing a role. On the other hand, lending to households rose for a third consecutive year to reach 3.4 % year on year, its highest level since 2011. The outstanding volume set a new record of € 5.6 trillion. In particular, consumer lending gained pace significantly as the year progressed. The high growth in deposits, up 4.1 % year on year, continued more or less unabated despite zero interest rates. The loan-to-deposit ratio in the private sector business declined further over the course of the year, dropping from 107 % to 105 %. Corporate deposits expanded by 6.6 %, twice the rate of household deposits of 3.3 % in 2017.

Contrasting with developments in the Eurozone as a whole, corporate lending activity in Germany saw another strong upswing in the past year. After stagnating as recently as two years ago, the growth rate doubled to 4.7 % year on year in 2017. There was simultaneously a considerable decline in corporate bond issuance. Lending to households again expanded at a quicker pace, accelerating to 3.4 %, with the mortgage sector remaining the primary growth driver (+4.3 %). On the funding side, the banks once again saw a significant rise in deposits (+4.4 %) despite further cuts in interest rates, which were negative for corporates and effectively zero for households – both record lows. Growth in corporate deposits outpaced that of retail deposits, as has been the case for many years. The ratio of corporate deposits to overall private sector deposits has increased from 14.5 % to over 20 % in the last 15 years.

In the U.S., lending activity stabilized at a low level following the dramatic slowdown at the end of 2016/ beginning of 2017. The outstanding corporate lending volume rose by 3.6 % compared to 8.4 % in 2016, while lending to private households saw growth of 3.1 %, in 2016 4.7 %. For corporate lending, the decisive factor was commercial real estate lending with 5.8 % year on year, while traditional corporate loans in the narrower sense saw growth of just 1.5 %. Where lending to private households is concerned, growth in consumer loans of 5.1 % outpaced that of mortgage lending of 3.8 %, while there were declines in home equity loans of 6.8 %. On the deposit side, the rate of expansion slowed moderately to 4.2 % in 2017, almost exactly level with the overall growth in lending activity. As a result, there was no net change in the U.S. banks' sizable excess of liabilities.

In Japan, the rate of growth in the deposit business slowed considerably in 2017 to 3.6 % year on year, although the figure remained slightly ahead of growth in the lending business which was up 2.5 % as against 2016.

In China, lending to households began to slow somewhat recently following extraordinary growth in the past year-and-a-half. Growth for the full year amounted to 21 % compared to 23 % in 2016. By contrast, the rate of expansion in corporate lending rose from 8 % to 12 % year on year. Since the growth in deposits slowed considerably to less than 8 % and could no longer keep pace with the increase in lending activity, the loan-to-deposit ratio continued to edge toward the 100 % mark (climbing from 86 % to 92.5 % over the course of the year). Overall, at almost 150 % of GDP, bank lending to the private sector in China has reached an extraordinarily high level. By means of comparison, the figure for Germany is roughly half this.

Deutsche Bank Performance

In 2017, Deutsche Bank generated income before income taxes of € 1.2 billion. The result reflects lower noninterest expenses compared to 2016 and was impacted by significant revenue headwinds. A one-time tax charge of € 1.4 billion as a result of the U.S. tax reform led to a net loss of € 0.7 billion. During the year, we successfully resolved a number of legacy litigation matters and continued to invest in control improvements. We made tangible progress in executing on technology and business strategic initiatives. In addition, we maintained a high level of liquidity and capital which was supported by a successfully executed capital raise in April 2017 and by prudent balance sheet management.

Group Key Performance Indicators

Group Key Performance Indicators	Status end of 2017	Status end of 2016
Net revenues	€ 26.4 bn	€ 30.0 bn
Income (loss) before income taxes	€ 1.2 bn	€ (0.8) bn
Net income (loss)	€ (0.7) bn	€ (1.4) bn
Post-tax return on average tangible shareholders' equity[1]	(1.4) %	(2.7) %
Post-tax return on average shareholders' equity[1]	(1.2) %	(2.3) %
Adjusted costs[2]	€ 23.9 bn	€ 24.7 bn
Cost/income ratio[3]	93.4 %	98.1 %
Risk-weighted assets (RWA)[4]	€ 344.2 bn	€ 357.5 bn
CRR/CRD 4 fully loaded Common Equity Tier 1 ratio[5]	14.0 %	11.8 %
Fully loaded CRR/CRD 4 leverage ratio[6]	3.8 %	3.5 %

[1] Based on Net Income attributable to Deutsche Bank shareholders and additional equity components. For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of this report.
[2] Total noninterest expenses excluding impairment of goodwill and other intangible assets, litigation, policyholder benefits and claims and restructuring and severances For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of the report.
[3] Total noninterest expenses as a percentage of total net interest income before provision for credit losses plus noninterest income.
[4] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[5] The CRR/CRD 4 fully loaded Common Equity Tier 1 ratio represents our calculation of our Common Equity Tier 1 ratio without taking into account the transitional provisions of CRR/CRD 4. Further detail on the calculation of this ratio is provided in the Risk Report.
[6] Further detail on the calculation of this ratio is provided in the Risk Report.

Net revenues in 2017 were € 26.4 billion, a decline of € 3.6 billion, or 12 % from 2016. The decline principally reflected the impact of challenging market conditions and strategic business disposals. It included the negative impact of € 348 million from Debt Valuation Adjustments (DVA), € 213 million from Currency Translation Adjustment (CTA) realization on disposals, € 164 million related to the tightening of our own credit spreads and € 157 million related to a partial sale of the retail business in Poland in 2017. Additionally, revenues in 2017 declined as 2016 included a revenue contribution of € 618 million from Hua Xia Bank Co. Ltd., € 161 million from Private Client Services (PCS) as well as € 537 million from Abbey Life, which were sold in 2016. Excluding these effects, our net revenues were lower by 5 %, as compared to 2016. Revenues in Corporate & Investment Bank (CIB) were impacted by higher funding costs, a consistently low level of volatility, subdued client activity, as well as client and perimeter adjustments in Global Transaction Banking (GTB). Revenues in Private & Commercial Bank (PCB) declined, primarily from the impact of business disposals and pressure on deposit revenues from the low interest rate environment. The decline was partly offset by growth in revenues from loans and investment products and positive impacts from workout activities in Sal. Oppenheim. Revenues in Deutsche Asset Management (Deutsche AM) decreased significantly as compared to 2016, primarily related to the non-recurrence of revenues from Abbey Life which was sold at the end of 2016, proceeds on the sale of Deutsche AM India and a write-up related to Heta Asset Resolution AG (HETA), both recorded in 2016.

Noninterest expenses in 2017 were € 24.7 billion, a decrease of € 4.8 billion or 16 %, from 2016. The reduction was mainly driven by lower litigation expenses, lower impairment of goodwill and other intangible assets and the absence of policy-holder benefits and claims related to Abbey Life. Partly offsetting were higher accruals for variable compensation due to a return to a normalized variable compensation framework in 2017.

Adjusted costs in 2017 were € 23.9 billion as compared to € 24.7 billion in 2016, a decrease of € 843 million or 3%. The improvement was primarily driven by lower legal fees, reduced costs for external advice and the wind-down of NCOU, partly offset by the aforementioned higher accruals for variable compensation.

Income before income taxes was € 1.2 billion in 2017 compared to a loss before income taxes of € 810 million in 2016. The improvement of € 2.0 billion was mainly driven by significantly lower impairment of goodwill and other intangible assets as well as significantly lower litigation charges.

Income tax expense was € 2.0 billion in 2017, including the aforementioned one-time tax charge of € 1.4 billion attributable to the re-measurement of U.S. Deferred Tax Assets as a result of the U.S. tax reform.

We reported a net loss of € 735 million in 2017, driven by the aforementioned one-time tax charge, as compared to a net loss of € 1.4 billion in 2016.

Our CRR/CRD 4 fully loaded Common Equity Tier 1 (CET1) ratio was 14.0 % at the end of 2017, up from 11.8 % at the end of 2016, resulting from proceeds of the capital raise in April 2017. The phase-in CET 1 ratio at the year-end 2017 was 14.8 %.

Deutsche Bank Group

Deutsche Bank: Our Organization

Headquartered in Frankfurt am Main, Germany, we are the largest bank in Germany and one of the largest financial institutions in Europe and the world, as measured by total assets of € 1,475 billion as of December 31, 2017. As of that date, we employed 97,535 people on a full-time equivalent basis and operated in 60 countries out of 2,425 branches worldwide, of which 65 % were in Germany. We offer a wide variety of investment, financial and related products and services to private individuals, corporate entities and institutional clients around the world.

As of December 31, 2017 we were organized into the following three corporate divisions:

– Corporate & Investment Bank (CIB)
– Private & Commercial Bank (PCB)
– Deutsche Asset Management (Deutsche AM)

The three corporate divisions are supported by infrastructure functions. In addition, we have a regional management function that covers regional responsibilities worldwide. Prior periods presented throughout this report have been restated in order to reflect our new segmental structure that was announced on March 5, 2017. In line with our targets originally announced, from 2017 onwards, Non-Core Operations Unit (NCOU) ceased to exist as a separate corporate division of the Group.

We have operations or dealings with existing or potential customers in most countries in the world. These operations and dealings include working through:

– subsidiaries and branches in many countries;
– representative offices in many other countries; and
– one or more representatives assigned to serve customers in a large number of additional countries.

We have made the following significant capital expenditures or divestitures since January 1, 2015, that are not allocated to the capital expenditures or divestitures of corporate divisions below:

On October 26, 2016, Deutsche Bank entered into an agreement to sell its Mexican bank and broker dealer subsidiaries to InvestaBank S.A., Institución de Banca Múltiple. The transaction is a part of our targets originally announced in October 2015 and the Group’s plan to rationalize its global footprint. Closing of the transaction is expected in the first half of 2018, subject to regulatory approvals and other customary conditions.

In August 2016, Deutsche Bank Group entered into an agreement to sell Deutsche Bank S.A., its subsidiary in Argentina, to Banco Comafi S.A. The transaction is part of the Group’s plan to rationalize its global footprint. In June 2017, the transaction was successfully completed.

Management Structure

The Management Board has structured the Group as a matrix organization, comprising (i) Corporate Divisions, (ii) Infrastructure Functions and (iii) Regions.

Pursuant to the German Stock Corporation Act, the Management Board is responsible for the executive management of Deutsche Bank. Its members are appointed and removed by the Supervisory Board, which is a separate corporate body. Our Management Board focuses on, among other topics, strategic management, corporate governance, financial accounting and reporting, resource allocation, control and risk management, and is assisted by functional committees.

Within each corporate division and region, coordination and management functions are handled by operating committees and executive committees, which help ensure that the implementation of the strategy of individual business divisions and the plans for the development of infrastructure areas are aligned to our global business objectives.

Corporate & Investment Bank (CIB)

Corporate Division Overview

Our Corporate & Investment Bank division (CIB) comprises our FIC Sales & Trading, Equity Sales & Trading, Financing, Origination & Advisory and Global Transaction Banking businesses. The integrated division brings together the wholesale banking expertise, coverage, risk management, and infrastructure across Deutsche Bank into one division. This enables CIB to align resourcing and capital across our client and product perimeter to better serve the Bank’s priority clients.

In CIB, we made the following significant capital divestitures since January 1, 2015:

In early October 2017, Deutsche Bank Group signed a binding agreement to sell its Alternative Fund Services business, a unit of the Global Transaction Banking division, to Apex Group Limited. The transaction supports the Group’s announced strategic priorities and is expected to close in 2018.

In June 2015, Markit Ltd. a provider of financial information services conducted a secondary public offering. As part of this offering, Markit also re-purchased own shares from a number of selling shareholders including Deutsche Bank. We offered and sold approximately 4 million of the 5.8 million shares (2.7 %) we held in Markit.

Products and Services

The FIC Sales & Trading and Equity Sales & Trading businesses combines sales, trading and structuring of a wide range of financial market products, including bonds, equities and equity-linked products, exchange-traded and over-the-counter derivatives, foreign exchange, money market instruments, and structured products. Coverage of institutional clients is provided by the Institutional Client Group and Equity Sales, while Research provides analysis of markets, products and trading strategies for clients.

All our trading activities are covered by our risk management procedures and controls which are described in detail in the Risk Report.

Corporate Finance is responsible for mergers and acquisitions (M&A) as well as debt and equity advisory and origination. Regional and industry-focused coverage teams ensure the delivery of the entire range of financial products and services to our corporate and institutional clients.

Global Transaction Banking (GTB) is a global provider of cash management, trade finance and securities services, delivering the full range of commercial banking products and services for both corporate clients and financial institutions worldwide.

Distribution Channels and Marketing

As part of our strategy, we are re-focusing and optimizing our client coverage model to the benefit of our core clients. We are exiting client relationships where we consider returns to be too low or risks to be too high while also strengthening our client onboarding and know-your-client (KYC) procedures.

Growth in corporate client activity is also expected to create opportunities in the institutional client segment. Overall, Deutsche Bank expects the majority of growth to come primarily from enhancing the returns on the existing resources by more selectively deploying capital to priority clients.

Private & Commercial Bank (PCB)

Corporate Division Overview

The Private & Commercial Bank (PCB) Corporate Division consists of the four business units: Postbank, Private & Commercial Clients Germany, Private & Commercial Clients International and Wealth Management. We serve personal and private clients, small and medium-sized enterprises as well as wealthy private clients. Our product range includes payment and account services, credit and deposit products as well as investment advice. In these products, we offer our customers both the coverage of all basic financial needs and individual, tailor-made solutions. We pursue an omni-channel approach and our customers can flexibly choose between different possibilities to access to our services and products (branches, advisory centers, mobile networks of independent consultants and online/mobile banking).

Our Corporate Division comprises the following units:

The Postbank business unit focuses on retail banking and corporate banking (transaction banking and financing) in Germany, providing standardized banking and financial services for retail, business and corporate clients. In cooperation with Deutsche Post DHL AG, we also offer postal and parcel services in the branches.

In our Private & Commercial Clients Germany (PCC Germany) business unit, we also focus on private and commercial clients in Germany and provide a wide range of financial services including complex advisory solutions for our private clients. For small and medium-sized corporate clients, we offer an integrated commercial banking coverage model in collaboration with experts in the Corporate & Investment Bank.

The Private & Commercial Clients International (PCC International) business unit provides banking and other financial services to private, commercial and corporate clients in Europe and India. In Europe, we operate in five major banking markets: Italy, Spain, Belgium, Portugal and Poland. In December 2017, we entered into an agreement to sell a significant portion of our retail business in Poland in order to sharpen PCB’s focus and to reduce complexity. We will continue to serve foreign currency mortgage retail borrowers in Poland and will also remain present with the Corporate & Investment Bank operations, including Global Transaction Banking.

The Wealth Management (WM) business unit serves wealthy, high-net-worth (HNW) and ultra-high-net-worth (UHNW) individuals and families. We support our clients in planning, managing and investing their wealth, financing their personal and business interests and servicing their institutional and corporate needs. We also provide institutional-like services for sophisticated clients and complement our offerings by closely collaborating with experts in the Corporate & Investment Bank and in Deutsche Asset Management.

PCB made the following significant capital expenditures or divestitures since January 1, 2015:

In December 2017, Deutsche Bank Group entered into an agreement to partially sell its PCC business in Poland. While the finalization of the transaction is planned for the fourth quarter 2018, the transaction remains subject to required approvals from regulators, corporate consents and other conditions.

In March 2017, Deutsche Bank Group signed a definitive agreement to sell its share in Concardis GmbH, a leading German payment service provider established in form of a joint venture of the German banking sector, to a consortium of Advent International and Bain Capital Private Equity. In July 2017, the transaction was successfully completed.

On December 28, 2015, we agreed to sell our entire 19.99 % stake in Hua Xia Bank Company Limited (“Hua Xia”) to PICC Property and Casualty Company Limited (“PICC Property & Casualty”). The share transfer was completed in the fourth quarter 2016 and all remaining closing formalities were completed in the first quarter of 2017.

In the fourth quarter 2015 we announced that we had entered into a definitive asset purchase agreement to sell our U.S. Private Client Services (PCS) unit to Raymond James Financial, Inc. In September 2016 the transaction was completed successfully.

In November 2015, Visa Inc. announced a definitive agreement to acquire Visa Europe Limited. As part of this acquisition Visa Europe Limited requested all its shareholders, which included several Deutsche Bank Group entities, to return their shares against consideration. We returned our shares in Visa Europe Limited in January 2016 and received the cash and preferred shares consideration at closing on June 21, 2016 as well as an entitlement to a deferred cash payment including interest upon the third anniversary of the closing date.

Products and Services

In our home market Germany and internationally, we offer our clients a wide range of financial services from standardized as well as comprehensive services for retail clients, to solutions for demanding clients in Private Banking and Wealth Management, to business and commercial client coverage.

Our Postbank, PCC Germany and PCC International business units provide banking and other financial services to private and commercial clients in Germany, Europe and Asia with some variations in the product offering among countries that are driven by local market, regulatory and customer requirements. Products for our retail and private clients are designed to meet all basic financial needs and to provide them with advisory services. We offer payment and current account services, credit and financing products as well as deposit, investment and insurance products. The product range also includes postal services, which we offer through Postbank, and further non-banking services. Products for our small and medium-sized clients also include specific financing solutions (ranging from start-up financing to structured finance) and midcap related products provided by the Corporate & Investment Bank.

In the WM business unit, we support our clients in preserving their wealth by offering wealth structuring, wealth transfer and philanthropy services. We offer customized wealth management and investment solutions including discretionary portfolio management, investment advice as well as currency and deposit services. Furthermore, we provide financing solutions, e.g. real estate, single-stock and aircraft financing. For the client’s institutional and corporate needs we offer M&A, pre-IPO, private placements and institutional-like access to structured lending, private and public investment opportunities, trading and hedging in close collaboration with experts in the Corporate & Investment Bank.

Distribution Channels and Marketing

We follow an omni-channel approach to optimize accessibility and availability of services for our customers. The expansion of digital capabilities remains a strong focus across all our businesses.

PCC Germany, PCC International and Postbank have similar distribution channels:

– Branches: Within branches, the PCC and Postbank business units generally offer the entire range of products and advice. The branch network is supported by Customer Contact Centers, Call Centers and Self-service Terminals. Additionally, Postbank uses around 4,500 Deutsche Post DHL AG partner retail outlets, where customers can access selected Postbank financial services. In Germany, PCC and Postbank offer cash services at more than 10,000 cash points.
– Advisory Centers: The Advisory Centers in PCC Germany represent a connection between the branches and our digital offerings to ensure a holistic service and advice for our private and commercial clients independent of branch opening hours.
– Online and Mobile Banking: Websites of the PCC and Postbank business units offer clients a broad variety of relevant product information and services including interactive tools, tutorials as well as rich media content. We also provide a high performing transaction platform for banking, brokerage and self-services, combined with a highly frequented multi-mobile offering for smartphones and tablets. Moreover, we further invest in improvements in seamless client friendly end-to-end process automation.
– Financial Agents / Third party distributors: The PCC and Postbank business units additionally provide banking products and services through self-employed financial agents as well as through third-party distributors.

Wealth Management has a distinct client coverage:

– Global Coverage/Advisory teams: Our relationship manager / senior advisor teams manage client relationships, provide advice and assist clients in accessing dedicated WM services and open-architecture products. To ensure holistic service and advice, all wealth management clients have a single point of access, with dedicated teams serving specific client groups.
– Key Client Partners (KCP) / Corporate Finance Partnership (CFP): For qualified ultra-high-net-worth clients, Key Client Partners (KCP) provide institutionalized access to market views and trade ideas with bespoke trading, risk management and hedging solutions from our Global Markets platform as well as innovative non-recourse lending solutions. Corporate Finance Partnership (CFP) acts as trusted partner and strategic advisor for selected group of sophisticated investors / family offices providing seamless access to our global corporate finance franchise.
– Deutsche Oppenheim Family Offices AG (DOAG): Multi-family offices services including discretionary portfolio management, strategic asset allocation, “Family Office Strategy” funds, family office consulting, third-party manager selection, reporting & controlling as well as real estate and private equity investments.

Deutsche Asset Management (Deutsche AM)

Corporate Division Overview

With over € 700 billion of invested assets as of December 31, 2017, Deutsche AM is one of the world's leading investment management organizations, bringing access to the world's financial markets and delivering solutions to clients around the globe. Deutsche AM aims to provide sustainable financial solutions for all its clients: individual investors and the institutions that serve them.

Deutsche AM remains a core business for Deutsche Bank. Since the announcement in March 2017 that we intend to pursue a partial initial public offering of Deutsche AM, we have made considerable progress towards this goal, including the announcement of our intention to float DWS shares on the Frankfurt Stock Exchange. The rationale for the partial IPO is to unlock the potential of the business by fostering greater autonomy. As a standalone asset manager, we will introduce the DWS brand for our global business, which is expected to enhance our external profile. The integration of our infrastructure partners is expected to enable us to achieve further operating efficiencies across the platform, including process improvements to reduce costs and enhance the client experience.

Products and Services

Deutsche AM's investment capabilities span both active and passive strategies across a diverse array of asset classes and liquidity spectrum including equities, fixed income, liquidity, real estate, infrastructure, private equity and sustainable investments. We offer these capabilities through a variety of wrappers including ETFs, Mutual Funds, and Separately Managed Accounts. Deutsche AM delivers alpha and beta solutions to address the longevity, liability and liquidity needs of clients, leveraging intelligence and technology.

Distribution Channels and Marketing

Coverage/Advisory teams manage client relationships, provide advice and assist clients to access Deutsche AM's products and services. Deutsche AM also markets and distributes its offerings through other business divisions of Deutsche Bank Group, notably PCB for retail customers, as well as through third-party distributors. To ensure effective service and advice, all clients have a single point of access to Deutsche AM, with dedicated teams serving specific client groups.

Non-Core Operations Unit Corporate Division (NCOU)

In the second half of 2012, the Non-Core Operations Unit (NCOU) was established with the aim to help the Bank reduce risks associated with capital-intensive assets that are not core to the strategy, thereby reducing capital demand. As set out in our previous strategy announcements, our objectives in setting up the NCOU were to improve external transparency of our non-core positions; to increase management focus on the core operating businesses by separating the non-core activities; and to facilitate targeted accelerated de-risking.

NCOU successfully executed its de-risking target and reduced the portfolio in size to achieve the 2016 year-end target to less than € 10 billion RWA. In carrying out this mandate, NCOU actively focused on initiatives which delivered efficient capital contribution and de-leveraging results, thereby enabling the Bank to strengthen its fully loaded Common Equity Tier 1 ratio. As a result, the NCOU ceased to exist as a standalone division from 2017 onwards.

The remaining legacy assets with balance sheet value of approximately € 6 billion as of December 31, 2016 were transferred to the corresponding core operating segments, predominately Corporate & Investment Bank and Private & Commercial Bank.

The NCOU division made the following significant divestitures since January 1, 2015:

In November 2016, Deutsche Bank sold its remaining 16.9 % stake in Red Rock Resorts after an IPO in April 2016 where Deutsche Bank sold around 3 %.

In April 2016, Deutsche Bank reached an agreement to sell 100% Maher Terminals USA LLC in Port Elizabeth, New Jersey to Macquarie Infrastructure Partners III, a fund managed by Macquarie Infrastructure and Real Assets. Following receipt of all regulatory approvals, we completed the sale in November 2016 for U.S.$ 739 million.

In April 2015, Deutsche Bank reached an agreement to sell the Fairview Container Terminal in Port of Prince Rupert, Canada (a segment of Maher Terminals) to DP World (a Dubai-based marine terminal operator) for CAD 580 million, subject to regulatory approvals. Following the receipt of all regulatory approvals, we completed the sale in August 2015.

Infrastructure

The infrastructure functions perform control and service functions and, in particular, tasks relating to Group-wide, supra-divisional resource-planning, steering and control, as well as tasks relating to risk, liquidity and capital management.

The infrastructure functions are organized into the following areas of responsibility of our senior management:

– Chairman: Management Board, Communications, Corporate Social Responsibility, Group Audit, Corporate Strategy and Group Incident & Investigation Management
– Chief Financial Officer: Group and Regional Finance including Cost Operations, Group Tax, Group Treasury, Investor Relations, Corporate M&A and Investments, Group Management Consulting, Planning and Performance Management and Finance Change & Administration.
– Chief Risk Officer: Credit Risk, Market Risk, Liquidity Risk, Enterprise Risk, Business aligned Risk management, Regional Risk management, Non-Financial Risk and Corporate Insurance
– Chief Regulatory Officer: Group Regulatory Affairs, Government and Public Affairs, Compliance and Anti-Financial Crime
– Chief Administrative Officer: Legal including Data Protection, Global Governance and Human Resources including Corporate Executive Matters
– Chief Operating Officer: Chief Information Officer, Technology and Operations, Digital Transformation, Corporate Services, Chief Security Officer and Chief Data Officer

All expenses and revenues incurred within the infrastructure functions and areas are fully allocated to our three corporate divisions.

From 2018 onwards, Infrastructure expenses associated with shareholder activities as defined in the OECD Transfer Pricing Guidelines will no longer be allocated to corporate divisions, but will be kept centrally and reported under Consolidation & Adjustments (C&A), which in this context will be renamed to “Corporate & Other”.

The bank decided in 2017 to move certain infrastructure employees to the divisions they provide service for in order to increase overall effectiveness and collaboration. This helped to increase the business divisions’ responsibility and autonomy with respect to their organizational and process-related decisions and led to a significant increase of the number of employees associated with the business divisions compared to 2016 – in particular in the Corporate & Investment Bank as well as in Deutsche Asset Management. Independent Control Functions generally remained in central areas.

Significant Capital Expenditures and Divestitures

Information on each Corporate Division’s significant capital expenditures and divestitures from the last three financial years has been included in the above descriptions of the Corporate Divisions.

Since January 1, 2017, there have been no public takeover offers by third parties with respect to our shares and we have not made any public takeover offers for our own account in respect of any other company’s shares.

Results of Operations

Consolidated Results of Operations

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

Condensed Consolidated Statement of Income

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	in %	2016 increase (decrease) from 2015 in € m.	in %
Net interest income	12,378	14,707	15,881	(2,329)	(16)	(1,174)	(7)
Provision for credit losses	525	1,383	956	(857)	(62)	427	45
Net interest income after provision for credit losses	**11,853**	**13,324**	**14,925**	**(1,472)**	**(11)**	**(1,601)**	**(11)**
Commissions and fee income[1]	11,002	11,744	12,765	(742)	(6)	(1,021)	(8)
Net gains (losses) on financial assets/liabilities at fair value through profit or loss[1]	2,926	1,401	3,842	1,524	109	(2,440)	(64)
Net gains (losses) on financial assets available for sale	479	653	203	(174)	(27)	450	N/M
Net income (loss) from equity method investments	137	455	164	(318)	(70)	291	177
Other income (loss)	(475)	1,053	669	(1,528)	N/M	385	58
Total noninterest income	**14,070**	**15,307**	**17,644**	**(1,238)**	**(8)**	**(2,336)**	**(13)**
Total net revenues[2]	**25,922**	**28,632**	**32,569**	**(2,709)**	**(9)**	**(3,937)**	**(12)**
Compensation and benefits	12,253	11,874	13,293	380	3	(1,419)	(11)
General and administrative expenses	11,973	15,454	18,632	(3,481)	(23)	(3,178)	(17)
Policyholder benefits and claims	0	374	256	(374)	(100)	117	46
Impairment of goodwill and other intangible assets	21	1,256	5,776	(1,235)	(98)	(4,520)	(78)
Restructuring activities	447	484	710	(37)	(8)	(226)	(32)
Total noninterest expenses	**24,695**	**29,442**	**38,667**	**(4,747)**	**(16)**	**(9,225)**	**(24)**
Income (loss) before income taxes	**1,228**	**(810)**	**(6,097)**	**2,038**	**N/M**	**5,287**	**(87)**
Income tax expense (benefit)	1,963	546	675	1,417	N/M	(129)	(19)
Net income (loss)	**(735)**	**(1,356)**	**(6,772)**	**621**	**(46)**	**5,416**	**(80)**
Net income attributable to noncontrolling interests	15	45	21	(30)	(66)	24	112
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	(751)	(1,402)	(6,794)	651	(46)	5,392	(79)

N/M – Not meaningful
[1] For further detail please refer to Note 1 "Significant Accounting Policies and Critical Accounting Estimates" of this report.
[2] After provision for credit losses.

Net Interest Income

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	in %	2016 increase (decrease) from 2015 in € m.	in %
Total interest and similar income	24,092	25,636	25,967	(1,544)	(6)	(331)	(1)
Total interest expenses	11,714	10,929	10,086	785	7	843	8
Net interest income	**12,378**	**14,707**	**15,881**	**(2,329)**	**(16)**	**(1,174)**	**(7)**
Average interest-earning assets[1]	1,021,697	1,033,172	1,031,827	(11,475)	(1)	1,345	0
Average interest-bearing liabilities[1]	790,488	812,578	816,793	(22,090)	(3)	(4,215)	(1)
Gross interest yield[2]	2.24 %	2.39 %	2.52 %	(0.15) ppt	(6)	(0.13) ppt	(5)
Gross interest rate paid[3]	1.32 %	1.23 %	1.23 %	0.09 ppt	7	0.00 ppt	0
Net interest spread[4]	0.91 %	1.16 %	1.28 %	(0.25) ppt	(22)	(0.12) ppt	(9)
Net interest margin[5]	1.21 %	1.42 %	1.54 %	(0.21) ppt	(15)	(0.12) ppt	(8)

ppt – Percentage points
[1] Average balances for each year are calculated in general based upon month-end balances.
[2] Gross interest yield is the average interest rate earned on our average interest-earning assets.
[3] Gross interest rate paid is the average interest rate paid on our average interest-bearing liabilities.
[4] Net interest spread is the difference between the average interest rate earned on average interest-earning assets and the average interest rate paid on average interest-bearing liabilities.
[5] Net interest margin is net interest income expressed as a percentage of average interest-earning assets.

2017

Net interest income was € 12.4 billion in 2017 compared to € 14.7 billion in 2016, a decrease of € 2.3 billion, or 16 %. The main drivers for decline in net interest income were perimeter changes including the sale of Abbey Life, PCS and the disposal of assets within the Non-Core Operations Unit (NCOU) in 2016, as well as higher funding costs and overall portfolio effects resulting in a shift towards lower interest yielding asset classes, mainly euro deposits with central banks. These effects were partially offset by interest income of € 116 million related to government grants under the Targeted Longer-Term Refinancing Operations II (TLTRO II) program. Overall, our net interest margin declined by 21 basis points in 2017 as compared to the prior year.

2016

Net interest income was € 14.7 billion in 2016 compared to € 15.9 billion in 2015, a decrease of € 1.2 billion, or 7 %. The decrease in net interest income was mainly driven by margin compression, the low interest rate environment, depressed trade volumes, reduced client balances and strategic perimeter decisions as well as higher funding costs. Both the net interest spread and the net interest margin declined by 12 basis points in 2016 as compared to prior year.

Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in € m.	in %	in € m.	in %
Total trading income	3,374	547	3,874	2,827	N/M	(3,327)	(86)
Total net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	(448)	854	(32)	(1,302)	N/M	886	N/M
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,926	1,401	3,842	1,524	109	(2,440)	(64)

2017

Net gains on financial assets/liabilities at fair value through profit or loss were € 2.9 billion in 2017 compared to € 1.4 billion in 2016, an increase of € 1.5 billion or 109 %. The increase was primarily driven by trading income, which improved by € 2.8 billion, mainly due to the non-recurrence of de-risking losses within the NCOU in 2016. Mark-to-market losses on issuances designated at fair value through profit or loss were the main contributor to a loss of € 448 million on financial assets/liabilities designated at fair value through profit or loss in 2017 compared to a gain of € 854 million in 2016. This loss was largely offset by mark-to-market gains in trading income related to financial instruments used as hedges for those issuances.

2016

Net gains (losses) on financial assets/liabilities at fair value through profit or loss was € 1.4 billion in 2016, a decrease of € 2.4 billion as compared to € 3.8 billion in 2015. The decrease was primarily driven by Trading income, which reduced by € 3.3 billion year-on-year from the impact of unfavorable foreign exchange rates and interest rates on the fair value of derivatives. The decline included a loss of € 0.9 billion occurred due to an un-winding of long-dated derivative exposures and related assets. In addition, Trading income was impacted by € 0.9 billion related to net losses on derivatives held by Group Treasury in respect of debt issuance. The corresponding gains were reported in the CIB division. Total net gains (losses) on financial assets/liabilities designated at fair value through profit or loss increased by € 886 million compared to 2015.

Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

Our trading and risk management businesses include significant activities in interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments designated at fair value through profit or loss (i.e., coupon and dividend income) and the costs of funding net trading positions are part of net interest income. Our trading activities can periodically shift income between net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies.

In order to provide a more business-focused discussion, the following table presents net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss by corporate division.

in € m.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in € m.	in %	in € m.	in %
Net interest income	12,378	14,707	15,881	(2,329)	(16)	(1,174)	(7)
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,926	1,401	3,842	1,524	109	(2,440)	(64)
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	**15,304**	16,108	19,723	(805)	(5)	(3,615)	(18)
Breakdown by Corporate Division:[1]							
Corporate & Investment Bank	9,078	10,773	12,348	(1,695)	(16)	(1,576)	(13)
Private & Commercial Bank	6,158	6,420	6,573	(262)	(4)	(153)	(2)
Deutsche Asset Management	30	365	255	(335)	(92)	110	43
Non-Core Operations Unit	0	(1,307)	(362)	1,307	N/M	(944)	N/M
Consolidation & Adjustments	37	(143)	910	180	N/M	(1,052)	N/M
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	**15,304**	16,108	19,723	(805)	(5)	(3,615)	(18)

N/M – Not meaningful
[1] This breakdown reflects net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss only. For a discussion of the corporate divisions' total revenues by product please refer to Note 4 "Business Segments and Related Information".

2017

Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were € 15.3 billion in 2017, compared to € 16.1 billion in 2016, a decrease of € 805 million, or 5 %. The decrease was primarily driven by CIB, where total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were € 9.0 billion in 2017, a decrease of € 1.7 billion, or 16 %, compared to 2016. In Sales & Trading (FIC), revenues were lower by € 503 million in 2017, a decrease of 10 % compared to 2016. The decline was primarily due to low volatility environment, reducing client demand and lack of major market demand and higher funding cost. In Sales & Trading (equity), revenues were lower by € 342 million in 2017, a decrease of 18 % compared to 2016 mainly due to in-creased U.S. funding costs, lower average balances and reduced spreads in Prime Finance. Revenues in other CIB pro-ducts were € 2.8 billion, represented a decline of € 850 million or 23 % compared to 2016. The decline was mainly due to losses of € 348 million in DVA from tightening of credit spreads and decrease in derivative liability exposures. Additionally revenues were also impacted by unfavorable exchange rate movements. In addition, Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss decreased in Deutsche AM, mainly due to nonrecurring revenues from Abbey Life which was sold at the end of 2016 and the absence of a write-up of our exposure to HETA; and in PCB, mainly impacted by the persistent low interest rate environment and loan book reductions. Partly offsetting these decreases was NCOU, which ceased to exist from 2017 onwards and reported negative € 1.3 billion of Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss in 2016, including the aforementioned de-risking losses.

2016

Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss were € 16.1 billion, a decrease by € 3.6 billion, or 18 %, versus € 19.7 billion in 2015. CIB contributed € 1.6 billion to the decrease, with Sales & Trading (FIC) revenues being lower by € 777 million in 2016, a decrease of 13 % compared to 2015. This decline was driven by a challenging market environment and country exits as part of our targets originally announced in October 2015. Lower revenues in Emerging Markets and Foreign Exchange were partly offset by higher Core Rates revenues. In Sales & Trading (equity), revenues were lower by € 904 million in 2016, a decrease of 32 % compared to 2015. This decline was felt across all equity businesses as a result of lower overall client activity in a challenging market environment. Prime Finance revenues were also impacted by higher funding costs due to a widening of our own credit spreads following negative market perceptions concerning Deutsche Bank. Interest revenues in Trade Finance were lower due to margin compression and the impact from negative interest rates. Revenues in other CIB products improved by € 106 million, or 3 % compared to 2015. In PCB, total net interest income and net gains (losses) on financial as-sets/liabilities at fair value through profit or loss declined by € 153 million. This includes the impact of a low interest rate environment in Europe and was partly offset by positive transaction related effects relating to PCB's stake in Hua Xia Bank Co. Ltd. In Deutsche AM, Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss increased by € 110 million, mainly due to a write up of our exposure to HETA during 2016, favorable mark-to-market movements on policyholder positions in Abbey Life and positive effects related to the sale of Deutsche AM India. In NCOU, Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss declined by € 944 million, predominantly driven by the resolution of long-dated derivative exposures, various bond sales and further un-winds across the portfolio. In C&A, the decrease by € 1.1 billion was primarily due to interest rate increases in the long end of the curve in USD and EUR during the fourth quarter of 2016. The offsetting mark to market movements were reported in other lines of the income statement.

Provision for Credit Losses

2017

Provision for credit losses was € 525 million in 2017, a decrease of € 857 million, or 62 %, compared to 2016 as a result of significantly lower charges and higher releases in all divisions. In CIB, the improvement reflected better performance of all portfolios including shipping. Despite the year-over-year reduction, shipping continued to be the main driver of provision for credit losses in 2017, in part related to the re-evaluation of the respective impairment method during the year. In PCB, provision for credit losses improved, reflecting the good portfolio quality and the continued benign environment along with a significant release in Postbank.

2016

Provision for credit losses was € 1.4 billion in 2016, an increase of € 427 million, or 45 %, compared to 2015. This mainly resulted from higher provisions in CIB driven by exposures related to the shipping, metals and mining and oil and gas industry sectors. Further increases in NCOU were driven by IAS 39 reclassified assets within our European mortgage portfolios. These increases were partly offset by lower provisions in PCB reflecting the quality of the retail loan portfolio and the benign economic environment.

Remaining Noninterest Income

in € m.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in € m.	in %	in € m.	in %
Commissions and fee income[1]	11,002	11,744	12,765	(742)	(6)	(1,021)	(8)
Net gains (losses) on financial assets available for sale	479	653	203	(174)	(27)	450	N/M
Net income (loss) from equity method investments	137	455	164	(318)	(70)	291	177
Other income (loss)	(475)	1,053	669	(1,528)	N/M	385	58
Total remaining noninterest income	**11,144**	13,906	13,802	(2,762)	(20)	104	1
[1] includes:							
Commissions and fees from fiduciary activities:							
Commissions for administration	338	401	432	(63)	(16)	(31)	(7)
Commissions for assets under management	3,603	3,507	3,666	96	3	(159)	(4)
Commissions for other securities business	379	380	382	(1)	(0)	(3)	(1)
Total	**4,320**	4,287	4,480	33	1	(193)	(4)
Commissions, broker's fees, mark-ups on securities underwriting and other securities activities:							
Underwriting and advisory fees	1,825	1,871	2,388	(46)	(2)	(517)	(22)
Brokerage fees	1,160	1,434	1,746	(274)	(19)	(312)	(18)
Total	**2,985**	3,305	4,134	(320)	(10)	(829)	(20)
Fees for other customer services	3,698	4,152	4,151	(454)	(11)	1	0
Total commissions and fee income	**11,002**	11,744	12,765	(742)	(6)	(1,021)	(8)

N/M – Not meaningful

Commissions and fee income

2017

Total Commission and fee income was € 11.0 billion in 2017, a decrease of € 742 million, or 6%, as compared to 2016. The decrease was mainly driven by lower fee income in CIB, due to the reduced perimeter and lower volumes in GTB as well as reduced volumes in Equities. Fee income in PCB declined due to the reduction in perimeter from the sale of the PCS business. Partly offsetting these negative effects were higher fund management fees in Deutsche AM mainly due to favorable market conditions.

2016

Total Commissions and fee income decreased from € 12.8 billion in 2015 by € 1.0 billion, or 8 %, to € 11.7 billion in 2016. In PCB, commission and fee income declined due to the difficult market environment and reduced client activities. CIB revenues were impacted primarily by a decline in deal volumes and issuance, resulting from worldwide political uncertainty and anticipation of interest rate hikes as well as from lower market volumes.

Net gains (losses) on financial assets available for sale

2017

Net gains on financial assets available for sale were € 479 million in 2017 compared to € 653 million in 2016, a decrease of € 174 million or 27 %. The decrease was primarily due to the non-recurrence of gains related to de-risking activities in NCOU and a gain on sale of stake in Visa Europe Limited, both in 2016. This was partly offset by a gain on sale of shares in Concardis GmbH in 2017.

2016

Net gains on financial assets available for sale were € 653 million in 2016 compared to € 203 million in 2015, an increase of € 450 million. The increase resulted from the sale a holding in Visa Europe Limited and from the sale of sovereign bonds in Postbank, as well as from de-risking activities in NCOU.

Net income (loss) from equity method investments

2017

Net gains from equity investments were € 137 million in 2017 compared to € 455 million in 2016, a decrease of € 318 million, or 70 %, primarily due to the non-recurrence of a gain from the IPO of Red Rock Resorts in NCOU.

2016

Net gains from equity investments were € 455 million in 2016 compared to € 164 million in 2015, an increase of € 291 million, or 177 %, primarily in NCOU due to a gain from the IPO of Red Rock Resorts.

Other income (loss)

2017

Other income (loss) was a loss of € 475 million in 2017 compared to a gain of € 1.1 billion in 2016. The decline was primarily driven by the absence of a positive realization in Other comprehensive income from the sale of stake in Hua Xia Bank Co. Ltd. The decline also included a negative impact from the agreement to sell a significant portion of the retail business in Poland as well as a one-off loss due to termination of a legacy trust preferred security.

2016

Other income increased by € 385 million or 58 %, from € 669 million in 2015 to € 1.1 billion in 2016. The increase in 2016 was primarily driven by a realization in Other comprehensive income from the sale of stake in Hua Xia Bank Co. Ltd. and was partly offset by de-risking losses due to the sale of IAS 39 assets in NCOU, the non-recurrence of a specific litigation recovery and gain on sale of Maher Prince Rupert in 2015.

Noninterest Expenses

in € m.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in € m.	in %	in € m.	in %
Compensation and benefits	12,253	11,874	13,293	380	3	(1,419)	(11)
General and administrative expenses[1]	11,973	15,454	18,632	(3,481)	(23)	(3,178)	(17)
Policyholder benefits and claims	0	374	256	(374)	(100)	117	46
Impairment of goodwill and other intangible assets	21	1,256	5,776	(1,235)	(98)	(4,520)	(78)
Restructuring activities	447	484	710	(37)	(8)	(226)	(32)
Total noninterest expenses	24,695	29,442	38,667	(4,747)	(16)	(9,225)	(24)

N/M – Not meaningful

[1] includes:							
IT costs	3,798	3,872	3,664	(74)	(2)	208	6
Occupancy, furniture and equipment expenses	1,849	1,972	1,944	(123)	(6)	28	1
Professional service fees	1,769	2,305	2,283	(536)	(23)	22	1
Communication and data services	686	761	807	(75)	(10)	(46)	(6)
Travel and representation expenses	405	450	505	(45)	(10)	(56)	(11)
Banking and transaction charges	744	664	598	80	12	66	11
Marketing expenses	309	285	294	24	8	(9)	(3)
Consolidated investments	0	334	406	(334)	N/M	(72)	(18)
Other expenses[2]	2,414	4,812	8,129	(2,398)	(50)	(3,317)	(41)
Total general and administrative expenses	11,973	15,454	18,632	(3,481)	(23)	(3,178)	(17)

[2] Includes litigation related expenses of € 0.2 billion in 2017, € 2.4 billion in 2016 and € 5.2 billion in 2015.

Compensation and benefits

2017

Compensation and benefits increased by € 380 million, or 3 %, to € 12.3 billion in 2017 compared to € 11.9 billion in 2016. The increase was primarily driven by higher variable compensation, reflecting the return to normal compensation programs in 2017. This increase was partly offset by a decrease in salaries, due to lower headcount and favorable foreign exchange movements, by reduced cost for amortization of prior years' deferrals and by lower severance expense.

2016

Compensation and benefits decreased by € 1.4 billion, or 11 %, to € 11.9 billion in 2016 compared to € 13.3 billion in 2015, primarily due to significantly limited 2016 variable compensation.

General and administrative expenses

2017

General and administrative expenses decreased by € 3.5 billion, or 23 %, to € 12.0 billion in 2017 compared to € 15.5 billion in 2016. The decrease was mainly due to a € 2.2 billion reduction in litigation charges compared to 2016. Professional service fees declined by € 536 million driven by lower legal fees and reduced business consulting cost.

2016

General and administrative expenses decreased by € 3.2 billion, or 17 %, to € 15.5 billion in 2016 compared to € 18.6 billion in 2015. The decrease was mainly due to a € 2.8 billion reduction in litigation charges compared to 2015. Effects from favorable foreign exchange rate movements as well as reductions in various expense positions were partially offset by higher IT cost, including higher depreciation for self-developed software.

Policyholder benefits and claims

2017

No policyholder benefits and claims were reported for 2017 following the sale of Abbey Life business at the end of 2016.

2016

Policyholder benefits and claims increased by € 117 million, or 46 %, from € 256 million in 2015 to € 374 million in 2016 and were solely driven by higher policyholder benefits and claims recorded in the Abbey Life business. These charges were offset by net gains on financial assets/liabilities at fair value through profit or loss on policyholder benefits and claims.

Impairment of goodwill and other intangible assets

2017

Impairment charges on goodwill and other intangible assets decreased from € 1.3 billion in 2016 to € 21 million in 2017, primarily due to the non-recurrence of prior year charges. The 2016 charge reflected an impairment of € 1.0 billion in Deutsche AM, triggered by the sale of Abbey Life and an impairment of € 285 million in CIB following the transfer of certain businesses from Deutsche AM.

2016

Impairment charges on goodwill and other intangible assets decreased by € 4.5 billion, or 78 %, to € 1.3 billion in 2016, from € 5.8 billion in 2015. The decline as compared to 2015 was primarily due to the absence of 2015 charges, notably € 3.6 billion in PCB and € 2.2 billion in CIB.

Restructuring

2017

Restructuring expenses amounted to € 447 million in 2017 compared to € 484 million in 2016. Restructuring charges for 2017 are primarily related to the planned merger of Private and Commercial Clients Germany and Postbank.

2016

Restructuring expenses were € 484 million in 2016 compared to € 710 million in 2015 due to execution of strategic measures.

Income Tax Expense

2017

Income tax expense in 2017 was € 2.0 billion (2016: € 546 million). The effective tax rate of 160 % (2016: negative 67 %) was mainly impacted by a one-time charge of € 1.4 billion resulting from the U.S. tax reform and other changes in the recognition and measurement of deferred tax assets.

2016

Income tax expense in 2016 was € 546 million (2015: € 675 million). The effective tax rate of negative 67 % (2015: negative 11 %) was mainly impacted by non-tax deductible goodwill impairment and litigation charges.

Net income (loss)

2017

The 2017 result was a net loss of € 735 million, driven by the aforementioned one-time tax charge attributable to the re-measurement of U.S. Deferred Tax Assets as a result of the U.S. tax reform, compared to a net loss of € 1.4 billion in 2016.

2016

The 2016 result was a net loss of € 1.4 billion as compared to a net loss of € 6.8 billion in 2015.

Segment Results of Operations

The following is a discussion of the results of our business segments. See Note 4 “Business Segments and Related Information” to the consolidated financial statements for information regarding:

– changes in the format of our segment disclosure and
– the framework of our management reporting systems.

The criterion for segmentation into divisions is our organizational structure as it existed at December 31, 2017. Prior period comparatives were restated due to changes in the divisional structure. Segment results were prepared in accordance with our management reporting systems.

						2017
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total Consolidated
Net revenues[1]	14,226	10,178	2,532	–	(488)	26,447
Provision for credit losses	213	313	(1)	–	(0)	525
Noninterest expenses						
Compensation and benefits	4,273	3,979	778	–	3,223	12,253
General and administrative expenses	8,782	5,166	1,025	–	(3,000)	11,973
Policyholder benefits and claims	0	0	0	–	0	0
Impairment of goodwill and other intangible assets	6	12	3	–	0	21
Restructuring activities	82	360	6	–	(0)	447
Total noninterest expenses	13,143	9,518	1,811	–	223	24,695
Noncontrolling interests	26	(12)	1	–	(16)	0
Income (loss) before income taxes	843	359	720	–	(695)	1,228
Cost/income ratio	92 %	94 %	72 %	–	N/M	93 %
Assets[2]	1,127,028	333,069	8,050	–	6,586	1,474,732
Additions to non-current assets	125	551	60	–	1,067	1,803
Risk-weighted assets[3]	231,574	87,472	8,432	–	16,734	344,212
CRD 4 leverage exposure measure (spot value at reporting date)	1,029,946	344,087	2,870	–	17,983	1,394,886
Average shareholders' equity	44,169	14,934	4,725	–	99	63,926
Post-tax return on average tangible shareholders' equity[4]	1 %	2 %	54 %	–	N/M	(1) %
Post-tax return on average shareholders' equity[4]	1 %	2 %	10 %	–	N/M	(1) %
[1] includes:						
Net interest income	4,532	5,876	(19)	–	1,989	12,378
Net income (loss) from equity method investments	81	3	44	–	9	137
[2] includes:						
Equity method investments	553	91	211	–	10	866

N/M – Not meaningful
[3] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[4] The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was 160 % for the year ended December 31, 2017. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 33 % for the year ended December 31, 2017.

in € m. (unless stated otherwise)	2016 Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total Consolidated
Net revenues[1]	16,763	11,090	3,015	(382)	(471)	30,014
Provision for credit losses	816	439	1	128	(0)	1,383
Noninterest expenses						
Compensation and benefits	3,955	4,042	708	68	3,101	11,874
General and administrative expenses	9,655	5,029	1,071	2,678	(2,979)	15,454
Policyholder benefits and claims	0	0	374	0	0	374
Impairment of goodwill and other intangible assets	285	0	1,021	(49)	(0)	1,256
Restructuring activities	299	141	47	4	(7)	484
Total noninterest expenses	14,193	9,212	3,220	2,701	116	29,442
Noncontrolling interests	49	0	0	(4)	(46)	0
Income (loss) before income taxes	1,705	1,439	(206)	(3,207)	(541)	(810)
Cost/income ratio	85 %	83 %	107 %	N/M	N/M	98 %
Assets[2]	1,201,894	329,869	12,300	5,523	40,959	1,590,546
Additions to non-current assets	22	480	1	0	1,517	2,019
Risk-weighted assets[3]	237,596	86,082	8,960	9,174	15,706	357,518
CRD 4 leverage exposure measure (spot value at reporting date)	954,203	342,424	3,126	7,882	40,018	1,347,653
Average shareholders' equity	40,518	15,018	4,864	1,682	0	62,082
Post-tax return on average tangible shareholders' equity[4]	3 %	7 %	N/M	N/M	N/M	(3) %
Post-tax return on average shareholders' equity[4]	3 %	6 %	(3) %	N/M	N/M	(2) %
[1] includes:						
Net interest income	6,314	6,201	326	142	1,724	14,707
Net income (loss) from equity method investments	138	5	44	269	(1)	455
[2] includes:						
Equity method investments	698	23	203	98	4	1,027

N/M – Not meaningful
[3] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[4] The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (67) % for the year ended December 31, 2016. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 35 % for the year ended December 31, 2016.

in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	2015 Total Consolidated
Net revenues[1]	18,899	10,637	3,016	794	179	33,525
Provision for credit losses	393	511	1	51	(0)	956
Noninterest expenses						
Compensation and benefits	4,897	4,161	870	86	3,279	13,293
General and administrative expenses	11,662	5,139	1,209	2,921	(2,299)	18,632
Policyholder benefits and claims	0	0	256	0	0	256
Impairment of goodwill and other intangible assets	2,168	3,608	0	0	0	5,776
Restructuring activities	129	586	(2)	(1)	(3)	710
Total noninterest expenses	18,856	13,495	2,334	3,006	976	38,667
Noncontrolling interests	26	0	(0)	1	(27)	0
Income (loss) before income taxes	(376)	(3,370)	682	(2,264)	(770)	(6,097)
Cost/income ratio	100 %	127 %	77 %	N/M	N/M	115 %
Assets[2]	1,236,770	312,732	30,316	23,007	26,305	1,629,130
Additions to non-current assets	3	280	2	3	1,251	1,539
Risk-weighted assets[3]	247,423	92,857	10,757	32,896	12,780	396,714
CRD 4 leverage exposure measure (spot value at reporting date)	1,007,791	329,902	5,354	36,553	15,587	1,395,188
Average shareholders' equity	39,258	14,333	5,352	3,735	6,377	69,055
Post-tax return on average tangible shareholders' equity[4]	(1) %	(17) %	145 %	N/M	N/M	(12) %
Post-tax return on average shareholders' equity[4]	(1) %	(15) %	8 %	N/M	N/M	(10) %
[1] includes:						
Net interest income	7,498	6,415	449	272	1,248	15,881
Net income (loss) from equity method investments	68	40	34	20	2	164
[2] includes:						
Equity method investments	650	21	182	166	(6)	1,013

N/M – Not meaningful
[3] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[4] The post-tax return on average tangible shareholders' equity and average shareholders' equity at the Group level reflects the reported effective tax rate for the Group, which was (11) % for the year ended December 31, 2015. For the post-tax return on average tangible shareholders' equity and average shareholders' equity of the segments, the Group effective tax rate was adjusted to exclude the impact of permanent differences not attributed to the segments, so that the segment tax rates were 35 % for the year ended December 31, 2015.

Corporate & Investment Bank

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	2017 increase (decrease) from 2016 in %	2016 increase (decrease) from 2015 in € m.	2016 increase (decrease) from 2015 in %
Net revenues							
Global Transaction Banking	3,942	4,421	4,609	(478)	(11)	(188)	(4)
Equity Origination	396	405	658	(8)	(2)	(253)	(38)
Debt Origination	1,327	1,393	1,481	(66)	(5)	(88)	(6)
Advisory	508	495	575	13	3	(80)	(14)
Origination and Advisory	2,231	2,292	2,714	(61)	(3)	(422)	(16)
Financing	2,231	2,375	2,127	(144)	(6)	248	12
Sales & Trading (Equity)	2,085	2,571	3,416	(486)	(19)	(845)	(25)
Sales & Trading (FIC)	4,380	5,087	6,083	(707)	(14)	(996)	(16)
Sales & Trading	6,465	7,658	9,499	(1,193)	(16)	(1,841)	(19)
Other	(644)	17	(51)	(661)	N/M	68	N/M
Total net revenues	14,226	16,763	18,899	(2,537)	(15)	(2,136)	(11)
Provision for credit losses	213	816	393	(603)	(74)	423	108
Noninterest expenses							
Compensation and benefits	4,273	3,955	4,897	318	8	(942)	(19)
General and administrative expenses	8,782	9,655	11,662	(872)	(9)	(2,007)	(17)
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	6	285	2,168	(279)	(98)	(1,883)	(87)
Restructuring activities	82	299	129	(217)	(73)	169	131
Total noninterest expenses	13,143	14,193	18,856	(1,050)	(7)	(4,663)	(25)
Noncontrolling interests	26	49	26	(23)	(46)	23	89
Income (loss) before income taxes	843	1,705	(376)	(861)	(51)	2,080	N/M
Cost/income ratio	92 %	85 %	100 %	N/M	8 ppt	N/M	(15) ppt
Assets[1]	1,127,028	1,201,894	1,236,770	(74,866)	(6)	(34,876)	(3)
Risk-weighted assets[2]	231,574	237,596	247,423	(6,022)	(3)	(9,827)	(4)
Average shareholders' equity[3]	44,169	40,518	39,258	3,651	9	1,260	3
Post-tax return on average tangible shareholders' equity	1 %	3 %	(1) %	N/M	(2) ppt	N/M	4 ppt
Post-tax return on average shareholders' equity	1 %	3 %	(1) %	N/M	(2) ppt	N/M	3 ppt

N/M – Not meaningful
[1] Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.
[2] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[3] See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

2017

CIB net revenues for the full year 2017 were € 14.2 billion, a decrease of € 2.5 billion, or 15 % year-on-year. The division was impacted by higher funding charges and by a particularly challenging environment for Sales and Trading, with consistently low levels of volatility and subdued client activity from the second quarter through to year end. Global Transaction Banking was also impacted by client and perimeter adjustments initiated in 2016 and margin pressure. Origination and Advisory performance was essentially flat to the prior year.

Global Transaction Banking net revenues were € 3.9 billion, a decrease of € 478 million, or 11 %. Cash Management revenues were slightly lower, as interest rate increases in the U.S. partly offset the negative impact of client and product perimeter reductions initiated in 2016. Trade revenues were lower, driven by active balance sheet management efforts and continued margin pressure. Trust, Agency and Securities Services revenues were essentially flat, as lower transaction volumes due to client and country exits were offset by interest rate increases in the U.S. In addition, GTB revenues were negatively impacted by a change in funding charges allocation methodology in 2017.

Origination and Advisory revenues were € 2.2 billion, a € 61 million, or 3 % decrease compared to the prior year. Equity Origination revenues decreased by € 8 million or 2 %, essentially flat to the prior year. Debt Origination revenues were € 66 million or 5 % lower, with a strong first quarter of 2017 supported by high inflows into the Leveraged Loan market, offset by slightly lower revenues during the remainder of 2017 amid lower client activity and Deutsche Bank's reduced risk appetite in the U.S. Advisory revenues were € 13 million or 3 % higher driven by a robust market and strong deal participation.

Financing net revenues were € 2.2 billion, a decrease of € 144 million, or 6% mainly driven by lower revenues from investment grade lending which was impacted by higher funding charges.

Sales & Trading (FIC) net revenues were € 4.4 billion, a decrease of € 707 million, or 14 %. Credit revenues were essentially flat supported by strong performance in distressed products in the first half of 2017, offset by less favorable trading conditions for flow businesses in the second half of 2017. Rates revenues were higher with solid performance in Europe, partly offset by a weaker performance in the U.S. Foreign Exchange revenues were lower as a persistently low volatility environment impacted client flows. Asia Pacific Foreign Exchange and Rates revenues decreased with a strong first quarter of 2017 offset by lower client activity during the remainder of the year. Emerging Markets revenues were significantly lower due to subdued client flow and specific developments in Venezuela, South Africa and Turkey towards the end of the year.

Sales & Trading (Equity) generated net revenues of € 2.1 billion, a decrease of € 486 million, or 19 %. Revenues in Prime Finance were lower reflecting lower average balances during the year, reduced margins and higher funding cost. Equity Derivatives revenues were lower with a challenging trading environment particularly in the second half of 2017. Cash Equities revenues were essentially flat with volumes remaining challenged.

Other revenues incurred a loss of € 644 million, compared to a gain of € 17 million in 2016. 2017 included a loss of € 348 million (2016: a gain of € 27 million) relating to the impact of DVA on certain derivative liabilities. € 136 million of this loss was driven by a change in the creditor hierarchy in the event of a bank insolvency which was introduced by the German Resolution Mechanism Act (Abwicklungsmechanismusgesetz), effective January 1, 2017. This hierarchy change results in derivative counterparties receiving greater protection as they would be satisfied prior to senior unsecured debt holders in the creditor waterfall structure. This greater protection increases the value of the derivative assets for the counterparty, thereby increasing the value of derivative liabilities on our balance sheet, resulting in the loss. Revenues associated with assets identified as not consistent with CIB's strategy are reported under 'Other' as of the second quarter of 2017, including a negative impact related to the valuation of the legacy RMBS portfolio.

Provisions for credit losses of € 213 million were down 74% year-on-year. The decrease resulted primarily from reductions across all portfolios, including shipping. Despite the year-over-year reduction, shipping continued to be the main driver of provision for credit losses in 2017.

Noninterest expenses of € 13.1 billion, were € 1.1 billion, or 7 % lower than in 2016. Reduced litigation provisions, materially lower goodwill impairment and lower severance and restructuring all positively impacted the comparison versus the prior year. Compensation costs increased due to the normalization of variable compensation payments in 2017, though this was partially mitigated by reduced noncompensation direct costs. The year-on-year development of noninterest expenses also benefitted from foreign exchange rate movements.

Income before income taxes of € 843 million was € 861 million or 51 % lower than in the previous year. The period-over-period reduction in revenues was only partially offset by reduced noninterest expenses and lower credit loss provisions.

2016

Revenues in the Corporate & Investment Bank of € 16.8 billion declined € 2.1 billion, or 11% in 2016 compared to the prior year. The division was impacted by a particularly challenging environment for Equities, negative market perceptions concerning Deutsche Bank and the impact of strategy execution in line with our targets announced in October 2015. In Corporate Finance, the industry-wide slowdown in client activity and primary market issuances seen in the fourth quarter of 2015 continued through the first half of 2016, while Transaction Banking revenues also decreased slightly, driven by a number of macro-economic headwinds.

Global Transaction Banking net revenues were € 4.4 billion, a decrease of € 188 million, or 4 %. Cash Management revenues were essentially flat and were impacted by low interest rates within the Eurozone area and client perimeter rationalization as part of our targets announced in October 2015. Trade revenues were lower driven by active balance sheet and risk management efforts and margin pressure. Trust, Agency and Securities Services revenues were slightly lower, with the business also affected by lower interest rates in Europe, coupled with lower global IPO activity, though these were partly offset by interest rate increases in the U.S.

Origination and Advisory revenues were € 2.3 billion, a € 422 million, or 16 % decrease compared to the prior year. Equity Origination revenues were down € 253 million or 38 % for the year reflecting an industry wide reduction in issuance levels. Debt Origination was lower by € 88 million or 6 % for the full year, driven by a weak first quarter. Advisory revenues decreased € 80 million or 14 %, as market activity decreased compared to 2015.

Financing net revenues were € 2.4 billion, an increase of € 248 million, or 12% driven by strong performance in asset based financing and Commercial Real Estate, specifically in the U.S.

Sales & Trading (FIC) net revenues were € 5.1 billion, a decrease of € 996 million, or 16 %. Revenues in Foreign Exchange were in line with a strong prior year. Revenues in Rates were essentially flat, as good performance in Europe was partly offset by a weaker performance in the U.S. Credit revenues were lower and included the impact of de-risking in Securitized Trading as part of our targets announced in October 2015. Underperformance was seen in both Credit Flow and Securitized Trading.

Emerging Market revenues were significantly lower in 2016 driven by the impact of country exits, specifically Russia, as part of the implementation of our targets announced in October 2015, lower client flow and macro uncertainty. Asia Pacific Foreign Exchange and Rates revenues were significantly lower as a result of unfavorable market conditions in the first half of the year and subdued market activity negatively impacting client flow.

Sales & Trading (Equity) net revenues were € 2.6 billion, a decrease of € 845 million, or 25 %. Prime Finance revenues were lower reflecting a decline in client balances and trading activity as well as increased cost of funding. Equity Derivatives revenues were significantly lower due to lower client activity. Cash Equity revenues were significantly lower in 2016 as a result of a challenging market environment and lower client volumes.

Other revenues were positive € 17 million, compared to negative € 51 million in 2015. The impact of DVA during the year was a gain of € 27 million (€ 48 million in 2015).

Provisions for credit losses of € 816 million were up € 423 million, or 108 % compared to 2015. The increase was primarily driven by the deterioration in credit quality of the shipping sector where the industry suffered from persistent structural challenges; such as oversupply and redundancy of certain types of ships. As a consequence this severe industry weakness also triggered more borrowers to fall into the defaulted category valued under a liquidation scenario.

Noninterest expenses of € 14.2 billion were € 4.7 billion, or 25 % lower than in 2015. Materially lower goodwill impairment and reduced litigation charges positively impacted the comparison versus the prior year and more than offset an increase in restructuring costs. Compensation costs in 2016 were lower as a result of reduced performance related compensation and a reduction in headcount as part of strategic initiatives.

Income before income taxes of € 1.7 billion was € 2.1 billion higher than in the previous year. The substantial reduction in noninterest expenses more than offset lower revenues and a significant increase in credit loss provisions.

Private & Commercial Bank

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	2017 increase (decrease) from 2016 in %	2016 increase (decrease) from 2015 in € m.	2016 increase (decrease) from 2015 in %
Net revenues:							
Private & Commercial Clients	5,013	5,225	5,603	(213)	(4)	(377)	(7)
Postbank	3,124	3,366	3,112	(242)	(7)	254	8
Wealth Management	2,041	1,880	2,097	161	9	(217)	(10)
Hua Xia	0	618	(175)	(618)	(100)	793	N/M
Total net revenues	10,178	11,090	10,637	(912)	(8)	453	4
thereof:							
Net interest income	5,876	6,201	6,415	(325)	(5)	(214)	(3)
Commissions and fee income	3,367	3,395	3,816	(28)	(1)	(421)	(11)
Remaining income	935	1,494	406	(559)	(37)	1,088	N/M
Provision for credit losses	313	439	511	(126)	(29)	(73)	(14)
Noninterest expenses:							
Compensation and benefits	3,979	4,042	4,161	(63)	(2)	(119)	(3)
General and administrative expenses	5,166	5,029	5,139	138	3	(110)	(2)
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	12	0	3,608	12	N/M	(3,608)	N/M
Restructuring activities	360	141	586	219	155	(445)	(76)
Total noninterest expenses	9,518	9,212	13,495	306	3	(4,283)	(32)
Noncontrolling interests	(12)	0	0	(12)	N/M	0	3
Income (loss) before income taxes	359	1,439	(3,370)	(1,080)	(75)	4,809	N/M
Cost/income ratio	94 %	83 %	127 %	N/M	10 ppt	N/M	(44) ppt
Assets[1]	333,069	329,869	312,731	3,200	1	17,138	5
Risk-weighted assets[2]	87,472	86,082	92,857	1,390	2	(6,776)	(7)
Average shareholders' equity[3]	14,934	15,018	14,333	(84)	(1)	685	5
Post-tax return on average tangible shareholders' equity	2 %	7 %	(17) %	N/M	(5) ppt	N/M	25 ppt
Post-tax return on average shareholders' equity	2 %	6 %	(15) %	N/M	(5) ppt	N/M	22 ppt

N/M – Not meaningful
1 Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.
2 Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
3 See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

Additional information

in € bn. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € bn.	2017 increase (decrease) from 2016 in %	2016 increase (decrease) from 2015 in € bn.	2016 increase (decrease) from 2015 in %
Assets under management[1]	506	501	583	5	1	(83)	(14)
Net flows	4	(42)	3	47	N/M	(46)	N/M

N/M – Not meaningful
[1] We define assets under management as (a) assets we hold on behalf of customers for investment purposes and/or (b) client assets that are managed by us. We manage assets under management on a discretionary or advisory basis, or these assets are deposited with us. Deposits are considered assets under management if they serve investment purposes. In our Private and Commercial Clients and Postbank businesses, this includes all time deposits and savings deposits. In Wealth Management, we assume that all customer deposits are held with us primarily for investment purposes.

2017

PCB's results in 2017 were significantly impacted by strategy-related items, which included restructuring provisions related to the planned merger of Private & Commercial Clients Germany and Postbank as well as a negative revenue impact subsequent to the agreement related to the sale of a significant portion of the retail business in Poland. In contrast, results in 2016 benefited from a gain related to the sale of the stake in Hua Xia Bank Co. Ltd. These specific factors explain most of the year-on-year decline in PCB's income before income taxes.

Net revenues of € 10.2 billion decreased by € 912 million, or 8 %, compared to the prior year. This decline was primarily attributable to business disposals in both years. 2016 included a € 618 million revenue contribution from Hua Xia Bank Co. Ltd. as well as a € 140 million higher revenue contribution from the Private Client Services (PCS) unit in the U.S. prior to its sale. In contrast, net revenues in 2017 were negatively impacted by € 157 million related to the agreement to sell a significant portion of the retail business in Poland. Excluding these effects, net revenues remained essentially flat year-on-year. Positive impacts from workout activities in Sal. Oppenheim compensated for negative impacts from lower gains from asset sales and the termination of a legacy trust preferred security. The decrease in deposit revenues in the ongoing low interest rate environment was largely mitigated by growth in loan revenues and by higher commission and fee income from account and investment products.

In the Private & Commercial Client (PCC) businesses, revenues decreased by € 213 million, or 4 %, compared to the prior year, mainly attributable to a negative impact of € 157 million from the agreement to sell a significant portion of the retail business in Poland reflected in remaining income. Additionally, both periods included gains from asset sales on a comparable level (2017 included a gain of € 95 million from the sale of shares in Concardis GmbH, 2016 included a gain of € 98 million from the sale of shares in VISA Europe Limited). Net interest income decreased slightly compared to 2016, which was attributable to the ongoing low interest rate environment. Commission and fee income remained essentially flat year-on-year with improved revenues from investment products.

Revenues in the Postbank businesses decreased by € 242 million, or 7 %, compared to the prior year, primarily driven by a negative impact of € 118 million from the termination of a legacy trust preferred security in 2017 whereas revenues in 2016 benefited from gains from certain asset sales including € 104 million related to the sale of shares in VISA Europe Limited. Postbank's net interest income declined slightly year-on-year. The impact of the low interest rate environment on deposit revenues was partly mitigated by higher loan revenues as a result of growth in lending volumes. Commission and fee income increased mainly reflecting the introduction of a new pricing model for current accounts and an enhanced advisory model for investment products.

Revenues in the Wealth Management (WM) businesses increased by € 161 million, or 9 %, mainly caused by positive impacts of approximately € 400 million from workout activities in the Sal. Oppenheim franchise, which more than compensated for the lower revenue contribution in 2017 after the disposal of the Private Client Services (PCS) unit in September 2016. Workout gains were primarily driven by favorable legal outcomes positively impacting the valuation of loans, which were reduced in their carrying amount as part of the acquisition. Excluding these effects, net revenues decreased compared to the previous year reflecting foreign exchange rate movements as well as a decline in net interest revenues driven by loan book reductions mainly in the Americas. Commission and fee income was slightly below the prior year, reflecting lower client activities and a lower asset base in the Americas and EMEA partly compensated by good growth momentum in Asia Pacific.

Provision for credit losses of € 313 million decreased by € 126 million, or 29 %, year-on-year benefiting from a provision release in Postbank as well as a good portfolio quality in a continued benign economic environment. Both periods included positive impacts from selective portfolio sales.

Noninterest expenses of € 9.5 billion increased by € 306 million, or 3 %, compared to the last year. As mentioned above, the current year was impacted by net restructuring charges of € 360 million (versus € 141 million in 2016) related to strategic items including the reorganization and integration measures in Germany. Noninterest expenses also increased due to higher variable compensation and higher investment spending. These effects were partially compensated by savings from executed reorganization measures and a reduced cost base after the disposal of the PCS unit.

Income before income taxes of € 359 million decreased by € 1.1 billion compared to 2016. The decrease was mainly attributable to the aforementioned specific factors and the continued difficult interest rate environment.

PCB's Assets under Management of € 506 billion increased by € 5 billion compared to December 31, 2016. Negative impacts from foreign exchange rate movements were more than compensated by market appreciation and by net inflows of € 4 billion (primarily in the PCC businesses). Net inflows mainly occurred in deposit products, in part reflecting the successful win-back of mandates after outflows in the third and fourth quarter of 2016. In Wealth Management net inflows were partly impacted by strategic business decisions and continued de-risking.

2016

During 2016, PCB made substantial progress in the execution of strategic measures including the streamlining of distribution models and the further expansion of digital offerings. Also as part of our targets originally announced in October 2015, PCB completed the disposals of the Private Client Services (PCS) unit in the U.S. and the Hua Xia Bank Co. Ltd. stake in China. The latter transaction resulted in a significant gain on sale. Additionally, PCB benefited from the sale of its shares in VISA Europe Limited. PCB's prior year results were negatively impacted by Hua Xia-related valuation effects, impairment charges of € 3.6 billion and significant expenses for restructuring activities.

Net revenues in PCB of € 11.1 billion increased by € 453 million, or 4 %, compared to the prior year period. This increase was driven by a higher contribution from Hua Xia Bank Co. Ltd. with revenues of € 618 million in 2016 including the aforementioned positive impact from the sale transaction. 2015 included net negative revenues of € 175 million related to Hua Xia Bank Co. Ltd. Excluding the impacts from the disposals of Hua Xia Bank Co. Ltd. and PCS, net revenues declined compared to the prior year period.

In the Private & Commercial Client (PCC) businesses, revenues decreased by € 377 million, or 7 %. Net interest income declined slightly driven by the lower interest rate environment in Europe resulting in reduced Deposit revenues. Commission and fee income declined year-on-year as the ongoing turbulent market environment with reduced client activity, resulted in lower revenues from Investment & insurance products. PCC's remaining income increased significantly, including a € 98 million gain attributable to the sale of the shares in VISA Europe Limited.

Revenues in the Postbank businesses increased by € 254 million, or 8 %, compared to 2015 primarily driven by gains from certain asset sales including a € 104 million gain from aforementioned sale of shares in VISA Europe Limited reflected in remaining income. Net interest income remained essentially flat. Lower revenues from deposit products following the continued low interest rate environment in Europe were compensated by a discontinued revenue burden from the adjustment of home loan savings interest provisions in 2015. Beyond that, net interest income from credit products increased driven by volume growth. Net commission and fee income remained essentially flat compared to the prior year period.

Revenues in the Wealth Management (WM) businesses decreased by € 217 million, or 10 %, in part due to a deconsolidation impact after the disposal of the PCS unit in September 2016. Apart from this effect, WM's net interest income remained essentially flat, while net commission and fee income in WM was also impacted by the difficult market environment with reduced client activity, strategic de-risking initiatives and the negative market perceptions associated with Deutsche Bank in the second half of 2016.

Provision for credit losses of € 439 million decreased by € 73 million, or 14 %, compared to prior year reflecting the continued good quality of the loan portfolio and the benign economic environment. Provision for credit losses also benefited from selective portfolio sales with similar impacts in 2015 and 2016.

Noninterest expenses of € 9.2 billion in 2016 decreased by € 4.3 billion, or 32 %, compared to the prior year period. 2015 included € 3.6 billion impairments, € 475 million higher charges for restructuring and severance and a € 131 million partial write-off of software, whereas noninterest expenses in 2016 benefited from a reduced cost base after the disposal of the PCS unit in September. Excluding these effects, noninterest expenses were at comparable levels in 2015 and 2016. The impact of higher investments in digitalization and further spending related to strategic measures was offset by lower compensation expenses and strict cost discipline.

Income before income taxes of € 1.4 billion increased by € 4.8 billion compared to 2015. The increase was attributable to the aforementioned impairment items and higher charges for restructuring and severance in 2015 combined with the positive impact from the disposal of the Hua Xia Bank Co. Ltd. stake in 2016. Excluding these factors, income before income taxes declined in 2016 compared to 2015 reflecting the impact of the continued low interest rate environment and the volatile market environment on revenues in the WM, PCC and Postbank businesses.

Assets under management of € 501 billion decreased by € 83 billion compared to December 31, 2015. The decline was mainly attributable to a deconsolidation effect of € 38 billion subsequent to the disposal of the PCS unit and net outflows of € 42 billion (€ 32 billion in WM, € 7 billion in PCC businesses, € 3 billion in Postbank) mainly occurring subsequent to the negative market perceptions associated with Deutsche Bank in the second half of 2016. In WM, net outflows during 2016 also reflected continued deleveraging activities of the clients as well as efforts to optimize risk management practices and to improve efficiencies such as cross-border servicing.

Deutsche Asset Management

				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
in € m. (unless stated otherwise)	2017	2016	2015	in € m.	in %	in € m.	in %
Net revenues							
Management Fees	2,215	2,161	2,299	53	2	(138)	(6)
Performance and transaction fees	199	219	246	(20)	(9)	(28)	(11)
Other revenues	118	239	213	(121)	(51)	25	12
Mark-to-market movements on policyholder positions in Abbey Life	0	396	258	(396)	N/M	139	54
Total net revenues	2,532	3,015	3,016	(483)	(16)	(1)	(0)
Provision for credit losses	(1)	1	1	(1)	N/M	(0)	(4)
Noninterest expenses							
Compensation and benefits	778	708	870	70	10	(163)	(19)
General and administrative expenses	1,025	1,071	1,209	(47)	(4)	(138)	(11)
Policyholder benefits and claims	0	374	256	(374)	(100)	117	46
Impairment of goodwill and other intangible assets	3	1,021	0	(1,018)	(100)	1,021	N/M
Restructuring activities	6	47	(2)	(41)	(88)	49	N/M
Total noninterest expenses	1,811	3,220	2,334	(1,409)	(44)	886	38
Noncontrolling interests	1	0	(0)	1	N/M	1	N/M
Income (loss) before income taxes	720	(206)	682	926	N/M	(888)	N/M
Cost/income ratio	72 %	107%	77%	N/M	(35) ppt	N/M	29 ppt
Assets[1]	8,050	12,300	30,316	(4,250)	(35)	(18,016)	(59)
Risk-weighted assets[2]	8,432	8,960	10,757	(528)	(6)	(1,797)	(17)
Average shareholders' equity[3]	4,725	4,864	5,352	(139)	(3)	(489)	(9)
Post-tax return on average tangible shareholders' equity	55%	N/M	145%	N/M	N/M	N/M	N/M
Post-tax return on average shareholders' equity	10%	(3)%	8%	N/M	13 ppt	N/M	(11) ppt

N/M – Not meaningful
[1] Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.
[2] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[3] See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

2017

In 2017, Deutsche AM reported significantly higher income before income taxes compared to 2016. Excluding Abbey Life, which was disposed in the fourth quarter of 2016, Deutsche AM results in 2017 were in line with those in 2016, driven by higher revenues, offset by higher expenses. 2017 saw a positive turnaround with € 16 billion net inflows compared to the net outflows reported in the prior year.

Net revenues were € 2.5 billion, a decrease of € 483 million or 16%. Excluding Abbey Life in 2016, net revenues were up by € 54 million, or 2%, compared to the prior year. Management fees increased slightly by € 53 million, or 2%, mainly in Active driven by favorable market movements. Performance and transaction fees were lower by € 20 million or 9%, primarily driven by lower fund performance fees, from one of the Active funds, compared to the prior year. Other revenues were significantly lower by € 121 million or 51% compared to the prior year. The decline was primarily due to non-recurring revenues from Abbey Life excluding mark-to-market revenues, proceeds on sale of Deutsche AM India and a write-up relating to HETA exposure which was exited in 2016. These drivers in other revenues were partly offset by a non-recurring recovery in the current year relating to a real-estate fund legal matter, unfavorable impact from the sale of Luxembourg-based Sal. Oppenheim asset servicing business and prior year negative fair value related to guaranteed products. Following the sale of Abbey Life in 2016, no mark-to-market movements on policyholder positions were recorded in 2017, compared to € 396 million reported in the prior year.

Noninterest expenses of € 1.8 billion decreased significantly by € 1.4 billion, or 44%, due to non-recurrence of costs relating to Abbey Life and lower restructuring expenses. Compensation and benefits were higher due to increased variable compensation costs, General and administrative expenses were slightly lower compared to prior year, driven by the aforementioned non-recurrence of costs relating to Abbey Life, partly offset by an operational loss provision taken in 2015 and released in 2016, coupled with 2017 costs relating to the Asset Management separation.

Income before income taxes of € 720 million significantly increased by € 926 million, driven by the impairment of goodwill and other intangible assets related to Abbey Life in 2016. These items were partly offset by lower revenues due to several non-recurring items in the prior year including Abbey Life, the sale of Deutsche AM India and the write-up relating to HETA.

Assets under Management (AuM) were € 702 billion, a decrease of € 4 billion versus December 31, 2016, driven by € 36 billion unfavorable foreign exchange rate movements and € 13 billion negative Other adjustments mainly relating to disposals of the Luxembourg-based Sal. Oppenheim asset servicing business and U.S. Private Clients business, partly offset by € 30 billion favorable market performance and € 16 billion net inflows led by Europe ETF, multi asset and liquidity product inflows, partly offset by insurance asset outflows.

The following table provides a development of AuM during 2017, broken down by product type as well as the respective management fee margins:

in € bn.	Active Equity	Active Fixed Income	Active Multi Asset	Active SQI	Active Cash	Passive	Alternatives	Assets under Management
Balance as of December 31, 2016	92	264	54	53	63	98	82	706
Inflows[1]	20	68	23	15	9	36	16	187
Outflows[1]	(22)	(71)	(12)	(17)	(9)	(25)	(16)	(172)
Net Flows	(2)	(3)	11	(3)	1	11	0	16
FX impact	(3)	(17)	(1)	(0)	(3)	(7)	(5)	(36)
Performance	9	5	1	2	(1)	11	3	30
Other	(1)	(2)	(5)	0	0	1	(6)	(13)
Balance as of December 31, 2017	96	247	60	52	59	115	73	702
Management fee margin (in bps)	76	14	38	29	9	24	55	31

[1] Inflows and Outflows as reported include the AuM shifts between asset classes.

2016

In 2016, Deutsche AM performance was impacted by the sale of Abbey Life resulting in € 1.0 billion impairment of goodwill and other intangible assets and net outflows, driven by market concerns about Deutsche Bank. Despite less favorable market conditions reflecting ongoing uncertainty from sustained low global growth, excluding Abbey Life, Deutsche AM achieved an income before income taxes of € 731 million, an increase of 16% from € 632 million in 2015.

Net revenues for full year 2016 were € 3.0 billion, and were in line with prior year. Net revenues excluding Abbey Life were € 2.5 billion, a decrease of 6% from € 2.7 billion in 2015. Management fees decreased slightly by € 138 million, or 6%, due to lower AuM and unfavorable market conditions impacting the Passive and Active businesses. Performance and transaction fees decreased by € 28 million, or 11%, compared to a strong prior year period in Alternatives. Other revenues increased by € 25 million, or 12%, due to a prior year write down relating to HETA and the 2016 sale of Abbey Life and Deutsche AM India, partly offset by negative fair value of guaranteed products and lower dividend income in Alternatives. Mark-to-market movements on policyholder positions in Abbey Life increased significantly by € 139 million, or 54%, following higher market gains.

Noninterest expenses of € 3.2 billion were significantly higher by € 886 million, or 38%, due to impairments of goodwill and other intangible assets predominantly related to the sale of Abbey Life and an increase in policyholder benefits and claims which offsets with revenues. Excluding Abbey Life, noninterest expenses of € 1.7 billion decreased by € 251 million compared to 2015, mainly due to lower compensation costs and the reversal of an operational loss provision taken in 2015.

Loss before income taxes was € 206 million, significantly lower by € 888 million compared to 2015, primarily driven by the aforementioned impacts related to the sale of Abbey Life.

AuM were € 706 billion as of December 31, 2016, a decrease of € 39 billion versus December 31, 2015, driven by challenging market conditions exacerbated by the negative market perceptions concerning Deutsche Bank, market rumors surrounding the future of Deutsche AM and changes in Deutsche AM's management. Net outflows of € 41 billion were driven by the Americas region, where outflows in cash were the main source of the results, driven by money market reform. Exchange-traded funds were another area with sizeable outflows as the currency-hedged category experienced outflows across the industry. The decrease was also driven by disposals of € 18 billion mainly relating to Abbey Life and Deutsche AM India. Partly offsetting the outflows was the effect from favorable Equity and Fixed Income market performance of € 16 billion, and favorable foreign exchange rate movements of € 4 billion. Deutsche AM also experienced positive inflows of € 2 billion in Asia Pacific in 2016.

The following table provides a development of AuM during 2016, broken down by product type as well as the respective management fee margins:

in € bn.	Active Equity	Active Fixed Income	Active Multi Asset	Active SQI	Active Cash	Passive	Alternatives	Assets under Management
Balance as of December 31, 2015	102	276	54	54	75	101	82	745
Inflows[1]	20	56	14	19	9	24	15	158
Outflows[1]	(25)	(73)	(14)	(23)	(18)	(32)	(15)	(199)
Net Flows	(5)	(17)	(0)	(4)	(9)	(7)	0	(41)
FX impact	(1)	2	(0)	0	1	1	1	4
Performance	4	6	1	2	(1)	3	2	16
Other	(9)	(3)	0	(0)	(2)	0	(3)	(18)
Balance as of December 31, 2016	92	264	54	53	63	98	82	706
Management fee margin (in bps)	68	15	37	29	8	27	53	30

[1] Inflows and Outflows as reported include the AuM shifts between asset classes.

Non-Core Operations Unit

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	2017 increase (decrease) from 2016 in %	2016 increase (decrease) from 2015 in € m.	2016 increase (decrease) from 2015 in %
Net revenues	–	(382)	794	382	N/M	(1,176)	N/M
thereof:							
Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	–	(1,307)	(362)	1,307	N/M	(944)	N/M
Provision for credit losses	–	128	51	(128)	N/M	76	148
Noninterest expenses							
Compensation and benefits	–	68	86	(68)	N/M	(18)	(20)
General and administrative expenses	–	2,678	2,921	(2,678)	N/M	(243)	(8)
Policyholder benefits and claims	–	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	–	(49)	0	49	N/M	(49)	N/M
Restructuring activities	–	4	(1)	(4)	N/M	5	N/M
Total noninterest expenses	–	2,701	3,006	(2,701)	N/M	(304)	(10)
Noncontrolling interests	–	(4)	1	4	N/M	(5)	N/M
Income (loss) before income taxes	–	(3,207)	(2,264)	3,207	N/M	(943)	42
Assets[1]	–	5,523	23,007	(5,523)	N/M	(17,485)	(76)
Risk-weighted assets[2]	–	9,174	32,896	(9,174)	N/M	(23,722)	(72)
Average shareholders' equity[3]	–	1,682	3,735	(1,682)	N/M	(2,052)	(55)

N/M – Not meaningful
[1] Segment assets represent consolidated view, i.e., the amounts do not include intersegment balances.
[2] Risk-weighted assets and capital ratios are based upon CRR/CRD 4 fully-loaded.
[3] See Note 4 "Business Segments and Related Information" to the consolidated financial statements for a description of how average shareholders' equity is allocated to the divisions.

2017

From 2017 onwards, Non-Core Operations Unit (NCOU) ceased to exist as a standalone division. The remaining legacy assets as of December 31, 2016 are now managed by the corresponding operating segments, predominately Corporate & Investment Bank and Private & Commercial Bank.

2016

During 2016, NCOU successfully executed its de-risking strategy and reduced its portfolio in size to achieve its year-end closure target. Activity focused on initiatives aimed at delivering efficient capital contribution and de-leveraging results, which took place across a number of portfolios. These included the resolution of long-dated derivative exposures as well as various bond sales and further unwinds across the correlation and negative basis portfolios. The sale of our stakes in Maher Port Elizabeth and Red Rock Resorts were also completed in the period.

Net revenues for NCOU in the reporting period were negative € 382 million versus positive € 794 million in the prior year. This was predominately driven by de-risking losses of € 821 million, mainly from an unwind of long dated derivative exposures and related assets, partially offset by a gain of € 368 million in relation to Red Rock Resorts. In addition portfolio revenues declined following asset sales including Maher Prince Rupert, which was partially offset by lower valuation adjustments and mark-to-market impacts. Net revenues in 2015 included € 219 million from a specific litigation recovery and a gain of € 195 million on the sale of Maher Prince Rupert.

Provisions for credit losses increased by € 76 million, in comparison to 2015. This was predominantly driven by higher provisions taken against the European residential mortgages and commercial loans which included IAS 39 reclassified assets.

Noninterest expenses decreased by € 304 million, or 10 %, in comparison to 2015 predominately due to lower litigation related expenses. Costs excluding litigation charges were 18 % lower year-on-year, driven by asset sales including Maher Prince Rupert in 2015.

The loss before income taxes increased by € 943 million to € 3.2 billion, compared to 2015. The increase was primarily driven by losses from de-risking activity, while noninterest expenses were lower.

Consolidation & Adjustments

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	2017 increase (decrease) from 2016 in %	2016 increase (decrease) from 2015 in € m.	2016 increase (decrease) from 2015 in %
Net revenues[1]	(488)	(471)	179	(16)	3	(650)	N/M
Provision for credit losses	(0)	(0)	(0)	0	(19)	(0)	N/M
Noninterest expenses							
Compensation and benefits	3,223	3,101	3,279	122	4	(178)	(5)
General and administrative expenses	(3,000)	(2,979)	(2,299)	(21)	1	(679)	30
Policyholder benefits and claims	0	0	0	0	N/M	0	N/M
Impairment of goodwill and other intangible assets	0	(0)	0	0	N/M	(0)	N/M
Restructuring activities	(0)	(7)	(3)	6	(98)	(3)	99
Total noninterest expenses	223	116	976	107	93	(860)	(88)
Noncontrolling interests	(16)	(46)	(27)	30	(65)	(19)	70
Income (loss) before income taxes	(695)	(541)	(770)	(153)	28	229	(30)
Assets[2]	6,586	40,959	26,305	(34,373)	(84)	14,654	56
Risk-weighted assets[3]	16,734	15,706	12,780	1,028	7	2,926	23
Average shareholders' equity[4]	99	0	6,377	99	N/M	(6,377)	N/M

N/M – Not meaningful
[1] Net interest income and noninterest income.
[2] Assets in C&A reflect residual Treasury assets not allocated to the business segments as well as Corporate assets, such as deferred tax assets and central clearing accounts, outside the management responsibility of the business segments.
[3] Risk weighted assets are based upon CRR/CRD 4 fully-loaded. Risk-weighted assets in C&A reflect Treasury and Corporate assets outside the management responsibility of the business segments, primarily the Group's deferred tax assets.
[4] Average shareholders' equity in December 2015 represents the difference between the spot values of the segments for the period end and the average Group amount.

2017

Loss before income taxes in C&A was € 695 million in 2017 compared to a loss of € 541 million in the prior year period, an increase of € 153 million, or 28 %. 2017 was impacted by € 213 million of currency translation adjustment realization and losses on sale from the disposal of non-strategic subsidiaries including in Argentina and Uruguay. Maintaining funding and liquidity buffers in excess of business-based liquidity requirements resulted in negative € 114 million (2016: negative € 42 million). Foreign exchange revaluation of proceeds from GBP denominated AT1 issuance was negative € 26 million (2016: negative € 127 million). Valuation and timing differences included a negative € 164 million in the debt issuance portfolio related to the tightening of our own credit spread. This was offset by a positive impact of € 104 million from interest rate related items, primarily driven by adjustments related to Group cash flow hedging programs. In 2016, valuation and timing differences included negative € 252 million from the Treasury portfolio, mainly driven by movement of interest rates and cross-currency basis spreads. Litigation costs amounted to € 112 million in 2017, an increase of € 130 million compared to prior year. 2016 litigation costs benefitted from a € 73 million insurance recovery.

2016

Loss before income taxes was € 541 million in 2016 compared to a loss of € 770 million in 2015, a decrease of € 229 million, or 30%, primarily as fourth quarter 2015 included a negative impact of € 358 million from litigation costs related to infrastructure functions reallocated from the Corporate & Investment Bank to C&A. Additionally, 2015 included negative € 146 million valuation and timing differences driven by a narrowing of our credit spreads as well as negative € 130 million resulting from the Postbank squeeze out. In 2016, valuation and timing differences included negative € 252 million from the Treasury portfolio, mainly driven by movement of interest rates and cross-currency basis spreads. Net revenues also included negative € 127 million related to the foreign exchange revaluation of proceeds from GBP-denominated AT1 issuance (2015: € 50 million).

Financial Position

in € m.	Dec 31, 2017	Dec 31, 2016	2017 increase (decrease) from 2016 in € m.	in %
Cash and central bank balances	225,655	181,364	44,291	24
Interbank balances (w/o central banks)	9,265	11,606	(2,341)	(20)
Central bank funds sold, securities purchased under resale agreements and securities borrowed	26,703	36,368	(9,665)	(27)
Trading assets	184,661	171,044	13,617	8
Positive market values from derivative financial instruments	361,032	485,150	(124,118)	(26)
Financial assets designated at fair value through profit or loss	91,276	87,587	3,690	4
thereof:				
Securities purchased under resale agreements	57,843	47,404	10,439	22
Securities borrowed	20,254	21,136	(882)	(4)
Loans	401,699	408,909	(7,210)	(2)
Securities held to maturity	3,170	3,206	(36)	(1)
Brokerage and securities related receivables	83,015	105,100	(22,085)	(21)
Remaining assets	88,256	100,213	(11,957)	(12)
Total assets	**1,474,732**	**1,590,546**	**(115,814)**	**(7)**
Deposits	580,812	550,204	30,608	6
Central bank funds purchased, securities sold under repurchase agreements and securities loaned	24,793	29,338	(4,545)	(15)
Trading liabilities	71,462	57,029	14,433	25
Negative market values from derivative financial instruments	342,726	463,858	(121,132)	(26)
Financial liabilities designated at fair value through profit or loss	63,874	60,492	3,382	6
thereof:				
Securities sold under repurchase agreements	53,840	50,397	3,442	7
Securities loaned	1,040	1,298	(258)	(20)
Other short-term borrowings	18,411	17,295	1,116	6
Long-term debt	159,715	172,316	(12,601)	(7)
Brokerage and securities related payables	106,742	122,019	(15,276)	(13)
Remaining liabilities	38,098	53,176	(15,079)	(28)
Total liabilities	**1,406,633**	1,525,727	(119,094)	(8)
Total equity	**68,099**	64,819	3,280	5

Movements in Assets

As of December 31, 2017, total assets decreased by € 115.8 billion (or 7 %) compared to year-end 2016.

The overall decrease was primarily driven by a € 124.1 billion reduction in positive market values from derivative financial instruments, mainly attributable to interest rate products as changes in interest rate curves were inversely correlated to changes in the mark-to-market values, as well as foreign exchange rate products primarily driven by lower volatility and decline in customer flows.

Brokerage and securities related receivables decreased by € 22.1 billion primarily driven by lower cash/margin receivables in line with lower collateral requirements corresponding to the decrease in negative market values from derivative financial instruments and lower receivables from unsettled regular way trades.

Loan volume decreased by € 7.2 billion mainly driven by foreign exchange rate movements, in particular the strengthening of the Euro versus the US Dollar.

These decreases were partly offset by an increase in cash and central bank balances by € 44.3 billion, mostly driven by deposits and proceeds from our capital raise as well as a result of our liquidity management activities.

Trading assets increased by € 13.6 billion primarily driven by our debt securities portfolio due to increased client activity and increased bond positions in EU and US rates businesses.

The overall movement of the balance sheet included a decrease of € 77.8 billion due to foreign exchange rate movements mainly driven by strengthening of the Euro versus the U.S. Dollar. The effects from foreign exchange rate movements are also reflected in the development of the balance sheet line items discussed in this section.

Movements in Liabilities

As of December 31, 2017, total liabilities decreased by € 119.1 billion (or 8 %) compared to year-end 2016.

The overall reduction was primarily driven by a € 121.1 billion decrease in negative market values from derivative financial instruments primarily due to the same factors as the movements in positive market values from derivative financial instruments as discussed above.

A € 15.3 billion decrease in brokerage and securities related payables also contributed to the overall reduction, primarily due to the same factors as the movements in brokerage and securities related receivables as discussed above.

Long-term debt decreased by € 12.6 billion primarily due to higher outflows compared to new issuances in aggregate.

The overall decreases were partly offset by a € 30.6 billion increase in deposits during the period, due to increased customer inflows as a result of campaigns in our Private and Commercial Bank as well as cash management initiatives in our transaction banking business. In addition, we saw a recovery in deposit balances during 2017 as we regained client deposits following outflows in the second half of 2016.

Trading liabilities increased by € 14.4 billion, mainly attributable to increased trading activities in EU and US rates businesses.

Similar to total assets, the impact of foreign exchange rate movements during the period is already embedded in the overall movements in liabilities as discussed in this section.

Liquidity

Liquidity reserves amounted to € 280 billion as of December 31, 2017 (compared to € 219 billion as of December 31, 2016). We maintained a positive liquidity stress result as of December 31, 2017 (under the combined scenario).

Equity

Total Equity as of December 31, 2017 increased by € 3.3 billion compared to December 31, 2016. The main factor contributing to the increase was a capital increase of € 8.0 billion from the issuance of 687.5 million new common shares in April 2017. The effect of the capital increase was partly offset by the following items: a net loss from exchange rate changes of € 2.6 billion (related especially to the U.S. dollar), the net loss attributable to Deutsche Bank shareholders and additional equity components of € 751 million, cash dividends paid to Deutsche Bank shareholders of € 392 million, the reduction of unrealized gains (losses) of both financial assets available for sale and derivatives hedging the variability of cash flows, net of tax of € 348 million, coupons paid on additional equity components of € 298 million as well as costs of the capital increase, net of tax of € 135 million.

Regulatory Capital

Our Common Equity Tier 1 (CET 1) capital according to CRR/CRD 4 as of December 31, 2017 increased by € 3.0 billion to € 50.8 billion, compared to € 47.8 billion as of December 31, 2016. Risk-weighted assets (RWA) according to CRR/CRD 4 decreased by € 12.9 billion to € 343.3 billion as of December 31, 2017, compared to € 356.2 billion as of December 31, 2016. Due to the increase in CET 1 capital and decrease in RWA, the CRR/CRD 4 CET 1 capital ratio as of December 31, 2017 increased to 14.8 % compared to 13.4 % as of December 31, 2016.

Our fully loaded CRR/CRD 4 CET 1 capital as of December 31, 2017 amounted to € 48.3 billion, € 6.0 billion higher compared to € 42.3 billion as of December 31, 2016. Fully loaded CRR/CRD 4 RWA were € 344.2 billion, € 13.3 billion lower compared to € 357.5 billion as of December 31, 2016. This resulted in the fully loaded CRR/CRD 4 CET 1 capital ratio as of December 31, 2017 increasing to 14.0 % compared to 11.8 % as of December 31, 2016. For details of the development please refer to “Management Report: Risk and Capital Performance: Capital and Leverage Ratio”.

Liquidity and Capital Resources

For a detailed discussion of our liquidity risk management, see our Risk Report.

Credit Ratings

Deutsche Bank is rated by Moody’s Investors Service, Inc. (“Moody’s”), Standard & Poor’s Credit Market Services Europe Limited (“S&P”), Fitch Ratings Limited (“Fitch”), and DBRS, Inc. (“DBRS”, together with Moody’s, S&P and Fitch, the “Rating Agencies”).

S&P and Fitch are established in the European Union and have been registered in accordance with Regulation (EC) No 1060/2009 of the European Parliament and of the Council of September 16, 2009, as amended, on credit rating agencies (“CRA Regulation”). With respect to Moody’s, the credit ratings are endorsed by Moody’s office in the UK (Moody’s Investors Service Ltd.) in accordance with Article 4(3) of the CRA Regulation. With respect to DBRS, the credit ratings are endorsed by DBRS Ratings Ltd. in the UK in accordance with Article 4(3) of the CRA Regulation.

Credit Ratings Development

Following the strategy update and capital increase in March 2017, Deutsche Bank’s ratings were affirmed by all four rating agencies. The rating agencies continued to adapt their ratings methodologies to reflect the changes in European bank resolution frameworks, however, and these methodology changes resulted in several rating changes during the year.

Following the announcement of the capital increase and the strategic update in March 2017, Fitch removed its credit watch negative assignment and put Deutsche Bank’s ratings on negative outlook. In June 2017, DBRS changed the outlook on Deutsche Bank’s senior unsecured debt and deposit ratings to stable from negative acknowledging the diminished pressure on Deutsche Bank’s credit fundamentals following the successful capital raise.

In March 2017, S&P resolved its credit watch on German banks reflecting the imminent changes in the German bank resolution regime. Deutsche Bank’s issuer credit ratings and instruments that S&P continues to view as senior unsecured (or ‘preferred debt’) were upgraded to A- from BBB+ to reflect the increase in loss absorbing capacity as a result of the bail-in law. Instruments that were reclassified as senior subordinated debt (or ‘non-preferred debt’) were downgraded to BBB- from BBB+. The outlook remained negative.

In September 2017, Fitch downgraded Deutsche Bank’s counterparty, debt and deposit ratings by one notch (counterparty assessment and deposit ratings to A- and the ‘non-preferred’ debt to BBB+) reflecting Fitch’s view of the continued pressure on Deutsche Bank's earnings, combined with a prolonged implementation of its strategy. As a result of the downgrade to the long-term ratings, the short-term ratings were also downgraded to F2 from F1. The outlook was raised to stable.

In December 2017, Moody’s affirmed Deutsche Bank’s Baa2 senior unsecured ratings but changed the outlook for this specific debt class to negative. The outlook change applies to most German banks and exclusively refers to an amendment to the EU’s Bank Recovery and Resolution Directive (BRRD) which will require banks to introduce one class of ‘preferred’ and one class of ‘non preferred’ senior debt. Moody’s regards this development as credit negative for existing ‘non-preferred’ senior unsecured bonds issued by German banks as they could rank pari passu with future junior senior bonds once the BRRD amendments are transposed into German law. Once this amendment is passed, Moody’s would likely remove the remaining notch of government support from this debt class.

Potential Impacts of Ratings Downgrades

Deutsche Bank calculates the potential impact of a one-notch and two-notch downgrade by the rating agencies (Moody’s, Standard & Poor’s and Fitch) on its liquidity position, and includes this impact in its daily liquidity stress test and Liquidity Coverage Ratio calculations.

The hypothetical impact of a one-notch downgrade across the three Rating Agencies Moody’s, Standard & Poor’s and Fitch would adversely impact Deutsche Bank’s liquidity position by approximately € 1.3 billion, mainly driven by increased contractual derivatives funding and/or margin requirements. The hypothetical impact of a two-notch downgrade would adversely impact Deutsche Bank’s liquidity position by approximately € 3 billion, driven by increased contractual derivatives funding and/or margin requirements of approximately € 1.6 billion and term deposits with downgrade triggers of approximately € 1.4 billion.

The above analysis assumes a simultaneous downgrade by the three rating agencies Moody's, Standard & Poor's and Fitch that would consequently reduce Deutsche Bank's funding capacity in the stated amounts. This specific contractual analysis feeds into the bank's idiosyncratic liquidity stress test scenario.

The actual impact of a downgrade to Deutsche Bank is unpredictable and may differ from potential funding and liquidity impacts described above.

Selected rating categories

	Counterparty Risk	Senior preferred/ Deposits[1]	Senior non-preferred[2]	Short-term rating
Moody's Investors Service, New York[3]	A3 (cr)	A3	Baa2	P-2
Standard & Poor's, New York[4]	–	A-	BBB-	A-2
Fitch Ratings, New York[5]	A- (dcr)	A-	BBB+	F2
DBRS, Toronto[6]	A (high)	A (low)	A (low)	R-1 (low)

1 Defined as senior-senior unsecured rating at Moody's, senior unsecured at Standard & Poor's, senior preferred debt rating at Fitch. DBRS does not provide a separate 'preferred' rating. Moody's, Standard & Poor's and Fitch provide separate ratings for deposits and 'senior preferred' debt, but at the same rating level.
2 Defined as senior unsecured debt rating at Moody's, as senior subordinated debt at Standard & Poor's, as senior non-preferred debt at Fitch and as senior unsecured debt at DBRS.
3 Moody's defines A-rated obligations as upper-medium grade obligations which are subject to low credit risk and Baa rated obligations are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics. The numerical modifier 2 indicates a ranking in the middle of the category and the numerical modifier 3 indicates a ranking at the lower end of the category.
4 Standard and Poor's defines its A rating as somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong. An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. The minus indicates a ranking in the lower end of the respective category.
5 Fitch Ratings defines its A rating as high credit quality. Fitch Ratings uses the A rating to denote expectations of low default risk. According to Fitch Ratings, A ratings indicate a strong capacity for payment of financial commitments. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than higher ratings. Fitch Ratings defines its BBB rating as good credit quality. Fitch Ratings uses the BBB rating to indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate, but adverse business or economic conditions are more likely to impair this capacity. The plus indicates a ranking in the higher end of the respective category. The minus indicates a ranking in the lower end of the respective category.
6 DBRS defines A-ratings as satisfactory credit quality, with still substantial protection of principal and interest; issuers in this category are more susceptible to adverse economic conditions and have greater cyclical tendencies than issuers in the categories AAA and AA. The modifier (high) indicates a ranking in the upper end of the respective category. The modifier (low) indicates a ranking in the lower end of the respective category.

Each rating reflects the view of the rating agency only at the time the rating was issued, and each rating should be separately evaluated and the rating agencies should be consulted for any explanations of the significance of their ratings. The rating agencies can change their ratings at any time if they believe that circumstances so warrant. The long-term credit ratings should not be viewed as recommendations to buy, hold or sell our securities.

Tabular Disclosure of Contractual Obligations

Cash payment requirements outstanding as of December 31, 2017

Contractual obligations					Payment due by period
in € m.	Total	Less than 1 year	1–3 years	3–5 years	More than 5 years
Long-term debt obligations[1]	173,571	48,981	41,227	36,373	46,990
Trust preferred securities[1]	5,726	5,038	677	11	0
Long-term financial liabilities designated at fair value through profit or loss[2]	6,753	1,967	1,020	650	3,116
Finance lease obligations	98	8	11	10	70
Operating lease obligations	4,564	684	1,140	838	1,901
Purchase obligations	1,836	266	680	111	779
Long-term deposits[1]	30,843	0	13,587	5,105	12,151
Other long-term liabilities	1,293	405	605	66	218
Total	224,683	57,349	58,946	43,164	65,224

1 Includes interest payments.
2 Long-term debt and long-term deposits designated at fair value through profit or loss.

Figures above do not include the future revenues of non-cancellable sublease rentals of € 58 million on operating leases. Purchase obligations for goods and services include future payments for, among other things, information technology services and facility management. Some figures above for purchase obligations represent minimum contractual payments and actual future payments may be higher. Long-term deposits exclude contracts with a remaining maturity of less than one year. Under certain conditions future payments for some long-term financial liabilities designated at fair value through profit or loss may occur earlier. See the following notes to the consolidated financial statements for further information: Note 5 "Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss", Note 24 "Leases", Note 28 "Deposits" and Note 32 "Long-Term Debt and Trust Preferred Securities".

Outlook

The Global Economy

For 2018, we believe global economic growth will remain robust. We expect global GDP to grow to 3.9 %, slightly above the 2017 growth rate, supported by several industrialized countries achieving and sustaining close to full employment. The improved economic environment should support higher asset prices, especially for commodities. The global inflation rate is forecasted to be 3.3 % in 2018, 0.4 % above the rate in 2017. For industrialized countries, we expect GDP growth to accelerate to 2.2 %, and consumer prices to increase by 1.7 % in 2018. Economic growth in the emerging markets is projected to rise slightly to 4.9 % in 2018 while inflation in emerging markets is expected to rise to 4.3 %, from 3.8 % in 2017.

In the Eurozone, we expect GDP growth to remain at 2.3 %. In 2018, inflation is expected to remain below 2 % as the output gap is shrinking only slowly. German wage agreements could put pressure on prices. However, inflation should remain low in the coming years. We believe the ECB net asset purchase program will end in 2018, and we expect the first ECB policy rate hike by mid-2019. Political risks could arise from the Italian parliamentary elections in March, as Eurosceptic parties remain popular. Following 2017 GDP growth of 2.2 %, we expect the German economy to expand by 2.3 % in 2018, driven almost solely by domestic demand.

In the U.S., economic growth is forecasted to accelerate to 2.9 % in 2018 supported by modest positive impulses for companies and households from the U.S. tax reform as well as the recent adoption of the budget agreement providing for nearly U.S.$ 300 billion in additional discretionary spending in fiscal years 2018 and 2019. This combined with repatriation tax incentives may lead to a pick-up in demand, a tighter labor market with potentially higher wages, and increased investment activity. This could lead to higher inflation, however partially offset by anticipated interest rate hikes by the Federal Reserve in 2018. Accordingly, we expect inflation rate to remain slightly above 2 %, as in 2017.

The growth rate of the Japanese economy is expected to slow to 1.2 %. We expect both the domestic and the external sector to contribute to GDP growth. Inflation should remain essentially flat at 0.4 %. The Bank of Japan is focused on managing the yield curve and we do not expect interest rate adjustments in 2018. In 2018, economic growth in emerging markets is projected to rise slightly to 4.9 %, and in Asia (excluding Japan) to be 6.0 %. Inflation in emerging markets is expected to rise to 4.3 %, from 3.8 % in 2017. In 2018, the Chinese economy is forecasted to slow moderately to 6.3 %, the lowest growth rate since 1990. The slowdown is expected to be driven by government policies encouraging a deleveraging process. The tightening of Chinese monetary, fiscal, and property market policies is expected to continue in 2018. Inflation is expected to increase to 2.7 %.

The uncertainty in our global forecast remains relatively high as the heat-map of global risks is more or less unchanged since 2017. An early recession in the U.S. due to changes in the structure of the yield curve, populist movements in Europe as well as geopolitical risks, particularly in the Middle East could potentially have a substantial adverse effect on our forecasts. Also, with at best a transitional deal in the near term, the risks of the exit of the UK from the European Union (Brexit) might not easily or quickly dissipate. However, if one of these risks materialize, we expect the impact on the economy and the financial markets to be lower than it would have been in previous years, since the higher economic momentum should have a dampening effect. Inflation risks which remained muted for several years have reappeared and represent a significant economic risk. A faster than expected pick-up could surprise markets and lead to a sharp repricing of central bank rate rise expectations, which could be disruptive for risk assets – akin to 2013's taper tantrum triggered by the Federal Reserve's communication at the time. In China, the cooling of the housing market due to deleveraging could have an impact on economic growth. We expect some policy easing in mid-2018 to support growth. However, if inflation rises substantially the Chinese economy could slow down and weigh on global growth.

The Banking Industry

For the banking industry, we expect the continuation of synchronous economic growth around the world in 2018, which should result in a favorable environment across all business segments. More importantly, activity levels in the capital markets have recently improved and key metrics like volatility have increased from historically low levels and are expected to continue to normalize in 2018. Additionally, the cycle of substantial regulatory tightening following the financial crisis is largely coming to an end with the conclusion of Basel III framework agreement and the implementation of the Financial Markets Directive (MiFID II) and the revised Payment Services Directive (PSD II) in Europe, and banks are expected to benefit from resulting greater regulatory clarity in 2018. Stability in the regulatory framework will permit more accurate planning with regard to both capital requirements and the economic attractiveness of various business lines. The greatest uncertainty for the industry is likely to stem from policy actions by key central banks that may terminate their asset purchase programs as well as a further normalization of interest rates in the U.S., which likely will have a significant impact on both the capital markets and the credit market. Additionally, the ongoing impact of technology in the banking industry will continue to be a theme in 2018 and beyond that will present both challenges and opportunities.

In the Eurozone, the outlook for higher capital markets revenues and lending growth is favorable, which may largely reflect continued good economic conditions and higher volatility levels in the capital markets. For households, the recent recovery in lending is expected to continue thanks to the favorable outlook for the labor market. In the case of corporates, low interest rates and greater economic growth and confidence will likely support growth in financing both through loans and capital market activities. The greatest near term risk to the Eurozone is a “hard” Brexit in which the UK departs the EU without a transitional or final agreement being reached clarifying the UK's future access to the European single market. Nonetheless, banks will likely see revenue and net income growth in 2018 as a result of the favorable macroeconomic backdrop.

German banks can expect growth in the lending and deposits, both for retail and corporate customers, as well as a continuation of the extremely low credit risk provisions. However, pressure on net interest margins from low interest rates will likely continue in 2018, the impact of which will be partly offset by volume growth.

In the U.S., the expectation is that the favorable business environment for banks will remain. The robust U.S. economy and the potential for further actions to ease regulation on U.S. banks will support ongoing revenue and net income growth in banking, capital markets and asset management. Net interest margins for U.S. banks are expected to benefit from further decisions by the Federal Reserve to raise its benchmark rate, although the extremely low credit risk provisions are also expected to increase moderately.

In Japan, the expected slowdown in economic growth and the end of the extraordinary monetary policy measures could result in lending and deposit growth cooling off. In China, the risks of a private sector debt bubble are expected to increase further, although the government remains steadfast in its willingness and ability to cushion major disruptions.

The Basel Committee’s revisions to the modelling approaches for RWA (“Basel III framework agreement”) were finalized at the end of 2017. This concluded one of the most significant revisions to regulatory requirements following the financial crisis. In 2018 the focus will shift to the start of an expected multi-year process of implementing the framework into law in the EU. As the process of implementing the Basel III framework begins around the globe, there remains the risk that implementation will differ in across jurisdictions and result in inconsistent impacts across regions.

In Europe, the implications of Brexit should become more clear through the course of 2018, with politicians in the UK and other EU members targeting an agreement on a transitional period by the end of first quarter of 2018 and a draft withdrawal treaty due to be ready for ratification by October. Increased clarity on the future relationship between the UK and other EU members should have a positive effect on banks operating in the region through the removal of uncertainty. At the same time progress should be made towards political agreement on key regulatory items that are outstanding, including updates to CRR, reviews of ESA’s and EMIR which should provide further clarity on the regulatory requirements for banks in Europe in the medium term.

The Deutsche Bank Group

In March 2017, we announced an updated strategy that included changes in the bank's business strategy, a capital increase and updates to our financial targets. For adjusted costs, we had set targets for 2018 and 2021, respectively, for which we provide an update in the paragraph for adjusted costs below. Our remaining key performance indicators we aim to achieve in the long-term, consistent with a simpler and safer bank. In 2018, we will continue to execute our strategy and aim to improve profitability and margins. Cost management will continue to be key to our strategy and we intend to intensify our efforts in this respect in 2018.

Our most important key performance indicators are shown in the table below:

Key Performance Indicators

Group Key Performance Indicators	Status end of 2017	Target KPI
CRR/CRD 4 Common Equity Tier 1 capital ratio (fully loaded)[1]	14.0 %	comfortably above 13.0 %
CRR/CRD 4 leverage ratio according to transitional rules (phase-in)[2]	4.1 %	4.5 %
Post-tax Return on Average Tangible Equity[3]	(1.4) %	circa 10.0 %
Adjusted costs[4]	€ 23.9 billion	2018: circa € 22 billion 2021: circa € 21 billion

[1] The CRR/CRD 4 fully loaded Common Equity Tier 1 ratio represents our calculation of our Common Equity Tier 1 ratio without taking into account the transitional provisions of CRR/CRD 4. Further detail on the calculation of this ratio is provided in the Risk Report.
[2] Further detail on the calculation of the CRR/CRD 4 leverage ratio according to transitional rules (phase-in basis) is provided in the Risk Report.
[3] Based on Net Income attributable to Deutsche Bank shareholders. Calculation for year-end 2017 is based on an effective tax rate of 160 % for year ended December 31, 2017. For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of the report.
[4] Adjusted costs are noninterest expenses excluding impairment of goodwill and other intangible assets, litigation and restructuring and severance. For further information please refer to "Supplementary Information: Non-GAAP Financial Measures" of the report.

In 2018, we expect slight increases in RWA, notably from operational risk, methodology changes, regulatory inflation and selected business growth. By year-end 2018, our CRR/CRD 4 Common Equity Tier 1 capital ratio (fully loaded) is expected to be above 13 %, and our CRR/CRD 4 leverage ratio (phase-in) to stay above 4 %.

For 2018, we expect revenues to be higher than in 2017. The outlook reflects our expectation of a strong macroeconomic environment as we expect global economies to perform well. We anticipate above trend growth in the U.S. and Eurozone. Prospects of interest rate normalization set the stage for improved revenues. We expect further rate hikes in the U.S., and the ECB net asset purchase program to end in 2018. Market volatility is likely to rise which should allow the return of trading activities in the financial markets back to more normal levels.

We are committed to work towards our target of 10 % Post-tax Return on Average Tangible Equity in a normalized environment and on the basis of the achievement of our cost targets. The successful ongoing implementation of our strategy including critical restructuring of a number of our businesses and the implementation of a cost reduction program remains key to reaching that target. We currently expect a moderate improvement in our Post-tax Return on Average Tangible Equity in 2018, largely reflecting an improved outlook for revenues and expected adjusted cost improvements, despite our expectation that credit costs and litigation expense are likely to increase in 2018, and restructuring costs remain at levels similar to 2017.

In March 2017, we announced an adjusted costs target of circa € 22 billion for 2018 including circa € 900 million of planned cost savings through business disposals. While we made progress on planned disposals, some of them have been delayed or in some cases suspended. As a result, we currently do not expect the planned € 900 million of cost savings to materialize in 2018. Furthermore, we expect higher costs from Brexit and MiFID II implementation in 2018. Additionally, some of the cost synergies we expected to materialize in 2018 from the merger of Postbank into our German banking entity have been delayed as we expect this merger to be completed in the second quarter of 2018. Those savings are now expected to be realized in 2019. Nonetheless, we have been taking additional measures to offset these impacts and also benefit from current foreign currency rates in our reported costs relative to our earlier assumptions. Therefore, we now expect our adjusted costs in 2018 will be circa € 23 billion, which reflects our original € 22 billion target plus the cost impact of the delayed and suspended business disposals. We target a further reduction in our adjusted costs in the years to 2021. This target however depends in part on our ability to execute our aforementioned business disposals successfully and within the planned timeframes.

We target a competitive dividend pay-out ratio for the financial year 2018 and thereafter. These dividend payments are subject to our maintaining sufficient levels of distributable profits under our stand-alone financial statements in accordance with German accounting rules (HGB) for the fiscal year 2018.

By the nature of our business, we are involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, especially in the U.S. Such matters are subject to many uncertainties. While we have resolved a number of important legal matters and made progress on others, we expect the litigation and enforcement environment to remain challenging in the short term. Litigation expenses in 2017 were relatively low as a result of our successful efforts in resolving a number of matters below estimated provisions. For 2018, and with a caveat that forecasting litigation expense is subject to many uncertainties, we expect litigation to be meaningfully higher than in 2017, but well below the elevated levels observed over the past number of years.

Our Business Segments

Corporate & Investment Bank (CIB)

CIB's objectives are to provide efficient and seamless client coverage for our offering of investment and transaction banking products and services for corporate and institutional clients and thereby generate attractive returns for our shareholders. For 2018, we expect Corporate & Investment Bank revenues to be higher compared to 2017 as the business environment in 2017 was very challenging, with persistently low levels of volatility and sluggish client activity. For 2018, we expect an increase in volatility levels, which should drive higher client activity, thus aiding revenue generation in Sales & Trading. CIB is also focused on reinvigorating its client-led franchise through more effective coverage and has made progress in selectively hiring to capture key opportunities. We remain focused on growing market share in target product and regional segments.

We expect Sales & Trading Fixed Income and Currencies (FIC) revenues to be higher in 2018 compared to 2017, primarily driven by growth in FX, Emerging Markets and Rates revenues. In the beginning of 2018, market volatility surged significantly on the back of concerns over inflation and rising U.S. interest rates. In the past such periods of heightened volatility have led to increased client activity levels in financial markets. Potential divergence in the global interest rates environment (with further increases expected in the U.S.) should further support revenue growth in Rates. We expect Sales & Trading Equity revenues to be higher in 2018 compared to 2017 driven by Equity Derivatives and Prime Finance. Client balances in Prime Finance have recovered to pre-September 2016 levels and are expected to drive revenue growth in 2018, while key hires in our Equity business that were on-boarded in the second half of 2017 are expected to deliver revenue improvements. However, headwinds such as higher funding charges, regulatory pressure, continued pressure on resources and the potential impact of geo-political events are expected to remain as challenges.

Effective in 2018, CIB plans to report revenues related to asset based financing and commercial real estate, previously reported under Financing, under Sales & Trading FIC. Revenues related to other financing activities, in particular revenues related to investment grade lending will be reported in Other products. We expect Financing revenues to be slightly lower year on year due to lower revenues from investment grade lending, while revenues from Commercial Real Estate and asset based financing are expected to be flat. Our financing portfolios should continue to provide steady levels of carry revenues in 2018, however funding charges are expected to remain elevated in the short term.

We expect Origination & Advisory revenues to be higher in 2018 year on year with market fee volumes remaining supportive, though below 2017 peak levels. We expect to grow market share, driven by a recovery in Equity Origination from re-focusing our client coverage as well as higher Advisory revenues, which we also expect to grow, on the back of a significant number of mandates announced in the fourth quarter of 2017, and improved coverage in particular of cross-border M&A transactions.

We expect GTB revenues in 2018 to be slightly higher than 2017. Trade Finance and Securities Services revenues are expected to be higher and Cash Management revenues slightly higher, against a supportive macro-economic backdrop, as well as an increase in interest rates. However, we expect margin pressure to continue.

We remain committed to reduce costs across CIB and to drive platform efficiency while enhancing regulatory compliance, control and conduct. Noninterest expenses for 2018 are expected to be essentially flat, with lower adjusted costs offset by increased non-operating expenses. Litigation continues to be uncertain with respect to both cost and timing. For 2018, currently we expect RWA in CIB to be essentially flat, as reductions in business assets (including the legacy portfolio) will partly offset pressure from methodology changes and higher Operational Risk RWA. We will maintain our focus on regulatory compliance, know-your-client (KYC) and client on-boarding process enhancement, system stability and control and conduct.

Risks to our outlook include the impact of the implementation of MiFID II in 2018, potential impacts on our business model from Brexit, the future impact of the Basel III framework agreement and of tax reform in the U.S. Uncertainty around central bank policies and ongoing regulatory developments also pose a risk, while challenges such as event risks and levels of client activity may also impact financial markets. Despite this, we believe that continued execution on the announced strategic priorities will position us favorably to capitalize on future opportunities.

Private & Commercial Bank (PCB)

PCB's goal is to provide its private, corporate and wealth management clients with a comprehensive range of products from standard banking services to individual investment and financing advice, and to drive attractive returns for our shareholders. The product offering is supported by a global network, strong capital market and financing expertise and innovative digital services. In our German businesses, our focus in 2018 will be on integrating our PCC business and Postbank. We are thereby creating the largest private and commercial bank in our German home market with over 20 million customers. PCC International concluded in December 2017 a sale agreement for a large part of our retail banking business in Poland and closing that transaction will be a focus in 2018. Furthermore, we will continue to transform our businesses in our remaining international locations. In Wealth Management, our emphasis will be to further transform and grow our franchise. This includes the implementation of the announced integration of Sal. Oppenheim's private customer business into our German business and the further expansion in important growth markets such as Asia, Americas and EMEA. In addition, we will continue to invest in digital capabilities across all business areas.

Our revenues in 2017 benefited from material specific items, which we do not expect to repeat in the same magnitude in 2018. This effect should be largely offset by growth in commission and fee income, so that we expect reported revenues in 2018 to be essentially flat compared to 2017. Margins in the deposit business will continue to be negatively impacted by the low interest rate environment. However, we assume that we will be able to compensate for this with higher loan revenues, so that net interest income should also remain essentially flat compared to 2017.

We project assets under management to grow slightly in 2018, driven mainly by our growth strategy in key Wealth Management regions. We also assume that our risk-weighted assets will be slightly higher than at the end of 2017 due to our growth strategy in the loan businesses.

In 2018, provision for credit losses is expected to be significantly higher than in 2017, which benefited from specific factors including a material release in Postbank. We also anticipate an increase in line with our growth strategy in the loan businesses, and the introduction of IFRS 9 should increase the volatility of provision for credit losses compared with previous years.

We assume that noninterest expenses in 2018 will be slightly lower than in 2017, which included considerable restructuring expenses for the integration of Postbank. The adjusted cost base should remain essentially flat in 2018. Further savings from initiated restructuring measures are expected to be offset by higher investment costs, in particular for the integration of Postbank, but also for further investments in digitization, the ongoing transformation of PCC International and Wealth Management, as well as inflationary effects.

Uncertainties that could affect our earnings situation in 2018 include slower economic growth in our main operating countries, any further decline in global interest rates and higher-than-expected volatility in the equity and credit markets, which could have a negative impact on our clients' investment activities. The implementation of extended regulatory requirements such as MiFID II and PSD II as well as possible delays in the implementation of our strategic projects could have a negative impact on our revenue and cost base.

Deutsche Asset Management

Deutsche AM remains a core business for Deutsche Bank. Since the announcement in March 2017 that we intend to pursue a partial initial public offering of Deutsche AM, we have made considerable progress towards this goal. The rationale for the partial IPO is to unlock the potential of the business by fostering greater autonomy. As a standalone asset manager, we will introduce the DWS brand for our global business and enhance our external profile. The integration of our infrastructure partners will enable us to achieve further operating efficiencies across the platform, including process improvements to reduce costs and enhance the client experience.

We believe that Deutsche AM's diverse investment capabilities and pending operational independence position us well to address industry challenges and capture opportunities. In 2018, we anticipate broadly positive equity markets based on global synchronous economic growth, and stable credit markets. Risks are however increasing through elevated valuations, a moderate reduction in monetary policy stimulus and continued political uncertainties. We expect growth in developed economies to remain healthy, while emerging markets continue to grow at a faster rate. These trends are expected to impact investor risk appetite and potentially also management fees and asset flows. By anticipating and responding to investor needs, Deutsche AM aspires to be the investment partner of choice for our global client base.

Over the medium term, the industry's global assets under management are expected to substantially increase, driven by strong net flows in passive strategies, alternatives and multi-asset solutions, as clients increasingly demand value-for-money, transparency and outcome oriented products. We are optimistic that these industry growth trends will favor our capabilities in passive products, alternative investments, next generation active products and multi-asset solutions, product areas where we believe we can grow market share. Our digital capabilities are also opening new channels for us to distribute products and services. However, we expect bottom line results to be challenged by fee compression, rising costs of regulation and competitive dynamics. In the face of this challenge, we intend to focus our growth initiatives on products and services where we can differentiate, while also maintaining a disciplined cost base.

In 2018, we intend to undertake selective investments in client coverage and product and digital capabilities. This is coupled with the anticipated efficiency gains from an operating platform review primarily across the business support organization with the aim of simplifying business operations to enhance client service, business controls and efficiency.

In 2018, we expect revenues to be slightly lower than 2017, largely attributable to significantly lower performance and transaction fees reflecting the periodic nature of fund performance fees recognition and significantly lower other revenues driven by non-recurrence of the insurance recovery and the impact from disposal activity which took place in 2017. For the full year 2018, we expect slightly higher assets under management, driven by net inflows and favorable market outlook. Within 2018, we expect net flows, especially for cash and insurance related products, to remain volatile. In addition, we anticipate net outflows driven by the recently implemented US tax reform. Management fees are expected to be essentially flat driven by net inflows and stronger performance partly offset by margin compression. Deutsche AM intends to carefully manage its cost base with efficiency measures offsetting growth initiatives. The impact from disposals of non-strategic business in 2017 as well as significant decrease in separation costs are expected to result in slightly lower adjusted costs.

Risks to our outlook include the pace of global net flows growth, equity market development, currency movements, interest rates, exposure to global macroeconomic growth and the political developments including Brexit, and continued political uncertainty worldwide. In addition, unforeseen regulatory costs and possible delays in the implementation of our efficiency measures due to jurisdictional restrictions could have an adverse impact on our cost base.

Risks and Opportunities

We have reflected in our Outlook risks and opportunities that we believe are likely to occur. The following section focuses on future trends or events that may result in downside risk or upside potential from what we have anticipated in our Outlook.

Our aspirations are subject to various external and internal factors. In particular, timely and complete achievement of our strategic aspirations may be adversely impacted by the reduced revenue-generating capacities of some of our core businesses in the current challenging macro-economic and market environment, the ongoing headwinds posed by regulatory reforms and/or the effects on us of our legal and regulatory proceedings.

Risks

Macro-economic and market conditions

If growth prospects, the interest rate environment and competition in the financial services industry worsen compared to the expectation in our Outlook, this could adversely affect our business, results of operations or strategic plans.

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

The overall macro-economic impact of the United Kingdom’s decision to leave the European Union, which will depend on Europe’s political response to Brexit, is difficult to predict. In general, we expect a prolonged period of uncertainty regarding the UK’s future status with the EU. Therefore, weaker investment and thereby slower economic growth are expected to persist during the UK exit negotiations. As a consequence, we will closely monitor the developments and their impact on our business and operating model. This may potentially require taking impairments on assets.

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

Adverse market conditions, unfavorable prices and volatility as well as cautious investor and client sentiment may in the future materially and adversely affect our revenues and profits as well as the timely and complete achievement of our strategic aspirations.

Our ability to achieve our adjusted cost target depends in part on whether we are able to execute our planned business disposals successfully and within the planned timeframes. Such planned disposals may, however, be delayed, or the scope of the assets being divested may change or their execution may be rendered impracticable due to market conditions, negotiations with interested parties and discussions with local regulators.

The direct costs and related business impacts described in this section and in our Outlook, should they be significantly greater than we currently expect, would impact the “available distributable items” (ADI) calculation for Deutsche Bank AG, which forms the basis for payment capacity on our Additional Tier 1 (AT1) securities. If Deutsche Bank AG’s stand-alone results in accordance with German accounting rules according to the German Commercial Code (Handelsgesetzbuch, HGB) do not provide sufficient ADI, this would impact our ability to make distributions on our AT1 instruments. This could lead to higher funding costs for us and adversely affect market perceptions of us, with potential adverse effects on our results of operations and financial condition. Such impacts may also put increasing pressure on our capital, liquidity and other regulatory ratios. Also, if we do not report sufficient levels of distributable profits under our stand-alone financial statements in accordance with HGB, this would impact our ability to pay dividends.

A downgrade in our credit rating could affect our funding costs and business activities, although we are unable to predict whether this would be the case or the extent of any such effect.

Regulatory reforms and supervisory reviews

The regulatory reforms enacted and proposed in response to weaknesses in the financial sector together with the increased regulatory scrutiny and discretion will impose material costs on us, create significant uncertainty for us and may adversely affect our business plans as well as our ability to execute our strategic plans. Those changes that require us to maintain increased capital may significantly affect our business model, financial condition and results of operation as well as the competitive environment generally. Other regulatory reforms, such as bank levies, may also materially increase our forecasted operating costs. Regulatory reforms in respect of resolvability or resolution measures may also impact our shareholders and creditors.

Regulators can also impose capital surcharges, either as a result of specific supervisory exams or, as result of the annual Supervisory Review and Evaluation Process (SREP), to reflect the additional risks posed by deficiencies in our control environment. In extreme cases, they can even suspend our permission to operate within their jurisdictions. Furthermore, implementing enhanced controls may result in higher regulatory compliance costs that could offset or exceed efficiency gains. Regulators may disagree with our interpretation of specific regulatory requirements when interpretative matters are discussed as part of our ongoing regulatory dialogue or in the context of supervisory exams. Changes in rule interpretations can have a material impact on the treatment of positions for Pillar 1 regulatory purposes. Similarly, the evolving interpretations of the European Banking Authority (EBA) on the Capital Requirements Regulation can also negatively impact our regulatory capital, leverage or liquidity ratios. For example, on October 6, 2017, the EBA published new interpretative guidance on the treatment of guaranteed fund products which, if determined to be applicable to the full range of guaranteed funds and guaranteed fund saving schemes including the main government sponsored private pension scheme in Germany, could have a material impact on our regulatory capital and leverage ratio.

Legal, tax and regulatory proceedings

We are subject to a number of legal proceedings, tax examinations and regulatory investigations whose outcome is difficult to estimate and which may substantially and adversely affect our planned results of operations, financial condition and reputation. If these matters are resolved on terms that are more adverse to us than we expect, in terms of their costs or necessary changes to our businesses, or if related negative perceptions concerning our business and prospects and related business impacts increase, we may not be able to achieve our strategic objectives or we may be required to change them.

Risk management policies, procedures and methods as well as operational risks

Although we have devoted significant resources to develop our risk management policies, procedures and methods, including with respect to market, credit, liquidity and operational risk, they may not be fully effective in mitigating our risk exposures in all economic market environments or against all types of risk, including risks that we fail to identify or anticipate.

Strategy

If we are unable to implement our strategy successfully, which is also subject to the previously mentioned factors, we may be unable to achieve our financial objectives, or we may incur losses or low profitability or erosion of our capital base, and our financial condition, results of operations and share price may be materially and adversely affected.

Digitization

Digitization offers new competitors such as FinTechs' market entry opportunities and we expect our businesses to have an increased need for investment in digital product and process resources to mitigate the risk of a potential loss of market share. In addition, with increasing levels of digitization, cyber attacks could lead to data loss or technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services. Any of these events could involve us in litigation or cause us to suffer financial loss, disruption of our business activities, liability to our customers, government intervention or damage to our reputation.

Opportunities

Macro-economic and market conditions

Should economic conditions, such as GDP growth, the interest rate environment and competitive conditions in the financial services industry improve beyond forecasted levels, this could lead to increasing revenues that may only be partially offset by additional costs, thus improving both income before income taxes and cost-income ratio directly and subsequently improving regulatory measures such as CET 1 and leverage ratio.

If market conditions, price levels, volatility and investor sentiment develop better than expected, this may also positively impact our revenues and profits. Similarly, if we experience higher levels of customer demand and market share than anticipated, this may positively affect our results of operations.

Strategy

Our strategy seeks to enable us to become a simpler and more efficient, less risky, better capitalized and better run organization. The implementation of our strategy may create further opportunities if implemented to a greater extent or under more favorable conditions than anticipated. If businesses and processes improve beyond our planning assumptions and cost efficiencies can be realized sooner or to a greater extent than forecasted, this could also positively impact our results of operations.

Brexit

The UK's exit from the European Union may become a source of competitive advantage for the bank because it will leave Deutsche Bank as one of a handful of globally-relevant EU-based banks offering a full suite of corporate and investment banking products.

Deutsche Bank may be able to benefit from this unique positioning and for this to be a clear competitive differentiator with our clients. Moreover Deutsche Bank's pre-existing EU based infrastructure may make our clients' Brexit transition easier than with some of our competitors.

Regulatory change

Regulatory change can also be an opportunity, driving incremental revenue streams and potentially altering the competitive landscape in Deutsche Bank's favor.

MiFID II, for example, could benefit Deutsche Bank given our high-quality, waterfront research coverage. By comparison, some of our competitors may have to scale back as a result of MiFID II. Some competitors may reduce their footprint or even withdraw from the market. This creates an opportunity to gain market share given Deutsche Bank's commitment to providing our clients with broad-based but deep product and service coverage.

Digitization

Digitization offers our divisions an opportunity for significant efficiency gains. By investing in digital applications such as digital client self-boarding, front-to-back processes can be automated and the productivity of employees with customer contact can be increased. Digitization will also result in more flexible ways for our customers to take advantage of services and products in the location and time chosen by them. In combination with our high level of expertise in data security, these factors can help us to strengthen our existing market position and gain additional market share.

Risk Report

Introduction

Disclosures in line with IFRS 7 and IAS 1

The following Risk Report provides qualitative and quantitative disclosures about credit, market and other risks in line with the requirements of International Financial Reporting Standard 7 (IFRS 7) Financial Instruments: Disclosures, and capital disclosures required by International Accounting Standard 1 (IAS 1) Presentation of Financial Statements. Information which forms part of and is incorporated by reference into the financial statements of this report is marked by a bracket in the margins throughout this Risk Report.

Disclosures according to Pillar 3 of the Basel 3 Capital Framework

Most disclosures according to Pillar 3 of the Basel 3 Capital Framework, which are implemented in the European Union by the CRR and supported by EBA Implementing Technical Standards or the EBA Guideline "Final Report on the Guidelines on Disclosure Requirements under Part Eight of Regulation (EU) No 575/2013" ("EBA Guideline", EBA/GL/2016/11, version 2*) are published in our additional Pillar 3 report, which can be found on our website. In cases where disclosures in this Risk Report also support Pillar 3 disclosure requirements these are highlighted by references from the Pillar 3 Report into the Risk Report.

Disclosures according to principles and recommendations of the Enhanced Disclosure Task Force (EDTF)

In 2012 the Enhanced Disclosure Task Force ("EDTF") was established as a private sector initiative under the auspices of the Financial Stability Board, with the primary objective to develop fundamental principles for enhanced risk disclosures and to recommend improvements to existing risk disclosures. As a member of the EDTF we adhered to the disclosure recommendations in this Risk Report and also in our additional Pillar 3 Report.

Risk and Capital Overview

Key Risk Metrics

The following selected key risk ratios and corresponding metrics form part of our holistic risk management across individual risk types. The Common Equity Tier 1 Ratio (CET 1), Internal Capital Adequacy Ratio (ICA), Leverage Ratio (LR), Liquidity Coverage Ratio (LCR), and Stressed Net Liquidity Position (SNLP) serve as high level metrics and are fully integrated across strategic planning, risk appetite framework, stress testing (except LCR), and recovery and resolution planning practices, which are reviewed and approved by our Management Board at least annually. The CET 1, LR, Leverage Exposure, LCR and Risk-Weighted-Assets ratios and metrics, which are regulatory defined, are based on the fully loaded rules under the Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation or "CRR") and the directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (Capital Requirements Directive 4 or "CRD 4"). ICA, Economic Capital and SNLP are Deutsche Bank specific internal risk metrics in addition to the above described regulatory metrics.

Common Equity Tier 1 Ratio		**Total Risk-Weighted Assets**	
31.12.2017	14.0 %	31.12.2017	€ 344.2 bn
31.12.2016	11.8 %	31.12.2016	€ 357.5 bn
Internal Capital Adequacy Ratio[1]		**Total Economic Capital[2]**	
31.12.2017	192 %	31.12.2017	€ 27.1 bn
31.12.2016	162 %	31.12.2016	€ 35.4 bn
Leverage Ratio		**Leverage Exposure**	
31.12.2017	3.8 %	31.12.2017	€ 1,395 bn
31.12.2016	3.5 %	31.12.2016	€ 1,348 bn
Liquidity Coverage Ratio		**Stressed Net Liquidity Position (sNLP)**	
31.12.2017	140 %	31.12.2017	€ 32.6 bn
31.12.2016	128 %	31.12.2016	€ 36.1 bn

[1] The definition of capital supply for the purpose of calculating the internal capital adequacy ratio has been changed to take a perspective that aims at maintaining the viability of Deutsche Bank on an ongoing basis. More information is provided in section "Internal Capital Adequacy".
[2] The quantile used to measure the economic capital demand has been changed from 99.98% to 99.9% to take a perspective that aims at maintaining the viability of Deutsche Bank on an ongoing basis in alignment with the change of the definition of capital supply. More information is provided in section "Internal Capital Adequacy". An overview of the quantitative impact of the quantile change on the economic capital is provided in section "Risk Profile".

For further details please refer to sections "Risk Appetite and Capacity", "Recovery and Resolution Planning", "Stress Testing", "Risk Profile", "Internal Capital Adequacy Assessment Process", "Capital Instruments", "Development of Regulatory Capital" (for phase-in and fully loaded CET 1 and risk-weighted-assets figures), "Development of Risk Weighted Assets", "Leverage Ratio" (for phase-in and fully loaded leverage ratio), "Liquidity Coverage Ratio", and "Stress Testing and Scenario Analysis".

Overall Risk Assessment

Key risk categories include 1) financial risks such as credit risk (including default, migration, transaction, settlement, exposure, country, mitigation and concentration risks), market risk (including interest rate, foreign exchange, equity, credit spread, commodity and other cross-asset risks), liquidity risk, business risk (including tax and strategic risk), and 2) non-financial risks (NFRs) including reputational risk and operational risk (with important sub-categories compliance risk, legal risk, model risk, information security risks, fraud risks, and money laundering risks). We manage the identification, assessment and mitigation of top and emerging risks through an internal governance process and the use of risk management tools and processes. Our approach to identification and impact assessment aims to ensure that we mitigate the impact of these risks on our financial results, long-term strategic goals and reputation. Please refer to the section "Risk and Capital Management" for detailed information on the management of our material risks.

As part of our regular analysis, sensitivities of the key portfolio risks are reviewed using a bottom-up risk assessment, complemented by a top-down macro-economic and political scenario analysis. This two-pronged approach allows us to capture both those risk drivers that have an impact across our risk inventories and business divisions as well as those relevant only to specific portfolios.

Against an improving global economic backdrop, particularly in the Eurozone, key downside risks are focused on monetary policy and (geo) political risks. The Federal Reserve is expected to continue to raise rates in 2018, while the ECB's quantitative easing program may terminate by the end of the year. Higher than expected inflation could drive more rapid policy tightening, in turn disrupting financial markets (where valuations are stretched across several asset classes) as well as driving financial instability in sectors where leverage is high. The political agenda in Europe remains busy with the Italy election in March, Brexit negotiations ongoing and the Catalonia situation unresolved. On the geopolitical risk front tensions between the United States and its allies and North Korea remain in focus.

The assessment of the potential impacts of these risks is integrated into our group-wide stress tests which assess our ability to absorb these events should they occur. The results of these tests showed that the currently available capital and liquidity reserves, in combination with available mitigation measures, would allow us to absorb the impact of these risks if they were to materialize in line with the tests' parameters. Information about risk and capital positions for our portfolios can be found in the "Risk and Capital Performance" section.

With the Basel Committee's revisions to the modelling approaches for RWA finalized at the end of 2017 (commonly referred to as Basel 4), the focus in 2018 is expected to shift to implementation of rules and enhancement of supervision. We remain focused on identifying potential political and regulatory changes and assessing the possible impact on our business model and processes.

The overall focus of risk and capital management throughout 2017 was on maintaining our risk profile in line with our risk strategy, increasing our capital base and supporting our strategic management initiatives with a focus on balance sheet optimization. This approach is reflected across the different risk metrics summarized below.

Risk Profile

The table below shows our overall risk position as measured by the economic capital usage calculated for credit, market, operational and business risk for the dates specified. To determine our overall (economic capital) risk position, we generally consider diversification benefits across risk types.

Overall risk position as measured by economic capital usage by risk type

in € m. (unless stated otherwise)	Dec 31, 2017	Dec 31, 2016	2017 increase (decrease) from 2016 in € m.	in %
Credit risk	10,769	13,105	(2,336)	(18)
Market risk	10,428	14,593	(4,165)	(29)
Trading market risk	3,800	4,229	(429)	(10)
Nontrading market risk	6,628	10,364	(3,736)	(36)
Operational risk	7,329	10,488	(3,159)	(30)
Business risk	5,677	5,098	579	11
Diversification benefit[1]	(7,074)	(7,846)	772	(10)
Total economic capital usage	**27,129**	35,438	(8,309)	(23)

[1] Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).

As of December 31, 2017, our economic capital usage amounted to € 27.1 billion, which was € 8.3 billion or 23 %, below the € 35.4 billion economic capital usage as of December 31, 2016. The decrease was mainly driven by the change in the quantile from 99.98% to 99.9%. The quantile change is due to our revised internal capital adequacy perspective from a “gone-concern” to a perspective aimed at maintaining the viability of Deutsche Bank, including a revised capital supply as further explained in the section “Internal Capital Adequacy”.

The economic capital usage for credit risk was € 2.3 billion or 18 % lower as of December 31, 2017 compared to year-end 2016 mainly due to quantile change which led a decrease in credit risk economic capital as of November 2017 by € 3.66 billion, partly offset by a higher counterparty risk component.

The economic capital usage for trading market risk decreased to € 3.8 billion as of December 31, 2017, compared to € 4.2 billion at year-end 2016. The decrease was primarily driven by the change of the quantile, which led to a reduction in trading market risk by € 0.6 billion, partially offset by an increase in traded default risk component exposure. The nontrading market risk economic capital usage decreased by € 3.7 billion or 36 % compared to December 31, 2016, mainly driven by a considerable decrease in the guaranteed funds risk from the application of a new methodology and due to lower structural foreign exchange risk exposure. The quantile change led to a decrease in nontrading market risk economic capital as of November 2017 by € 1.8 billion.

The operational risk economic capital usage totaled € 7.3 billion, as of December 31, 2017, which is € 3.2 billion or 30 % lower than the € 10.5 billion economic capital usage as of December 31, 2016.The decrease was almost exclusively driven by the impact from the change in the reference confidence level, which was only marginally offset by the effects that also led to the small increase in regulatory capital for operational risk as outlined in the section “Operational Risk Management”.

Our business risk economic capital methodology captures strategic risk, which also implicitly includes elements of non-standard risks including refinancing and reputational risk, a tax risk component and a capital charge for IFRS deferred tax assets on temporary differences. The business risk increased by € 578 million compared to December 31, 2016, to € 5.7 billion as of December 31, 2017. This increase reflected a higher economic capital usage for the tax risk component by € 267 million and a deferred tax capital charge of € 686 million partially offset by the lower economic capital quantile used since November 2017 by € 791 million. Further details can be found in the section “Internal Capital Adequacy”.

The inter-risk diversification effect of the economic capital usage across credit, market, operational and strategic risk decreased by € 772 million mainly due to quantile change and due to an overall lower economic capital usage.

Our mix of business activities results in diverse risk taking by our business divisions. We also measure the key risks inherent in their respective business models through the undiversified economic capital demand (EC) metric, which mirrors each business division’s risk profile before taking into account cross-risk effects at the Group level.

Risk profile of our business divisions as measured by economic capital

							Dec 31, 2017
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total	Total (in %)
Credit Risk	6,519	3,596	62	-	591	10,769	40
Market Risk	4,679	1,386	310	-	4,054	10,428	38
Operational Risk	5,995	932	402	-	0	7,329	27
Business Risk	4,435	10	99	-	1,133	5,677	21
Diversification Benefit[1]	(5,450)	(950)	(264)	-	(410)	(7,074)	(26)
Total EC	**16,178**	**4,974**	**609**	**-**	**5,368**	**27,129**	**100**
Total EC in %	60	18	2	-	20	100	N/M

N/M – Not meaningful
[1] Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).

							Dec 31, 2016[1]
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total	Total (in %)
Credit Risk	8,185	4,308	62	108	442	13,105	37
Market Risk	5,341	1,712	2,197	332	5,010	14,593	41
Operational Risk	8,330	1,437	561	160	0	10,488	30
Business Risk	4,753	32	100	245	(32)	5,098	14
Diversification Benefit[2]	(6,008)	(1,039)	(441)	(110)	(248)	(7,846)	(22)
Total EC	**20,602**	**6,449**	**2,480**	**735**	**5,172**	**35,438**	**100**
Total EC in %	58	18	7	2	15	100	N/M

N/M – Not meaningful
[1] Amounts allocated to the business segments have been restated to reflect comparatives according to the structure as of December 31, 2016.
[2] Diversification benefit across credit, market, operational and strategic risk (largest part of business risk).

Corporate & Investment Bank's (CIB) risk profile is dominated by its trading in support of origination, structuring and market making activities, which gives rise to market risk and credit risk. The vast majority of its credit risk relates to trade finance activities in Global Transaction Banking and corporate finance activities in Financing and Origination & Advisory. The share of the operational risk in CIB's risk profile reflects a high loss profile in the industry combined with internal losses and has increased compared to the year-end 2016. The remainder of CIB's risk profile is derived from business risk reflecting earnings volatility risk. The economic capital usage for business risk increased compared to year-end 2016 mainly due to a higher economic capital usage for the strategic risk component. The quantile change led to a decrease of economic capital in CIB by € 6.3 billion.

Private & Commercial Bank's (PCB) risk profile comprises credit risk from retail, small and medium-sized enterprises lending and wealth management activities as well as nontrading market risk from investment risk, modelling of client deposits and credit spread risk. The economic capital usage for market risk decreased compared to the year-end 2016 mainly due to a lower nontrading market risk component. The quantile change led to a decrease of economic capital in PCB by € 1.8 billion.

The main risk driver of Deutsche Asset Management's (Deutsche AM) business are guarantees on investment funds, which we report as nontrading market risk. Otherwise Deutsche AM's advisory and commission focused business attracts primarily operational risk. The economic capital usage for market risk decreased compared to the year-end 2016 mainly due to a lower nontrading market risk component resulting from the application of a new methodology to measure guaranteed funds risk. The quantile change led to a decrease of economic capital in Deutsche AM by € 469 million.

The Non-Core Operations Unit (NCOU) portfolio included activities that are non-core to the Bank's future strategy; assets earmarked for de-risking; assets suitable for separation; assets with significant capital absorption but low returns; and assets exposed to legal risks. NCOU's risk profile covered risks across the entire range of our operations. The economic capital usage across all risk types decreased throughout 2016 mainly due to general wind-down of non-strategic assets. The NCOU was dissolved as of the beginning of 2017 and its assets were reallocated to the other segments.

Consolidation & Adjustments mainly comprises nontrading market risk for structural foreign exchange risk, pension risk and equity compensation risk. The economic capital usage for market risk and tax risk as part of business risk increased compared to the year-end 2016. The quantile change led to a decrease of economic capital in Consolidation & Adjustments by € 1.8 billion.

Risk and Capital Framework

Risk Management Principles

The diversity of our business model requires us to identify, assess, measure, aggregate and manage our risks, and to allocate our capital among our businesses. Our aim is to help reinforce our resilience by encouraging a holistic approach to the management of risk and return throughout our organization as well as the effective management of our risk, capital and reputational profile. We actively take risks in connection with our business and as such the following principles underpin our risk management framework:

- Risk is taken within a defined risk appetite;
- Every risk taken needs to be approved within the risk management framework;
- Risk taken needs to be adequately compensated; and
- Risk should be continuously monitored and managed.

Risk and capital are managed via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the activities of the divisions and business units:

- Core risk management responsibilities are embedded in the Management Board and delegated to senior risk managers and senior risk management committees responsible for execution and oversight.
- We operate a Three Lines of Defense ("3LoD") risk management model, in which risk, control and reporting responsibilities are defined.
  - The 1st Line of Defense ("1st LoD") refers to those roles in the Bank whose activities generate risks, whether financial or non-financial.
  - The 2nd Line of Defense ("2nd LoD") refers to the risk type controller roles in the Bank who facilitate the implementation of a sound risk management framework throughout the organization. The 2nd LoD defines the risk appetite and risk management and control standards for their risk type, and independently oversees and challenges the risk taking and risk management activities of the 1st LoD.
  - The 3rd Line of Defense ("3rd LoD") is Group Audit, which is accountable for providing independent and objective assurance on the adequacy of the design and effectiveness of the systems of internal control and risk management.

- The risk strategy is approved by the Management Board on an annual basis and is defined based on the Group Risk Appetite and the Strategic and Capital Plan in order to align risk, capital and performance targets.
- Cross-risk analysis reviews are conducted across the Group to validate that sound risk management practices and a holistic awareness of risk exist.
- All material risk types, including credit risk, market risk, operational risk, liquidity risk, business risk and reputational risk, are managed via risk management processes. Modeling and measurement approaches for quantifying risk and capital demand are implemented across the material risk types. For more details, refer to section "Risk and Capital Management" for the management processes of our material risks.
- Monitoring, stress testing tools and escalation processes are in place for key capital and liquidity thresholds and metrics.
- Systems, processes and policies are critical components of our risk management capability.
- Recovery and contingency planning provides the escalation path for crisis management and supplies senior management with a set of actions designed to improve the capital and liquidity positions in a stress event.
- Resolution planning is the responsibility of our resolution authority, the Single Resolution Board. It provides a strategy to manage Deutsche Bank in case of default. It is designed to prevent major disruptions to the financial system or the wider economy through maintaining critical services.
- We apply an integrated risk management approach that aims at Group-wide consistency in risk management standards, while allowing for adaptation to local or legal entity specific requirements.

We promote a strong risk culture where employees at all levels are responsible for the management and escalation of risks. We expect employees to exhibit behaviors that support a strong risk culture in line with our Code of Business Conduct and Ethics. To promote this, our policies require that risk-related behavior is taken into account during our performance assessment and compensation processes. In addition, our Management Board members and senior management frequently communicate the importance of a strong risk culture to support a consistent tone from the top.

In 2017, we also introduced a principles-based assessment of risk culture, in particular focusing on risk awareness, risk ownership and management of risk within risk appetite. Assessment results are incorporated into existing risk reporting, reinforcing the message that risk culture is an integral part of effective day-to-day risk management.

Risk Governance

Our operations throughout the world are regulated and supervised by relevant authorities in each of the jurisdictions in which we conduct business. Such regulation focuses on licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. The European Central Bank (the "ECB") in connection with the competent authorities of EU countries which joined the Single Supervisory Mechanism via the Joint Supervisory Team act in cooperation as our primary supervisors to monitor our compliance with the German Banking Act and other applicable laws and regulations as well as the CRR/CRD 4 framework and respective implementations into German law.

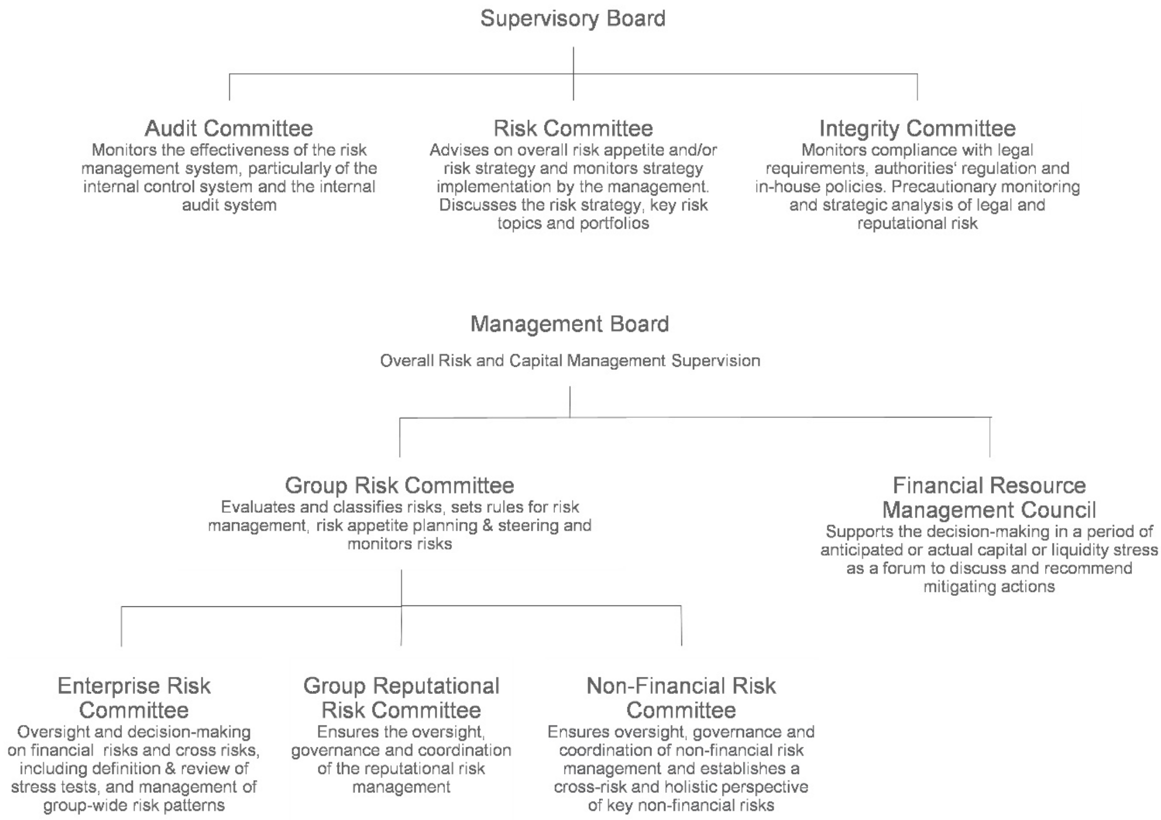
European banking regulators assess our capacity to assume risk in several ways, which are described in more detail in the section "Regulatory Capital" of this report.

Several layers of management provide cohesive risk governance:

- The Supervisory Board is informed regularly on our risk situation, risk management and risk controlling, as well as on our reputation and material litigation cases. It has formed various committees to handle specific tasks (for a detailed description of these committees, please see the "Corporate Governance Report" under "Management Board and Supervisory Board", "Standing Committees").
  - At the meetings of the Risk Committee, the Management Board reports on key risk portfolios, on risk strategy and on matters of special importance due to the risks they entail. It also reports on loans requiring a Supervisory Board resolution pursuant to law or the Articles of Association. The Risk Committee deliberates with the Management Board on issues of the overall risk appetite, aggregate risk position and the risk strategy and supports the Supervisory Board in monitoring the implementation of this strategy.
  - The Integrity Committee, among other responsibilities, monitors the Management Board's measures that promote the company's compliance with legal requirements, authorities' regulations and the company's own in-house policies. It also reviews the Bank's Code of Business Conduct and Ethics, and, upon request, supports the Risk Committee in monitoring and analyzing the Bank's legal and reputational risks.
  - The Audit Committee, among other matters, monitors the effectiveness of the risk management system, particularly the internal control system and the internal audit system.
- The Management Board is responsible for managing Deutsche Bank Group in accordance with the law, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the company, thus taking into consideration the interests of the shareholders, employees and other stakeholders. The Management Board is responsible for establishing a proper business organization, encompassing appropriate and effective risk management. The

Management Board established the Group Risk Committee (“GRC”) as the central forum for review and decision on material risk and capital-related topics. The GRC generally meets once a week. It has delegated some of its duties to individuals and sub-committees. The GRC and its sub-committees are described in more detail below.

Risk Management Governance Structure of the Deutsche Bank Group



The following functional committees are central to the management of risk at Deutsche Bank:

- The Group Risk Committee (GRC) has various duties and dedicated authority, including approval of new or materially changed risk and capital models, review of risk exposure developments and internal and regulatory Group-wide stress testing results, and monitoring of risk culture across the Group. The GRC also reviews risk resources available to the business divisions and high-level risk portfolios (for example on a country or industry level) and sets related risk appetite targets, for example in the form of limits or thresholds. In addition, the GRC reviews and recommends items for Management Board approval, such as key risk management principles, the Group Recovery Plan and the Contingency Funding Plan, over-arching risk appetite parameters, and recovery and escalation indicators. The GRC also supports the Management Board during Group-wide risk and capital planning processes.
- The Non-Financial Risk Committee (NFRC) oversees, governs and coordinates the management of non-financial risks in Deutsche Bank Group and establishes a cross-risk and holistic perspective of the key non-financial risks of the Group. It is tasked to define the non-financial risk appetite tolerance framework, to monitor and control the non-financial risk operating model and interdependencies between business divisions and control functions and different risk type control functions.
- The Group Reputational Risk Committee (GRRC) is responsible for the oversight, governance and coordination of reputational risk management and provides for an appropriate look-back and a lessons learnt process. It reviews and decides all reputational risk issues escalated by the Regional Reputational Risk Committees (“RRRCs”) and RRRC decisions which have been appealed by the business divisions, infrastructure functions or regional management. It provides guidance on Group-wide reputational risk matters, including communication of sensitive topics, to the appropriate levels of Deutsche Bank Group. The RRRCs which are sub-committees of the GRRC, are responsible for the oversight, governance and coordination of the management of reputational risk in the respective regions on behalf of the Management Board.
- The Enterprise Risk Committee (ERC) has been established with a mandate to focus on enterprise-wide risk trends, events and cross-risk portfolios, bringing together risk experts from various risk disciplines. As part of its mandate, the ERC approves the annual country risk portfolio overviews and specified country risk thresholds, establishes product thresholds, reviews risk portfolio concentrations across the Group, monitors group-wide stress tests used for managing the Group’s risk appetite, and reviews topics with enterprise-wide risk implications like risk culture.

– The Financial Resource Management Council (FRMC) is an ad-hoc governance body to support the decision-making in a period of anticipated or actual capital or liquidity stress. It is a forum to discuss and recommend mitigating actions, thereby bringing together in one forum the tasks of the former Liquidity Management Committee and the crisis-related tasks previously assigned to the GRC. Specifically, the FRMC is tasked with analyzing the bank's capital and liquidity situation, advising on the capital and liquidity strategy, and making recommendations on specific business level capital and liquidity targets and/or countermeasures that are necessary to successfully execute the strategy. This includes the recommendation whether or not to invoke the Contingency Funding Plan and the right to oversee the execution of related decisions.

Our Chief Risk Officer ("CRO"), who is a member of the Management Board, has Group-wide, supra-divisional responsibility for the management of all credit, market, liquidity and operational risks as well as for the continuing development and enhancement of methods for risk measurement. In addition, the CRO is responsible for monitoring, analyzing and reporting risk on a comprehensive basis.

The CRO has direct management responsibility for the Risk function. Risk management & control duties in the Risk function are generally assigned to specialized risk management units focusing on the management of

– Specific risk types
– Risks within a specific business
– Risks in a specific region.

These specialized risk management units generally handle the following core tasks:

– Foster consistency with the risk appetite set by the GRC within a framework established by the Management Board and applied to Business Divisions;
– Determine and implement risk and capital management policies, procedures and methodologies that are appropriate to the businesses within each division;
– Establish and approve risk limits;
– Conduct periodic portfolio reviews to keep the portfolio of risks within acceptable parameters; and
– Develop and implement risk and capital management infrastructures and systems that are appropriate for each division.

Additionally, Business Aligned Risk Management (BRM) represents the Risk function vis-à-vis specific business areas. The CROs for each business division manage their respective risk portfolio, taking a holistic view of each division to challenge and influence the division's strategy and risk ownership and implement risk appetite.

The specialized risk management functions are complemented by our Enterprise Risk Management (ERM) function, which sets a bank-wide risk management framework seeking to ensure that all risks at the Group and Divisional level are identified, owned and controlled by the functional risk teams within the agreed risk appetite and risk management principles. ERM is responsible for aggregating and analyzing enterprise-wide risk information and reviewing the risk/return profile of portfolios to enable informed strategic decision-making on the Bank's resources. ERM has the mandate to:

– Manage enterprise risk appetite and allocation across businesses and legal entities;
– Integrate and aggregate risks to provide greater enterprise risk transparency to support decision making;
– Commission forward-looking stress tests, and manage Group recovery and resolution plans; and
– Govern and improve the effectiveness of the risk management framework.

The specialized risk management functions and ERM have a reporting line to the CRO.

While operating independently from each other and the business divisions, our Finance and Risk functions have the joint responsibility to quantify and verify the risk that we assume.

The integration of the risk management of our subsidiary Deutsche Postbank AG is promoted through harmonized processes for identifying, assessing, managing, monitoring, and communicating risk, the strategies and procedures for determining and safeguarding risk-bearing capacity, and corresponding internal control procedures. Key features of the joint governance are:

– Functional reporting lines from Postbank Risk Management to Deutsche Bank Risk;
– Participation of voting members from Deutsche Bank from the respective risk functions in Postbank's key risk committees and vice versa for selected key committees; and
– Alignment to key Group risk policies.

The key risk management committees of Postbank are:

– The Bank Risk Committee, which advises Postbank's Management Board with respect to the determination of overall risk appetite and risk and capital allocation;

- The Credit Risk Committee, which is responsible for limit allocation and the definition of an appropriate limit framework;
- The Market Risk Committee, which decides on limit allocations as well as strategic positioning of Postbank's banking and trading book and the management of liquidity risk;
- The Operational Risk Management Committee, which defines the appropriate risk framework as well as the limit allocation for the individual business areas; and
- The Model and Validation Risk Committee, which monitors validation of all rating systems and risk management models.

The Chief Risk Officer of Postbank or senior risk managers of Deutsche Bank are voting members of the committees listed above.

Following the announcement in March 2017 to merge Postbank with the German Private and Business Clients business and as part of the overarching integration project, the Risk division has also commenced the analyses and work on establishing an appropriate Risk function for the planned merged legal entity which will remain connected into to the Group as described above.

Risk Appetite and Capacity

Risk appetite expresses the aggregate level of risk that we are willing to assume to achieve our strategic objectives, as defined by a set of minimum quantitative metrics and qualitative statements. Risk capacity is defined as the maximum level of risk we can assume given our capital and liquidity base, risk management and control capabilities, and our regulatory constraints.

Risk appetite is an integral element in our business planning processes via our risk plan and strategy, to promote the appropriate alignment of risk, capital and performance targets, while at the same time considering risk capacity and appetite constraints from both financial and non-financial risks. Compliance of the plan with our risk appetite and capacity is also tested under stressed market conditions. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions.

The Management Board reviews and approves our risk appetite and capacity on an annual basis, or more frequently in the event of unexpected changes to the risk environment, with the aim of ensuring that they are consistent with our Group's strategy, business and regulatory environment and stakeholders' requirements.

In order to determine our risk appetite and capacity, we set different group level triggers and thresholds on a forward looking basis and define the escalation requirements for further action. We assign risk metrics that are sensitive to the material risks to which we are exposed and which are able to function as key indicators of financial health. In addition to that, we link our risk and recovery management governance framework with the risk appetite framework. In detail, we assess a suite of metrics under stress (Common Equity Tier 1 ("CET 1") Ratio, Leverage Ratio ("LR"), Internal Capital Adequacy ("ICA") Ratio, and Stressed Net Liquidity Position ("SNLP")) within the regularly performed group-wide stress tests.

Reports relating to our risk profile as compared to our risk appetite and strategy and our monitoring thereof are presented regularly up to the Management Board. In the event that our desired risk appetite is breached, a predefined escalation governance matrix is applied so these breaches are highlighted to the respective committees. Amendments to the risk appetite and capacity must be approved by the Group Risk Committee or the full Management Board, depending on their significance.

Risk and Capital Plan

Strategic and Capital Plan

We conduct annually an integrated strategic planning process which lays out the development of our future strategic direction for us as a Group and for our business areas. The strategic plan aims to create a holistic perspective on capital, funding and risk under risk-return considerations. This process translates our long-term strategic targets into measurable short- to medium-term financial targets and enables intra-year performance monitoring and management. Thereby we aim to identify growth options by considering the risks involved and the allocation of available capital resources to drive sustainable performance. Risk-specific portfolio strategies complement this framework and allow for an in-depth implementation of the risk strategy on portfolio level, addressing risk specifics including risk concentrations.

The strategic planning process consists of two phases: a top-down target setting and a bottom-up substantiation.

In a first phase – the top-down target setting – our key targets for profit and loss (including revenues and costs), capital supply, capital demand as well as leverage, funding and liquidity are discussed for the group and the key business areas. In this process, the targets for the next five years are based on our global macro-economic outlook and the expected regulatory framework. Subsequently, the targets are approved by the Management Board.

In a second phase, the top-down objectives are substantiated bottom-up by detailed business unit plans, which for the first year consist of a month by month operative plan; years two and three are planned per quarter and years four and five are annual plans. The proposed bottom-up plans are reviewed and challenged by Finance and Risk and are discussed individually with the business heads. Thereby, the specifics of the business are considered and concrete targets decided in line with our strategic direction. The bottom-up plans include targets for key legal entities to review local risk and capitalization levels. Stress tests complement the strategic plan to also consider stressed market conditions.

The resulting Strategic and Capital Plan is presented to the Management Board for discussion and approval. The final plan is presented to the Supervisory Board.

The Strategic and Capital Plan is designed to support our vision of being a leading European bank with a global reach supported by a strong home base in Germany and aims to ensure:

– Balanced risk adjusted performance across business areas and units;
– High risk management standards with focus on risk concentrations;
– Compliance with regulatory requirements;
– Strong capital and liquidity position; and
– Stable funding and liquidity strategy allowing for business planning within the liquidity risk appetite and regulatory requirements.

The Strategic and Capital Planning process allows us to:

– Set earnings and key risk and capital adequacy targets considering the bank's strategic focus and business plans;
– Assess our risk-bearing capacity with regard to internal and external requirements (i.e., economic capital and regulatory capital); and
– Apply an appropriate stress test to assess the impact on capital demand, capital supply and liquidity.

The specific limits e.g. for regulatory capital demand, economic capital, and leverage exposures are derived from the Strategic and Capital Plan to align risk, capital and performance targets at all relevant levels of the organization.

All externally communicated financial targets are monitored on an ongoing basis in appropriate management committees. Any projected shortfall from targets is discussed together with potential mitigating strategies to ensure that we remain on track to achieve our targets. Amendments to the strategic and capital plan must be approved by the Management Board. Achieving our externally communicated solvency targets ensures that we also comply with the Group Supervisory Review and Evaluation Process ("SREP") requirements as articulated by our home supervisor. On December 19, 2017, Deutsche Bank was informed by the ECB of its decision regarding prudential minimum capital requirements for 2018, following the results of the 2017 SREP. The decision requires Deutsche Bank to maintain a phase-in CET 1 ratio of at least 10.65 % on a consolidated basis, beginning on January 1, 2018. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50 %, the Pillar 2 requirement (SREP Add-on) of 2.75 %, the phase-in capital conservation buffer of 1.88 %, the countercyclical buffer (currently 0.02%) and the phase-in G-SII buffer following Deutsche Bank's designation as a global systemically important institution ("G-SII") of 1.50 %. The new CET 1 capital requirement of 10.65 % for 2018 is higher than the CET 1 capital requirement of 9.51 %, which was applicable to Deutsche Bank in 2017. Correspondingly, 2018 requirements for Deutsche Bank's Tier 1 capital ratio are at 12.15 % and for its total capital ratio at 14.15 %. Also following the results of the 2017 SREP, the ECB communicated to us an individual expectation to hold a further "Pillar 2" CET 1 capital add-on, commonly referred to as the '"Pillar 2" guidance'. The capital add-on pursuant to the "Pillar 2" guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the "Pillar 2" guidance although it is not legally binding, and failure to meet the "Pillar 2" guidance does not automatically trigger legal action.

Internal Capital Adequacy Assessment Process

Deutsche Bank's internal capital adequacy assessment process ("ICAAP") consists of several well-established components which ensure that Deutsche Bank maintains sufficient capital to cover the risks to which the bank is exposed on an ongoing basis:

– Risk identification and assessment: The risk identification process forms the basis of the ICAAP and results in an inventory of risks for the Group. All risks identified are assessed for their materiality. Further details can be found in under section "Risk Identification and Assessment".
– Capital demand/risk measurement: Risk measurement methodologies and models are applied to quantify the capital demand which is required to cover all material risks except for those which cannot be adequately limited by capital e.g. liquidity risk. Further details can be found in sections "Risk Profile" and "Capital and Leverage Ratio".
– Capital supply: Capital supply quantification refers to the definition of available capital resources to absorb unexpected losses quantified as part of the capital demand. Further details can be found in section "Capital and Leverage Ratio".
– Risk appetite: Deutsche Bank has established Group risk appetite thresholds which express the level of risk that we are willing to assume to achieve our strategic objectives. Threshold breaches are subject to a dedicated governance framework triggering management actions aimed to safeguard capital adequacy. Further details can be found in sections "Risk Appetite and Capacity" and "Key Risk Metrics".
– Capital planning: The Group risk appetite thresholds for capital adequacy metrics constitute boundaries which have to be met to safeguard capital adequacy on a forward-looking basis. Further details can be found in section "Strategic and Capital Plan".
– Stress testing: Capital plan figures are also considered under various stress test scenarios to prove resilience and overall viability of the bank. Capital adequacy metrics are also subject to regular stress tests throughout the year to constantly evaluate Deutsche Bank's capital position in hypothetical stress scenarios and to detect any vulnerabilities under stress. Further details can be found in section "Stress Testing".
– Capital adequacy assessment: Although capital adequacy is constantly monitored throughout the year, the ICAAP concludes with a dedicated annual capital adequacy assessment (CAS). The assessment consists of a Management Board statement about Deutsche Bank's capital adequacy, which is linked to specific conclusions and management actions to be taken to safeguard capital adequacy on a forward-looking basis.

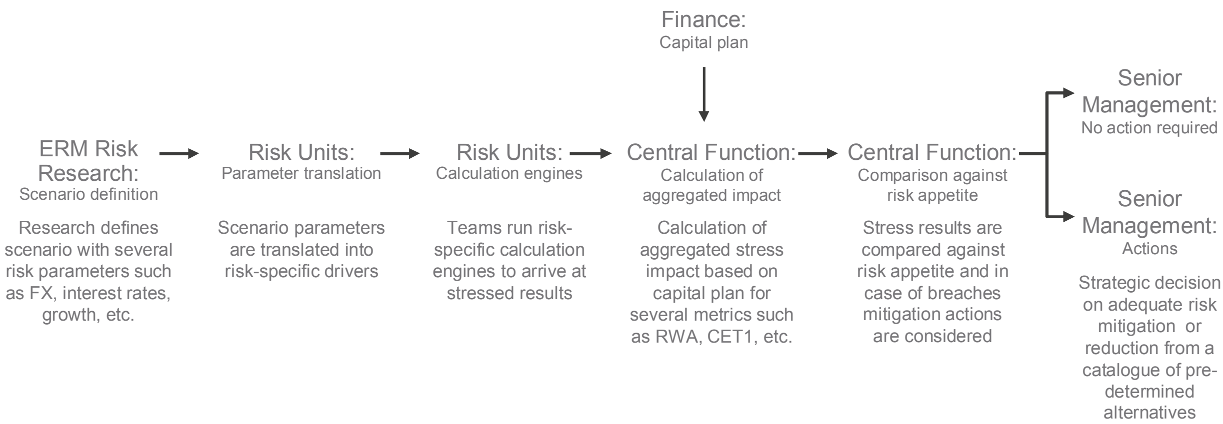
As part of its ICAAP, Deutsche Bank distinguishes between a normative and economic internal perspective. The normative internal perspective refers to an internal process aimed at the fulfilment of all capital-related legal requirements and supervisory demands on an ongoing basis (primarily measured via the CET1 and leverage ratio). The economic internal perspective (measured via the internal capital adequacy ratio) refers to an internal process aimed at capital adequacy using internal economic capital demand models and an internal economic capital supply definition. Both perspectives focus on maintaining the viability of Deutsche Bank on an ongoing basis.

Stress testing

We have a strong commitment to stress testing performed on a regular basis in order to assess the impact of a severe economic downturn on our risk profile and financial position. These exercises complement traditional risk measures and represent an integral part of our strategic and capital planning process. Our stress testing framework comprises regular Group-wide stress tests based on internally defined “Downside Planning” and more severe macroeconomic global downturn scenarios. We include all material risk types into our stress testing exercises. The time-horizon of internal stress tests is generally one year and can be extended to multi-year, if required by the scenario assumptions. Our methodologies undergo regular scrutiny from Deutsche Bank’s internal validation team (Global Model Validation and Governance - GMVG) whether they correctly capture the impact of a given stress scenario. These analyses are complemented by portfolio- and country-specific stress tests as well as regulatory requirements, such as annual reverse stress tests and additional stress tests requested by our regulators on group or legal entity level. An example of a regulatory stress test performed in 2017 is the CCAR stress test for the U.S. entity. In 2018, Deutsche Bank will take part in the biannual EBA stress test. Moreover, capital plan stress testing is performed to assess the viability of our capital plan in adverse circumstances and to demonstrate a clear link between risk appetite, business strategy, capital plan and stress testing. An integrated procedure allows us to assess the impact of ad-hoc scenarios that simulate potential imminent financial or geopolitical shocks.

The initial phase of our internal stress tests consists of defining a macroeconomic downturn scenario by ERM Risk Research in cooperation with business specialists. ERM Risk Research monitors the political and economic development around the world and maintains a macro-economic heat map that identifies potentially harmful scenarios. Based on quantitative models and expert judgments, economic parameters such as foreign exchange rates, interest rates, GDP growth or unemployment rates are set accordingly to reflect the impact on our business. The scenario parameters are translated into specific risk drivers by subject matter experts in the risk units. Based on our internal models framework for stress testing, the following major metrics are calculated under stress: risk-weighted assets, impacts on profit and loss and economic capital by risk type. These results are aggregated at the Group level, and key metrics such as the CET 1 ratio, ECA ratio, Leverage Ratio and the Net Liquidity Position under stress are derived. Prior to the impact assessment the scenarios are discussed and approved by the Enterprise Risk Committee (ERC) which also reviews the final stress results. After comparing these results against our defined risk appetite, the ERC also discusses specific mitigation actions to remediate the stress impact in alignment with the overall strategic and capital plan if certain limits are breached. The results also feed into the recovery planning which is crucial for the recoverability of the Bank in times of crisis. The outcome is presented to senior management up to the Management Board to raise awareness on the highest level as it provides key insights into specific business vulnerabilities and contributes to the overall risk profile assessment of the bank. The group wide stress tests performed in 2017 indicated that the bank’s capitalization together with available mitigation measures allow it to reach the internally set stress exit level being well above regulatory early intervention levels. A reverse stress test is performed annually in order to challenge our business model to determine the severity of scenarios that would cause us to become unviable. Such a reverse stress test is based on a hypothetical macroeconomic scenario and takes into account severe impacts of major risks on our results. Comparing the hypothetical scenario that would be necessary to result in our non-viability according to the reverse stress, to the current economic environment, we consider the probability of occurrence of such a hypothetical macroeconomic scenario as extremely low. Given the extremely low probability of the reverse stress test scenario, we do not believe that our business continuity is at risk.

Stress Testing Framework of Deutsche Bank Group



Risk Reporting and Measurement Systems

Our risk measurement systems support regulatory reporting and external disclosures, as well as internal management reporting across credit, market, liquidity, cross, business, operational and reputational risks. The risk infrastructure incorporates the relevant legal entities and business divisions and provides the basis for reporting on risk positions, capital adequacy and limit, threshold or target utilization to the relevant functions on a regular and ad-hoc basis. Established units within Finance and Risk assume responsibility for measurement, analysis and reporting of risk while promoting sufficient quality and integrity of risk-related data. Our risk management systems are reviewed by Group Audit following a risk-based audit approach.

Deutsche Bank's reporting is an integral part of Deutsche Bank's risk management approach and as such aligns with the organizational setup delivering consistent information on Group level and for material legal entities as well as breakdowns by risk types, business division and material business units.

The following principles guide Deutsche Bank's "risk reporting and monitoring" practices:

– Deutsche Bank monitors risks taken against the risk appetite and risk-reward considerations on various levels across the Group, e.g. Group, business divisions, material business units, material legal entities, risk types, portfolio and counterparty levels.
– Risk reporting is required to be accurate, clear, useful and complete and must convey reconciled and validated risk data to communicate information in a concise manner to permit, across material Financial and Non-Financial Risks, the bank's risk profile is easily and well understood.
– Senior risk committees, such as the Enterprise Risk Committee (ERC) and the Group Risk Committee (GRC), as well as the Management Board who are responsible for risk and capital management receive regular reporting (as well as ad-hoc reporting as required).
– Dedicated teams within Deutsche Bank proactively manage material Financial- and Non-Financial Risks and must ensure that required management information is in place to enable proactive identification and management of risks and avoid undue concentrations within a specific Risk Type and across Risks (Cross-Risk view).

In applying the previously mentioned principles, Deutsche Bank maintains a common basis for all risk reports and aims to minimize individual separate reporting efforts to allow Deutsche Bank to provide consistent information, which only differentiates by granularity and audience focus.

The Bank identifies a large number of metrics within our risk measurement systems which support regulatory reporting and external disclosures, as well as internal management reporting across risks and for material risk types. Deutsche Bank designates a subset of those as "Key Risk Metrics" that represent the most critical ones for which the Bank places an appetite, limit, threshold or target at Group level and / or are reported routinely to senior management for discussion or decision making. The identified Key Risk Metrics include Capital Adequacy and Liquidity metrics; further details can be found in the section "Key Risk Metrics".

While a large number of reports are used across the Bank, Deutsche Bank designates a subset of these as "Key Risk Reports" that are critical to support Deutsche Bank's Risk Management Framework through the provision of risk information to senior management and therefore enable the relevant governing bodies to monitor, steer and control the Bank's risk taking activities effectively.

The main reports on risk and capital management that are used to provide the central governance bodies with information relating to the Group risk profile are the following:

– The monthly Risk and Capital Profile (RCP) report is a Cross-Risk report and provides a comprehensive view of Deutsche Bank's risk profile and is used to inform the ERC, the GRC as well as the Management Board and subsequently the Risk Committee of the Supervisory Board, whereby the level of granularity is customized to the audiences' requirements. The RCP includes risk type specific, business aligned overviews and enterprise-wide risk topics. It also includes updates on Key Group Risk Appetite metrics and other Risk Type Control Metrics as well as Risk development updates on areas of particular interest.
– Overviews of our liquidity and solvency/leverage position are typically presented to the GRC by Group Capital Management and the Group Treasurer on a monthly basis. It comprises information on key metrics including CRR/CRD 4 Common Equity Tier 1 ratio and the CRR/CRD 4 leverage ratio, as well as an overview of our current funding, liquidity status and the liquidity stress test results.
– Group-wide macroeconomic stress tests are typically performed twice per quarter (or more frequently if required). They are reported to and discussed in the ERC and escalated to the GRC if deemed necessary. The stressed key performance indicators are benchmarked against the Group Risk Appetite thresholds.

While the above reports are used at a Group level to monitor and review the risk profile of Deutsche Bank holistically, there are other, supplementing standard and ad-hoc management reports that Risk Type or Business Aligned Risk Management functions use to monitor and control the risk profile.

Recovery and Resolution Planning

The 2007/2008 financial crisis exposed banks and the broader financial market to unprecedented pressures. These pressures led to certain banks seeking significant support from their governments and to large-scale interventions by central banks. The crisis also forced many financial institutions to significantly restructure their businesses and strengthen their capital, liquidity and funding bases. This crisis revealed that many financial institutions were insufficiently prepared for a fast-evolving systemic crisis and thus were unable to act and respond in a way that would avoid potential failure and prevent material adverse impacts on the financial system and ultimately the economy and society.

In response to the crisis, a number of jurisdictions (such as the member states of the European Union, including Germany and the UK as well as the U.S.) have enacted new regulations requiring banks or competent regulatory authorities to develop recovery and resolution plans. The Group recovery plan (“Recovery Plan”) is updated and submitted to our regulators at least annually to reflect changes in the business and the regulatory requirements. The Recovery Plan prepares us to restore our financial strength and viability during an extreme stress situation. The Recovery Plan’s more specific purpose is to outline how we can respond to a financial stress situation that would significantly impact our capital or liquidity position. Therefore it lays out a set of defined actions aimed to protect us, our customers and the markets and prevent a potential resolution event. In line with regulatory guidance, we have identified a wide range of countermeasures that will mitigate different types of stress scenarios. These scenarios originate from both idiosyncratic and market-wide events, which would lead to severe capital and liquidity impacts as well as impacts on our performance and balance sheet. The Recovery Plan is intended to enable us to effectively monitor, escalate, plan and execute actions in the event of a crisis situation.

The Management Board oversees the development of the Recovery Plan and has set up a dedicated contingent governance process to manage financial stress events.

As set out in the Bank Recovery and Resolution Directive (”BRRD”), the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, “SAG”) transforming the BRRD into German national legislation, and the Single Resolution Mechanism Regulation (the “SRM Regulation”), the Group resolution plan is prepared by the resolution authorities, rather than by the bank itself. We work closely with the Single Resolution Board (“SRB”) and the Bundesanstalt für Finanzdienstleistungsaufsicht (“BaFin”) who establish the group resolution plan for Deutsche Bank which is currently based on a single point of entry (“SPE”) bail-in as the preferred resolution strategy. Under the SPE strategy, the parent entity Deutsche Bank AG would be recapitalized through a direct bail-in (write-down and/or conversion to equity of capital instruments (Common Equity Tier1, Additional Tier1, Tier2) and other liabilities eligible for bail-in) to stabilize the group. Within one month after the application of the bail-in tool to recapitalize an institution, the BRRD (as implemented in the SAG) requires such institution to establish a business reorganization plan addressing the causes of failure and aiming to restore the institution's long-term viability.

The BRRD requires banks in EU member states to maintain minimum requirements for own funds and eligible liabilities (“MREL”) to make resolution credible by establishing sufficient loss absorption and recapitalization capacity. Apart from MREL-requirements, Deutsche Bank AG, as a global systemically important bank, will be subject to global minimum standards for Total Loss-Absorbing Capacity (“TLAC”), which sets out strict requirements for the amount and eligibility of instruments to be maintained for bail-in purposes. In particular, TLAC instruments must be subordinated to other senior liabilities. From January 1, 2017, non-structured senior debt instruments issued by Deutsche Bank AG meet the TLAC subordination requirement, since Germany adopted legislation to adjust the creditor hierarchy in insolvency for banks in the German Banking Act. This ensures that a bail-in would be applied first to equity and TLAC instruments, which must be exhausted before a bail-in may affect other senior liabilities such as deposits, derivatives, debt instruments that are “structured” and money market instruments.

In addition, Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) and the implementing regulations issued by the Federal Reserve Board and the Federal Deposit Insurance Corporation (“FDIC”) require each bank holding company with assets of U.S.$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the “U.S. Resolution Plan”). For foreign-based companies subject to these resolution planning requirements such as Deutsche Bank AG, the U.S. Resolution Plan relates only to subsidiaries, branches, agencies and businesses that are domiciled in or whose activities are carried out in whole or in material part in the United States. Deutsche Bank AG filed its last U.S. Resolution Plan in July 2015 and was not required to file a U.S. Resolution Plan in 2016 or 2017. Our next U.S. Resolution Plan is due on July 1, 2018.

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

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

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

MREL and TLAC

Under the Single Resolution Mechanism ("SRM") Regulation, the Bank Recovery and Resolution Directive ("BRRD") and the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, "SAG") banks in the European Union ("EU") are required to meet at all times a robust minimum requirement for own funds and eligible liabilities ("MREL") which is determined on a case-by-case basis by the competent resolution authority.

The Single Resolution Board ("SRB") intends to set binding MREL targets for the majority of the largest and most complex banking groups in its remit as part of the 2017 resolution planning cycle and to communicate the MREL decision to them (via National Resolution Authorities) in the first quarter 2018.

In addition, on November 9, 2015, the Financial Stability Board ("FSB") published a standard that will require, when implemented as law, global systemically important banks ("G-SIBs") to meet a new firm-specific minimum requirement for total loss-absorbing capacity ("TLAC") starting on January 1, 2019.

On July 6, 2017, the FSB published guiding principles on internal TLAC, i.e., the loss absorbing capacity that a resolution entity has committed to material sub-groups so that losses and recapitalization needs of material sub-groups may be passed with legal certainty to the resolution entity of a G-SIB resolution group without subsidiaries within the material sub-groups entering into resolution.

Both the TLAC and MREL requirements are specifically designed to require banks to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers' money.

On November 23, 2016, the European Commission ("EC") proposed a revision of the Capital Requirement Regulation ("CRR") to implement TLAC into EU legislation. In addition, it proposed amendments to the BRRD and the SRM Regulation. Under the Commission's CRR revision proposal, the loss absorbency regime for EU global systemically important institutions ("G-SIIs") would be closely aligned with the international TLAC term sheet. The instruments which qualify under TLAC are Common Equity Tier 1 instruments, Additional Tier 1 instruments, Tier 2 instruments and certain eligible unsecured liabilities. The TLAC term sheet introduces a minimum requirement of 16% of Risk Weighted Assets ("RWAs") or 6% of leverage exposure by January 1, 2019; and 18% of RWAs and 6.75% of leverage exposure by 2022. The resolution authority would be able to request a firm-specific add-on if deemed necessary. For non-G-SIIs banks, the MREL would still be set on a case-by-case basis.

Furthermore, under the German Banking Act, as amended by the German Resolution Mechanism Act, which was published in November 2015, senior bonds rank junior to other senior liabilities, without constituting subordinated debt, in insolvency proceedings opened on or after January 1, 2017. On December 27, 2017, an EU Directive amending the ranking of unsecured debt instruments in the insolvency hierarchy for the purpose of banks' resolution and insolvency proceedings has been published which introduces a common EU approach to banks' creditor hierarchy, thereby enhancing legal certainty in the event of resolution. The Directive introduces non-preferred senior debt instruments as a separate category of senior debt. These new instruments will rank junior to all other senior liabilities but will be senior to subordinated debt provided they have an original contractual maturity of at least one year, do not contain embedded derivatives or be derivatives themselves and the contractual documentation explicitly refers to their lower ranking under normal insolvency proceedings. Member States are required to transpose the amending Directive into national law by December 29, 2018. The new provisions will apply to unsecured debt instruments issued on or after the date of when the respective national law enters into force. Any senior bonds that rank junior to other senior liabilities in accordance with the German Banking Act provisions published in November 2015 will be grandfathered and represent non-preferred senior debt instruments according to the EU Directive published on December 27, 2017.

Risk and Capital Management

Capital Management

Our Treasury function manages solvency, capital adequacy and leverage ratios at Group level and locally in each region. Treasury implements our capital strategy, which itself is developed by the Group Risk Committee and approved by the Management Board, including issuance and repurchase of shares and capital instruments, hedging of capital ratios against foreign exchange swings, limit setting for key financial resources, design of shareholders' equity allocation, and regional capital planning. We are fully committed to maintaining our sound capitalization both from an economic and regulatory perspective. We continuously monitor and adjust our overall capital demand and supply in an effort to achieve an appropriate balance of the economic and regulatory considerations at all times and from all perspectives. These perspectives include book equity based on IFRS accounting standards, regulatory and economic capital as well as specific capital requirements from rating agencies.

Treasury manages the issuance and repurchase of capital instruments, namely Common Equity Tier 1, Additional Tier 1 and Tier 2 capital instruments. Treasury constantly monitors the market for liability management trades. Such trades represent a countercyclical opportunity to create Common Equity Tier 1 capital by buying back our issuances below par.

Our core currencies are Euro, US Dollar and Pound Sterling. Treasury manages the sensitivity of our capital ratios against swings in core currencies. The capital invested into our foreign subsidiaries and branches in the other non-core currencies is largely hedged against foreign exchange swings. Treasury determines which currencies are to be hedged, develops suitable hedging strategies in close cooperation with Risk Management and finally executes these hedges.

In connection with MREL and TLAC requirements, we review our issuance portfolio of senior bonds to make them eligible under bail-in rules. We intend to comply with potential requirements as they become effective.

Resource Limit Setting

Usage of key financial resources is influenced through the following governance processes and incentives.

Target resource capacities are reviewed in our annual strategic plan in line with our CET 1 and Leverage Ratio ambitions. In a quarterly process, the Group Risk Committee approves divisional resource limits for Total Capital Demand and leverage exposure that are based on the strategic plan but adjusted for market conditions and the short-term outlook. Limits are enforced through a close monitoring process and an excess charging mechanism.

Overall regulatory capital requirements are driven by either our CET 1 ratio (solvency) or leverage ratio (leverage) requirements, whichever is the more binding constraint. For the internal capital allocation, the combined contribution of each segment to the Group's Common Equity Tier 1 ratio, the Group's Leverage ratio and the Group's Capital Loss under Stress are weighted to reflect their relative importance and level of constraint to the Group. Contributions to the Common Equity Tier 1 ratio and the Leverage ratio are measured though Risk-Weighted Assets (RWA) and Leverage Ratio Exposure (LRE) assuming full implementation of CRR/CRD 4 rules. The Group's Capital Loss under Stress is a measure of the Group's overall economic risk exposure under a defined stress scenario. In our performance measurement, our methodology also applies different rates for the cost of equity for each of the business segments, reflecting in a more differentiated way the earnings volatility of the individual business models. This enables improved performance management and investment decisions.

Regional capital plans covering the capital needs of our branches and subsidiaries across the globe are prepared on an annual basis and presented to the Group Investment Committee. Most of our subsidiaries are subject to legal and regulatory capital requirements. In developing, implementing and testing our capital and liquidity, we fully take such legal and regulatory requirements into account.

Further, Treasury is represented on the Investment Committee of the largest Deutsche Bank pension fund which sets the investment guidelines. This representation is intended to ensure that pension assets are aligned with pension liabilities, thus protecting our capital base.

Risk Identification and Assessment

We face a variety of risks as a result of our business activities; these risks include credit risk, market risk, business risk, liquidity risk, operational risk and reputational risk as described in the following sections below. Our risk identification and assessment processes utilize our three lines of defense (3LoD) operating model with the first line identifying the key risks and the second line complementing and aggregating identified risks into our global risk type taxonomy and assessing identified risks for their materiality. Operating processes are in place across the organization to capture relevant measures and indicators. The core aim of all processes is to provide adequate transparency and understanding of existing and emerging risk issues, and to ensure a holistic cross-risk perspective. We update the risk inventory at least once a year or at other times if needed, by running a risk identification and materiality assessment process.

We categorize our material risks into financial risks and non-financial risks. Financial risks comprise credit risk (including default, migration, transaction, settlement, exposure, country, mitigation and concentration risks), market risk (including interest-rate, foreign exchange, equity, credit-spread, commodity and other cross asset risks), liquidity risk and business (strategic) risk. Non-financial risks comprise operational risks and reputational risks (with important sub-categories compliance risk, legal risk, model risk and information security risk captured in our operational risk framework). For all material risks common risk management standards apply including having a dedicated risk management function, defining a risk type specific risk appetite and the decision on the amount of capital to be held.

Credit risk, market risk and operational risk attract regulatory capital. As part of our internal capital adequacy assessment process, we calculate the amount of economic capital for credit, market, operational and business risk to cover risks generated from our business activities taking into account diversification effects across those risk types. Furthermore, our economic capital framework embeds additional risks, e.g. reputational risk and refinancing risk, for which no dedicated economic capital models exist. We exclude liquidity risk from economic capital.

Credit Risk Management

Credit Risk Framework

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower, obligor or issuer (which we refer to collectively as “counterparties”) exist, including those claims that we plan to distribute. These transactions are typically part of our non-trading lending activities (such as loans and contingent liabilities) as well as our direct trading activity with clients (such as OTC derivatives). These also include traded bonds and debt securities. Carrying values of equity investments are also disclosed in our Credit Risk section. We manage the respective positions within our market risk and credit risk frameworks.

Based on the annual risk identification and materiality assessment, Credit Risk is grouped into five categories, namely default/ migration risk, country risk, transaction/ settlement risk (exposure risk), mitigation (failure) risk and concentration risk.

- Default/Migration Risk is the risk that a counterparty defaults on its payment obligations or experiences material credit quality deterioration increasing the likelihood of a default.
- Country Risk is the risk that otherwise solvent and willing counterparties are unable to meet their obligations due to direct sovereign intervention or policies.
- Transaction/Settlement Risk (Exposure Risk) is the risk that arises from any existing, contingent or potential future positive exposure.
- Mitigation Risk is the risk of higher losses due to risk mitigation measures not performing as anticipated.
- Concentration Risk is the risk of an adverse development in a specific single counterparty, country, industry or product leading to a disproportionate deterioration in the risk profile of Deutsche Bank’s credit exposures to that counterparty, country, industry or product.

We measure, manage/mitigate and report/monitor our credit risk using the following philosophy and principles:

- Our credit risk management function is independent from our business divisions and in each of our divisions, credit decision standards, processes and principles are consistently applied.
- A key principle of credit risk management is client credit due diligence. Our client selection is achieved in collaboration with our business division counterparts who stand as a first line of defense.

– We aim to prevent undue concentration and tail-risks (large unexpected losses) by maintaining a diversified credit portfolio. Client, industry, country and product-specific concentrations are assessed and managed against our risk appetite.
– We maintain underwriting standards aiming to avoid large undue credit risk on a counterparty and portfolio level. In this regard we assume unsecured cash positions and actively use hedging for risk mitigation purposes. Additionally, we strive to secure our derivative portfolio through collateral agreements and may additionally hedge concentration risks to further mitigate credit risks from underlying market movements.
– Every new credit facility and every extension or material change of an existing credit facility (such as its tenor, collateral structure or major covenants) to any counterparty requires credit approval at the appropriate authority level. We assign credit approval authorities to individuals according to their qualifications, experience and training, and we review these periodically.
– We measure and consolidate all our credit exposures to each obligor across our consolidated Group on a global basis, in line with regulatory requirements.
– We manage credit exposures on the basis of the “one obligor principle” ” (as required under CRR Article 4(1)(39)), under which all facilities to a group of borrowers which are linked to each other (for example by one entity holding a majority of the voting rights or capital of another) are consolidated under one group.
– We have established within Credit Risk Management – where appropriate – specialized teams for deriving internal client ratings, analyzing and approving transactions, monitoring the portfolio or covering workout clients.
– Where required, we have established processes to report credit exposures at legal entity level.

Measuring Credit Risk

Credit risk is measured by credit rating, regulatory and internal capital demand and key credit metrics mentioned below.

The credit rating is an essential part of the Bank’s underwriting and credit process and builds the basis for risk appetite determination on a counterparty and portfolio level, credit decision and transaction pricing as well the determination of credit risk regulatory capital. Each counterparty must be rated and each rating has to be reviewed at least annually. Ongoing monitoring of counterparties helps keep ratings up-to-date. There must be no credit limit without a credit rating. For each credit rating the appropriate rating approach has to be applied and the derived credit rating has to be established in the relevant systems. Different rating approaches have been established to best reflect the specific characteristics of exposure classes, including central governments and central banks, institutions, corporates and retail.

Counterparties in our non-homogenous portfolios are rated by our independent Credit Risk Management function. Country risk related ratings are provided by ERM Risk Research.

Our rating analysis is based on a combination of qualitative and quantitative factors. When rating a counterparty we apply in-house assessment methodologies, scorecards and our 21-grade rating scale for evaluating the credit-worthiness of our counterparties.

Changes to existing credit models and introduction of new models are approved by the Regulatory Credit Risk Model Committee (RCRMC) chaired by the Head of CRM, as well as by the Head of the Model Risk Function or delegate, where appropriate, before the methodologies are used for credit decisions and capital calculation for the first time or before they are significantly changed. Proposals with high impact are recommended for approval to the Management Board. Additionally, the Risk Committee of the Supervisory Board has to be informed regularly about all model changes that have been brought to the attention of the Management Board. Regulatory approval may also be required. The methodology validation is performed independently of model development by Global Model Validation and Governance. The results of the regular validation processes as stipulated by internal policies have to be brought to the attention of the Regulatory Credit Risk Model Forum (RCRMF), even if the validation results do not lead to a change. The validation plan for rating methodologies is presented to RCRMF at the beginning of the calendar year and a status update is given on a quarterly basis.

For Postbank, responsibility for implementation, validation and monitoring of internal rating systems effectiveness is with Postbank’s Group Risk Controlling function and overseen by the model and validation committee, chaired by Postbank’s Head of Group Risk Controlling. An independent model risk and validation function has been established in 2016 in addition to the model risk development unit. All rating systems are subject to approval by Postbank’s Bank Risk Committee chaired by the Chief Risk Officer. Effectiveness of rating systems and rating results are reported to the Postbank Management Board on a regular basis. Joint governance is ensured via a cross committee membership of Deutsche Bank senior managers joining Postbank committees and vice versa.

We measure risk-weighted assets to determine the regulatory capital demand for credit risk using “advanced”, “foundation” and “standard” approaches of which advanced and foundation are approved by our regulator.

The advanced Internal Ratings Based Approach ("IRBA") is the most sophisticated approach available under the regulatory framework for credit risk and allows us to make use of our internal credit rating methodologies as well as internal estimates of specific further risk parameters. These methods and parameters represent long-used key components of the internal risk measurement and management process supporting the credit approval process, the economic capital and expected loss calculation and the internal monitoring and reporting of credit risk. The relevant parameters include the probability of default ("PD"), the loss given default ("LGD") and the maturity ("M") driving the regulatory risk-weight and the credit conversion factor ("CCF") as part of the regulatory exposure at default ("EAD") estimation. For the majority of derivative counterparty exposures as well as securities financing transactions ("SFT"), we make use of the internal model method ("IMM") in accordance with CRR and SolvV to calculate EAD. For most of our internal rating systems more than seven years of historical information is available to assess these parameters. Our internal rating methodologies aim at point-in-time rather than a through-the-cycle rating, but in line with regulatory solvency requirements, they are calibrated based on long-term averages of observed default rates.

We apply the foundation IRBA to the majority of our remaining foundation IRBA eligible credit portfolios at Postbank. The foundation IRBA is an approach available under the regulatory framework for credit risk allowing institutions to make use of their internal rating methodologies while using pre-defined regulatory values for all other risk parameters. Parameters subject to internal estimates include the probability of default ("PD") while the loss given default ("LGD") and the credit conversion factor ("CCF") are defined in the regulatory framework.

We apply the standardized approach to a subset of our credit risk exposures. The standardized approach measures credit risk either pursuant to fixed risk weights, which are predefined by the regulator, or through the application of external ratings. We assign certain credit exposures permanently to the standardized approach in accordance with Article 150 CRR. These are predominantly exposures to the Federal Republic of Germany and other German public sector entities as well as exposures to central governments of other European Member States that meet the required conditions. These exposures make up the majority of the exposures carried in the standardized approach and receive predominantly a risk weight of zero percent. For internal purposes, however, these exposures are subject to an internal credit assessment and fully integrated in the risk management and economic capital processes.

In addition to the above described regulatory capital demand, we determine the internal capital demand for credit risk via an economic capital model.

We calculate economic capital for the default risk, country risk and settlement risk as elements of credit risk. In line with our economic capital framework, economic capital for credit risk is set at a level to absorb with a probability of 99.9 % very severe aggregate unexpected losses within one year. Our economic capital for credit risk is derived from the loss distribution of a portfolio via Monte Carlo Simulation of correlated rating migrations. The loss distribution is modeled in two steps. First, individual credit exposures are specified based on parameters for the probability of default, exposure at default and loss given default. In a second step, the probability of joint defaults is modeled through the introduction of economic factors, which correspond to geographic regions and industries. The simulation of portfolio losses is then performed by an internally developed model, which takes rating migration and maturity effects into account. Effects due to wrong-way derivatives risk (i.e., the credit exposure of a derivative in the default case is higher than in non-default scenarios) are modeled by applying our own alpha factor when deriving the exposure at default for derivatives and securities financing transactions under the CRR. We allocate expected losses and economic capital derived from loss distributions down to transaction level to enable management on transaction, customer and business level.

Besides the credit rating which is the key credit risk metric we apply for managing our credit portfolio, including transaction approval and the setting of risk appetite, we establish internal limits and credit exposures under these limits. Credit limits set forth maximum credit exposures we are willing to assume over specified periods. In determining the credit limit for a counterparty, we consider the counterparty's credit quality by reference to our internal credit rating. Credit limits and credit exposures are both measured on a gross and net basis where net is derived by deducting hedges and certain collateral from respective gross figures. For derivatives, we look at current market values and the potential future exposure over the relevant time horizon which is based upon our legal agreements with the counterparty. We generally also take into consideration the risk-return characteristics of individual transactions and portfolios. Risk-Return metrics explain the development of client revenues as well as capital consumption. In this regard we also look at the client revenues in relation to the balance sheet consumption.

Managing and Mitigation of Credit Risk

Managing Credit Risk on Counterparty Level

Credit-related counterparties are principally allocated to credit officers within credit teams which are aligned to types of counterparty (such as financial institutions, corporates or private individuals) or economic area (e.g., emerging markets) and dedicated rating analyst teams. The individual credit officers have the relevant expertise and experience to manage the credit risks associated with these counterparties and their associated credit related transactions. For retail clients, credit decision making and credit monitoring is highly automated for efficiency reasons. Credit Risk Management has full oversight of the respective processes and tools used in the retail credit process. It is the responsibility of each credit officer to undertake ongoing credit monitoring for their allocated portfolio of counterparties. We also have procedures in place intended to identify at an early stage credit exposures for which there may be an increased risk of loss.

In instances where we have identified counterparties where there is a concern that the credit quality has deteriorated or appears likely to deteriorate to the point where they present a heightened risk of loss in default, the respective exposure is generally placed on a “watch list”. We aim to identify counterparties that, on the basis of the application of our risk management tools, demonstrate the likelihood of problems well in advance in order to effectively manage the credit exposure and maximize the recovery. The objective of this early warning system is to address potential problems while adequate options for action are still available. This early risk detection is a tenet of our credit culture and is intended to ensure that greater attention is paid to such exposures.

Credit limits are established by the Credit Risk Management function via the execution of assigned credit authorities. This also applies to settlement risk that must fall within limits pre-approved by Credit Risk Management considering risk appetite and in a manner that reflects expected settlement patterns for the subject counterparty. Credit approvals are documented by the signing of the credit report by the respective credit authority holders and retained for future reference.

Credit authority is generally assigned to individuals as personal credit authority according to the individual’s professional qualification, experience and training. All assigned credit authorities are reviewed on a periodic basis to help ensure that they are commensurate with the individual performance of the authority holder.

Where an individual’s personal authority is insufficient to establish required credit limits, the transaction is referred to a higher credit authority holder or where necessary to an appropriate credit committee. Where personal and committee authorities are insufficient to establish appropriate limits, the case is referred to the Management Board for approval.

Mitigation of Credit Risk on Counterparty Level

In addition to determining counterparty credit quality and our risk appetite, we also use various credit risk mitigation techniques to optimize credit exposure and reduce potential credit losses. Credit risk mitigants are applied in the following forms:

– Comprehensive and enforceable credit documentation with adequate terms and conditions.
– Collateral held as security to reduce losses by increasing the recovery of obligations.
– Risk transfers, which shift the loss arising from the probability of default risk of an obligor to a third party including hedging executed by our Credit Portfolio Strategies Group.
– Netting and collateral arrangements which reduce the credit exposure from derivatives and securities financing transactions (e.g. repo transactions).

Collateral

We regularly agree on collateral to be received from or to be provided to customers in contracts that are subject to credit risk. Collateral is security in the form of an asset or third-party obligation that serves to mitigate the inherent risk of credit loss in an exposure, by either substituting the counterparty default risk or improving recoveries in the event of a default. While collateral can be an alternative source of repayment, it does not replace the necessity of high quality underwriting standards and a thorough assessment of the debt service ability of the counterparty in line with CRR Article 194 (9).

We segregate collateral received into the following two types:

– Financial and other collateral, which enables us to recover all or part of the outstanding exposure by liquidating the collateral asset provided, in cases where the counterparty is unable or unwilling to fulfill its primary obligations. Cash collateral, securities (equity, bonds), collateral assignments of other claims or inventory, equipment (i.e., plant, machinery and aircraft) and real estate typically fall into this category. All financial collateral is regularly, mostly daily, revalued and measured against the respective credit exposure. The value of other collateral, including real estate, is monitored based upon established processes that includes regular revaluations by internal and/or external experts.
– Guarantee collateral, which complements the counterparty's ability to fulfill its obligation under the legal contract and as such is provided by third parties. Letters of credit, insurance contracts, export credit insurance, guarantees, credit derivatives and risk participations typically fall into this category. Guarantee collateral with a non-investment grade rating of the guarantor is limited.

Our processes seek to ensure that the collateral we accept for risk mitigation purposes is of high quality. This includes seeking to have in place legally effective and enforceable documentation for realizable and measureable collateral assets which are evaluated regularly by dedicated teams. The assessment of the suitability of collateral for a specific transaction is part of the credit decision and must be undertaken in a conservative way, including collateral haircuts that are applied. We have collateral type specific haircuts in place which are regularly reviewed and approved. In this regard, we strive to avoid "wrong-way" risk characteristics where the counterparty's risk is positively correlated with the risk of deterioration in the collateral value. For guarantee collateral, the process for the analysis of the guarantor's creditworthiness is aligned to the credit assessment process for counterparties.

Risk Transfers

Risk transfers to third parties form a key part of our overall risk management process and are executed in various forms, including outright sales, single name and portfolio hedging, and securitizations. Risk transfers are conducted by the respective business units and by our Credit Portfolio Strategies Group (CPSG), in accordance with specifically approved mandates.

CPSG manages the residual credit risk of loans and lending-related commitments of the institutional and corporate credit portfolio, the leveraged portfolio and the medium-sized German companies' portfolio within our CIB Division.

Acting as a central pricing reference, CPSG provides the businesses with an observed or derived capital market rate for loan applications; however, the decision of whether or not the business can enter into the credit risk remains exclusively with Credit Risk Management.

CPSG is concentrating on two primary objectives within the credit risk framework to enhance risk management discipline, improve returns and use capital more efficiently:

– to reduce single-name credit risk concentrations within the credit portfolio and
– to manage credit exposures by utilizing techniques including loan sales, securitization via collateralized loan obligations, sub-participations and single-name and portfolio credit default swaps.

Netting and Collateral Arrangements for Derivatives and Securities Financing Transactions

Netting is applicable to both exchange traded derivatives and OTC derivatives. Netting is also applied to securities financing transactions (e.g. repurchase, securities lending and margin lending transactions) as far as documentation, structure and nature of the risk mitigation allow netting with the underlying credit risk.

All exchange traded derivatives are cleared through central counterparties ("CCPs"), which interpose themselves between the trading entities by becoming the counterparty to each of the entities. Where legally required or where available and to the extent agreed with our counterparties, we also use CCP clearing for our OTC derivative transactions.

The Dodd-Frank Act ("DFA") and related Commodity Futures Trading Commission ("CFTC") rules introduced in 2013 mandatory CCP clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps. Additionally, the CFTC adopted final rules in 2016 that require additional interest rate swaps to be cleared on a phased implementation schedule ending in October 2018. The European Regulation (EU) No 648/2012 on OTC Derivatives, Central Counterparties and Trade Repositories ("EMIR") and the Commission Delegated Regulations (EU) 2015/2205, (EU) 2015/592 and (EU) 2016/1178 based thereupon introduced mandatory CCP clearing in the EU clearing for certain standardized OTC derivatives transactions. Mandatory CCP clearing in the EU began for certain interest rate derivatives on June 21, 2016 and for certain iTraxx-based credit derivatives and additional interest rate derivatives on February 9, 2017. Article 4 (2) of EMIR authorizes competent authorities to exempt intragroup transactions from mandatory CCP clearing, provided certain requirements, such as full consolidation of the intragroup transactions and the application of an appropriate centralized risk evaluation, measurement and control procedure are met. The Bank successfully applied for the clearing exemption for most of its regulatory-consolidated subsidiaries with intragroup derivatives, including e.g., Deutsche Bank Securities Inc. and Deutsche Bank Luxembourg S.A. As of December 31, 2017, the Bank has obtained intragroup exemptions from the EMIR clearing obligation for 70 bilateral intragroup relationships. The extent of the exemptions differs as not all entities enter into relevant transaction types subject to the clearing obligation. Of the 70 intragroup relationships, 17 are relationships where both entities are established in the Union (EU) for which a full exemption has been granted, and 53 are relationships where one is established in a third country (“Third Country Relationship”). Third Country Relationships currently require repeat applications for each new asset class being subject to the clearing obligation. Such repeat applications have been filed for 39 of the Third Country Relationships.

The rules and regulations of CCPs typically provide for the bilateral set off of all amounts payable on the same day and in the same currency (“payment netting”) thereby reducing our settlement risk. Depending on the business model applied by the CCP, this payment netting applies either to all of our derivatives cleared by the CCP or at least to those that form part of the same class of derivatives. Many CCP rules and regulations also provide for the termination, close-out and netting of all cleared transactions upon the CCP’s default (“close-out netting”), which reduced our credit risk. In our risk measurement and risk assessment processes we apply close-out netting only to the extent we have satisfied ourselves of the legal validity and enforceability of the relevant CCP’s close-out netting provisions.

In order to reduce the credit risk resulting from OTC derivative transactions, where CCP clearing is not available, we regularly seek the execution of standard master agreements (such as master agreements for derivatives published by the International Swaps and Derivatives Association, Inc. (ISDA) or the German Master Agreement for Financial Derivative Transactions) with our counterparts. A master agreement allows for the close-out netting of rights and obligations arising under derivative transactions that have been entered into under such a master agreement upon the counterparty’s default, resulting in a single net claim owed by or to the counterparty. For parts of the derivatives business (e.g., foreign exchange transactions) we also enter into master agreements under which payment netting applies in respect to transactions covered by such master agreements, reducing our settlement risk. In our risk measurement and risk assessment processes we apply close-out netting only to the extent we have satisfied ourselves of the legal validity and enforceability of the master agreement in all relevant jurisdictions.

Also, we enter into credit support annexes (“CSA”) to master agreements in order to further reduce our derivatives-related credit risk. These annexes generally provide risk mitigation through periodic, usually daily, margining of the covered exposure. The CSAs also provide for the right to terminate the related derivative transactions upon the counterparty’s failure to honor a margin call. As with netting, when we believe the annex is enforceable, we reflect this in our exposure measurement.

The Dodd-Frank Act and CFTC rules thereunder, including CFTC rules § 23.504 and § 23.158, as well as EMIR and Commission Delegated Regulation based thereupon, namely Commission Delegated Regulation (EU) 2016/2251, introduced the mandatory use of master agreements and related CSAs, which must be executed prior to or contemporaneously with entering into an uncleared OTC derivative transaction. Under U.S. margin rules adopted by U.S. prudential regulators (the Federal Reserve, the FDIC, the Office of the Comptroller of the Currency, the Farm Credit Administration and Federal Housing Finance Agency) and the CFTC, we are required to post and collect initial margin and variation margin for our derivatives exposures with other derivatives dealers, as well as with our counterparties that (a) are “financial end users,” as that term is defined in the U.S. margin rules, and (b) have an average daily aggregate notional amount of uncleared swaps, uncleared security-based swaps, foreign exchange forwards and foreign exchange swaps exceeding U.S.$ 8 billion in June, July and August of the previous calendar year. The U.S. margin rules additionally require us to post and collect variation margin for our derivatives with other financial end user counterparties. These margin requirements are subject to a U.S.$ 50 million threshold for initial margin and a zero threshold for variation margin, with a combined U.S.$ 500,000 minimum transfer amount. The U.S. margin requirements have been in effect for large banks since September 2016, with additional variation margin requirements having come into effect March 1, 2017 and additional initial margin requirements phased in on an annual basis from September 2017 through September 2020.

Under EMIR the CSA must provide for daily valuation and daily variation margining based on a zero threshold and a minimum transfer amount of not more than € 500,000. For large derivative exposures exceeding € 8 billion, initial margin has to be posted as well. The variation margin requirements under EMIR apply as of March 1, 2017; the initial margin requirements will be subject to a staged phase-in until September 1, 2020. Pursuant to Article 11 (5) to (10) of EMIR competent authorities are authorized to exempt intragroup transactions from the margining obligation, provided certain requirements are met. While some of those requirements are the same as for the EMIR clearing exemptions (see above), there are additional requirements such as the absence of any current or foreseen practical or legal impediment to the prompt transfer of funds or repayment of liabilities between intragroup counterparties. The Bank plans to make use of this exemption. The Bank has successfully applied for the collateral exemption for some of its regulatory-consolidated subsidiaries with intragroup derivatives, including, e.g., Deutsche Bank Securities Inc. and Deutsche Bank Luxembourg S.A. As of December 31, 2017, the Bank has obtained intragroup exemptions from the EMIR collateral obligation for 13 bilateral intragroup relationships, and one application is still pending.

Certain CSAs to master agreements provide for rating-dependent triggers, where additional collateral must be pledged if a party's rating is downgraded. We also enter into master agreements that provide for an additional termination event upon a party's rating downgrade. These downgrade provisions in CSAs and master agreements usually apply to both parties but in some agreements may apply to us only. We analyze and monitor our potential contingent payment obligations resulting from a rating downgrade in our stress testing approach for liquidity risk on an ongoing basis. For an assessment of the quantitative impact of a downgrading of our credit rating please refer to table “Stress Testing Results” in the section “Liquidity Risk”.

Concentrations within Credit Risk Mitigation

Concentrations within credit risk mitigations taken may occur if a number of guarantors and credit derivative providers with similar economic characteristics are engaged in comparable activities with changes in economic or industry conditions affecting their ability to meet contractual obligations. We use a range of tools and metrics to monitor our credit risk mitigating activities.

For more qualitative and quantitative details in relation to the application of credit risk mitigation and potential concentration effects please refer to the section “Maximum Exposure to Credit Risk”.

Managing Credit Risk on Portfolio Level

On a portfolio level, significant concentrations of credit risk could result from having material exposures to a number of counterparties with similar economic characteristics, or who are engaged in comparable activities, where these similarities may cause their ability to meet contractual obligations to be affected in the same manner by changes in economic or industry conditions.

Our portfolio management framework supports a comprehensive assessment of concentrations within our credit risk portfolio in order to keep concentrations within acceptable levels.

Industry Risk Management

To manage industry risk, we have grouped our corporate and financial institutions counterparties into various industry sub-portfolios. For each of these portfolios an “Industry Strategy Document” is prepared, usually on an annual basis. This report highlights industry developments and risks to our credit portfolio, reviews cross-risk concentration risks, analyses the risk/reward profile of the portfolio and incorporates an economic downside stress test. Finally, this analysis is used to define the credit strategies for the portfolio in question.

Beyond credit risk, our Industry Risk Framework comprises of Market Risk thresholds for Traded Credit Positions while key non-financial risks are closely monitored.

The Industry Strategy Documents have been presented to the Enterprise Risk Committee. In addition to these analyses, the development of the industry portfolios is regularly monitored during the year and is compared with the approved portfolio strategies. Regular overviews are prepared for the Enterprise Risk Committee to discuss recent developments and to agree on actions where necessary.

Country Risk Management

Avoiding undue concentrations from a regional perspective is also an integral part of our credit risk management framework. In order to achieve this, country risk limits are applied to Emerging Markets as well as selected Developed Markets countries (based on internal country risk ratings). Emerging Markets are grouped into regions and for each region, as well as for the Higher Risk Developed Markets, a “Country Strategy Document” is prepared, usually on an annual basis. These reports assess key macroeconomic developments and outlook, review portfolio composition and cross-risk concentration risks and analyze the risk/reward profile of the portfolio. Based on this, thresholds and strategies are set for countries and, where relevant, for the region as a whole. Country risk thresholds are approved by our Enterprise Risk Committee and by the Management Board at Postbank for respective portfolios.

In our Country Limit framework, thresholds are established for counterparty credit risk exposures in a given country to manage the aggregated credit risk subject to country-specific economic and political events. These thresholds include exposures to entities incorporated locally as well as subsidiaries of foreign multinational corporations. Also, gap risk thresholds are set to control the risk of loss due to intra-country wrong-way risk exposure.

Beyond credit risk, our Country Risk Framework comprises Market Risk thresholds for trading positions in emerging markets that are based on the P&L impact of potential stressed market events on these positions. Furthermore we take into consideration treasury risk comprising thresholds for capital positions and intra-group funding exposure of Deutsche Bank entities in above countries given the transfer risk inherent in these cross-border positions. Key non-financial risks are closely monitored.

Our country risk ratings represent a key tool in our management of country risk. They are established by the independent ERM Risk Research function within Deutsche Bank and include:

- Sovereign rating: A measure of the probability of the sovereign defaulting on its foreign or local currency obligations.
- Transfer risk rating: A measure of the probability of a “transfer risk event”, i.e., the risk that an otherwise solvent debtor is unable to meet its obligations due to inability to obtain foreign currency or to transfer assets as a result of direct sovereign intervention.
- Event risk rating: A measure of the probability of major disruptions in the market risk factors relating to a country (interest rates, credit spreads, etc.). Event risks are measured as part of our event risk scenarios, as described in the section “Market Risk Measurement” of this report.

All sovereign and transfer risk ratings are reviewed, at least on an annual basis.

Product/Asset Class specific Risk Management

Complementary to our counterparty, industry and country risk approach, we focus on product/asset class specific risk concentrations and selectively set limits, thresholds or indicators where required for risk management purposes. Specific risk limits are set in particular if a concentration of transactions of a specific type might lead to significant losses under certain cases. In this respect, correlated losses might result from disruptions of the functioning of financial markets, significant moves in market parameters to which the respective product is sensitive, macroeconomic default scenarios or other factors. Specific focus is put on concentrations of transactions with underwriting risks where we underwrite commitments with the intention to sell down or distribute part of the risk to third parties. These commitments include the undertaking to fund bank loans and to provide bridge loans for the issuance of public bonds. The risk is that we may not be successful in the distribution of the facilities, meaning that we would have to hold more of the underlying risk for longer periods of time than originally intended. These underwriting commitments are additionally exposed to market risk in the form of widening credit spreads. We dynamically hedge this credit spread risk to be within the approved market risk limit framework.

In addition to underwriting risk, we also focus on concentration of transactions with specific risk dynamics (including risk to commercial real estate and risk from securitization positions).

Furthermore, in our PCC businesses, we apply product-specific strategies setting our risk appetite for sufficiently homogeneous portfolios where tailored client analysis is secondary, such as the retail portfolios of mortgages and business and consumer finance products. In Wealth Management, target levels are set for global concentrations along products as well as based on type and liquidity of collateral.

Market Risk Management

Market Risk Framework

The vast majority of our businesses are subject to market risk, defined as the potential for change in the market value of our trading and invested positions. Risk can arise from changes in interest rates, credit spreads, foreign exchange rates, equity prices, commodity prices and other relevant parameters, such as market volatility and market implied default probabilities.

One of the primary objectives of Market Risk Management, a part of our independent Risk function, is to ensure that our business units’ risk exposure is within the approved appetite commensurate with its defined strategy. To achieve this objective, Market Risk Management works closely together with risk takers (“the business units”) and other control and support groups.

We distinguish between three substantially different types of market risk:

- Trading market risk arises primarily through the market-making and client facilitation activities of the Corporate & Investment Bank Corporate Division. This involves taking positions in debt, equity, foreign exchange, other securities and commodities as well as in equivalent derivatives.
- Traded default risk arising from defaults and rating migrations relating to trading instruments.
- Nontrading market risk arises from market movements, primarily outside the activities of our trading units, in our banking book and from off-balance sheet items. This includes interest rate risk, credit spread risk, investment risk and foreign exchange risk as well as market risk arising from our pension schemes, guaranteed funds and equity compensation. Nontrading market risk also includes risk from the modeling of client deposits as well as savings and loan products.

Market Risk Management governance is designed and established to promote oversight of all market risks, effective decision-making and timely escalation to senior management.

Market Risk Management defines and implements a framework to systematically identify, assess, monitor and report our market risk. Market risk managers identify market risks through active portfolio analysis and engagement with the business areas.

Market Risk Measurement

We aim to accurately measure all types of market risks by a comprehensive set of risk metrics embedding accounting, economic and regulatory considerations.

We measure market risks by several internally developed key risk metrics and regulatory defined market risk approaches.

Trading Market Risk

Our primary mechanism to manage trading market risk is the application of our Risk Appetite framework of which the limit framework is a key component. Our Management Board, supported by Market Risk Management, sets group-wide value-at-risk, economic capital and portfolio stress testing limits for market risk in the trading book. Market Risk Management allocates this overall appetite to our Corporate Divisions and individual business units within them based on established and agreed business plans. We also have business aligned heads within Market Risk Management who establish business limits, by allocating the limit down to individual portfolios, geographical regions and types of market risks.

Value-at-risk, economic capital and Portfolio Stress Testing limits are used for managing all types of market risk at an overall portfolio level. As an additional and important complementary tool for managing certain portfolios or risk types, Market Risk Management performs risk analysis and business specific stress testing. Limits are also set on sensitivity and concentration/liquidity, exposure, business-level stress testing and event risk scenarios, taking into consideration business plans and the risk vs return assessment.

Business units are responsible for adhering to the limits against which exposures are monitored and reported. The market risk limits set by Market Risk Management are monitored on a daily, weekly and monthly basis, dependent on the risk management tool being used.

Internally developed Market Risk Models

Value-at-Risk (VaR)

VaR is a quantitative measure of the potential loss (in value) of Fair Value positions due to market movements that will not be exceeded in a defined period of time and with a defined confidence level.

Our value-at-risk for the trading businesses is based on our own internal model. In October 1998, the German Banking Supervisory Authority (now the BaFin) approved our internal model for calculating the regulatory market risk capital for our general and specific market risks. Since then the model has been continually refined and approval has been maintained.

We calculate VaR using a 99 % confidence level and a one day holding period. This means we estimate there is a 1 in 100 chance that a mark-to-market loss from our trading positions will be at least as large as the reported VaR. For regulatory purposes, which include the calculation of our risk-weighted assets, the holding period is ten days.

We use one year of historical market data as input to calculate VaR. The calculation employs a Monte Carlo Simulation technique, and we assume that changes in risk factors follow a well-defined distribution, e.g. normal or non-normal (t, skew-t, Skew-Normal). To determine our aggregated VaR, we use observed correlations between the risk factors during this one year period.

Our VaR model is designed to take into account a comprehensive set of risk factors across all asset classes. Key risk factors are swap/government curves, index and issuer-specific credit curves, funding spreads, single equity and index prices, foreign exchange rates, commodity prices as well as their implied volatilities. To help ensure completeness in the risk coverage, second order risk factors, e.g. CDS index vs. constituent basis, money market basis, implied dividends, option-adjusted spreads and precious metals lease rates are considered in the VaR calculation.

For each business unit a separate VaR is calculated for each risk type, e.g. interest rate risk, credit spread risk, equity risk, foreign exchange risk and commodity risk. For each risk type this is achieved by deriving the sensitivities to the relevant risk type and then simulating changes in the associated risk drivers. “Diversification effect” reflects the fact that the total VaR on a given day will be lower than the sum of the VaR relating to the individual risk types. Simply adding the VaR figures of the individual risk types to arrive at an aggregate VaR would imply the assumption that the losses in all risk types occur simultaneously.

The model incorporates both linear and, especially for derivatives, nonlinear effects through a combination of sensitivity-based and revaluation approaches.

The VaR measure enables us to apply a consistent measure across all of our fair value businesses and products. It allows a comparison of risk in different businesses, and also provides a means of aggregating and netting positions within a portfolio to reflect correlations and offsets between different asset classes. Furthermore, it facilitates comparisons of our market risk both over time and against our daily trading results.

When using VaR estimates a number of considerations should be taken into account. These include:

– The use of historical market data may not be a good indicator of potential future events, particularly those that are extreme in nature. This “backward-looking” limitation can cause VaR to understate future potential losses (as in 2008), but can also cause it to be overstated.
– Assumptions concerning the distribution of changes in risk factors, and the correlation between different risk factors, may not hold true, particularly during market events that are extreme in nature. The one day holding period does not fully capture the market risk arising during periods of illiquidity, when positions cannot be closed out or hedged within one day.
– VaR does not indicate the potential loss beyond the 99^{th} quantile.
– Intra-day risk is not reflected in the end of day VaR calculation.
– There may be risks in the trading or banking book that are partially or not captured by the VaR model.

We are committed to the ongoing development of our internal risk models, and we allocate substantial resources to reviewing, validating and improving them. Additionally, we have further developed and improved our process of systematically capturing and evaluating risks currently not captured in our value-at-risk model. An assessment is made to determine the level of materiality of these risks and material risks are prioritized for inclusion in our internal model. Risks not in value-at-risk are monitored and assessed on a regular basis through our Risk Not In VaR (RNIV) framework.

Stressed Value-at-Risk

Stressed Value-at-Risk calculates a stressed value-at-risk measure based on a one year period of significant market stress. We calculate a stressed value-at-risk measure using a 99 % confidence level. The holding period is one day for internal purposes and ten days for regulatory purposes. Our stressed value-at-risk calculation utilizes the same systems, trade information and processes as those used for the calculation of value-at-risk. The only difference is that historical market data and observed correlations from a period of significant financial stress (i.e., characterized by high volatilities) is used as an input for the Monte Carlo Simulation.

The time window selection process for the stressed value-at-risk calculation is based on the identification of a time window characterized by high levels of volatility in the top value-at-risk contributors. The identified window is then further validated by comparing the SVaR results to neighboring windows using the complete Group portfolio.

Incremental Risk Charge

Incremental Risk Charge captures default and credit rating migration risks for credit-sensitive positions in the trading book. It applies to credit products over a one-year capital horizon at a 99.9 % confidence level, employing a constant position approach. We use a Monte Carlo Simulation for calculating incremental risk charge as the 99.9 % quantile of the portfolio loss distribution and for allocating contributory incremental risk charge to individual positions.

The model captures the default and migration risk in an accurate and consistent quantitative approach for all portfolios. Important parameters for the incremental risk charge calculation are exposures, recovery rates, maturity ratings with corresponding default and migration probabilities and parameters specifying issuer correlations.

Comprehensive Risk Measure

Comprehensive Risk Measure captures incremental risk for the corporate correlation trading portfolio calculated using an internal model subject to qualitative minimum requirements as well as stress testing requirements. The comprehensive risk measure for the correlation trading portfolio is based on our own internal model.

We calculate the comprehensive risk measure based on a Monte Carlo Simulation technique to a 99.9 % confidence level and a capital horizon of one year. Our model is applied to the eligible corporate correlation trading positions where typical products include collateralized debt obligations, nth-to-default credit default swaps, and commonly traded index- and single-name credit default swaps used to risk manage these corporate correlation products.

Trades subject to the comprehensive risk measure have to meet minimum liquidity standards to be eligible. The model incorporates concentrations of the portfolio and nonlinear effects via a full revaluation approach.

For regulatory reporting purposes, the comprehensive risk measure represents the higher of the internal model spot value at the reporting dates, their preceding 12-week average calculation, and the floor, where the floor is equal to 8 % of the equivalent capital charge under the standardized approach securitization framework. Since the first quarter of 2016, the CRM RWA calculations include two regulatory-prescribed add-ons which cater for (a) stressing the implied correlation within nth-to-default baskets and (b) any stress test loss in excess of the internal model spot value.

Market Risk Standardized Approach

Market Risk Management monitors exposures and concentrations for certain exposures under the specific Market Risk Standardized Approach (“MRSA”). We use the MRSA to determine the regulatory capital charge for the specific market risk of trading book securitizations which fall outside the scope of the regulatory correlation trading portfolio.

We also use the MRSA to determine the regulatory capital charge for longevity risk as set out in CRR/CRD 4 regulations. Longevity risk is the risk of adverse changes in life expectancies resulting in a loss in value on longevity linked policies and transactions. For risk management purposes, stress testing and economic capital allocations are also used to monitor and manage longevity risk. Furthermore, certain types of investment funds require a capital charge under the MRSA. For risk management purposes, these positions are also included in our internal reporting framework.

Market Risk Stress Testing

Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and movements in individual risk factors. It is one of the core quantitative tools used to assess the market risk of Deutsche Bank’s positions and complements VaR and Economic Capital. Market Risk Management performs several types of stress testing to capture the variety of risks (Portfolio Stress Testing, individual specific stress tests and Event Risk Scenarios) and also contributes to Group-wide stress testing. These are also set at varying severities ranging from extreme for capital adequacy assessment to mild for earning stability purposes.

Trading Market Risk Economic Capital (TMR EC)

Our trading market risk economic capital model - scaled Stressed VaR based EC (SVaR based EC) - comprises two core components, the “common risk” component covering risk drivers across all businesses and the “business-specific risk” component, which enriches the Common Risk via a suite of Business Specific Stress Tests (BSSTs). Both components are calibrated to historically observed severe market shocks. Common risk is calculated using a scaled version of the Regulatory SVaR framework while BSSTs are designed to capture more product/business-related bespoke risks (e.g. complex basis risks) as well as higher order risks not captured in the common risk component.

Traded Default Risk Economic Capital (TDR EC)

TDR EC captures the relevant credit exposures across our trading and fair value banking books. Trading book exposures are monitored by MRM via single name concentration and portfolio thresholds which are set based upon rating, size and liquidity. Single name concentration risk thresholds are set for two key metrics: Default Exposure, i.e., the P&L impact of an instantaneous default at the current recovery rate (RR), and bond equivalent Market Value (MV), i.e. default exposure at 0 % recovery. In order to capture diversification and concentration effects we perform a joint calculation for traded default risk economic capital and credit risk economic capital. Important parameters for the calculation of traded default risk are exposures, recovery rates and default probabilities as well as maturities. The probability of joint rating downgrades and defaults is determined by the default and rating correlations of the portfolio model. These correlations are specified through systematic factors that represent countries, geographical regions and industries.

Trading Market Risk Reporting

Market Risk Management reporting creates transparency on the risk profile and facilitates the understanding of core market risk drivers to all levels of the organization. The Management Board and Senior Governance Committees receive regular reporting, as well as ad hoc reporting as required, on market risk, regulatory capital and stress testing. Senior Risk Committees receive risk information at a number of frequencies, including weekly or monthly.

Additionally, Market Risk Management produces daily and weekly Market Risk specific reports and daily limit utilization reports for each business owner.

Regulatory prudent valuation of assets carried at fair value

Pursuant to Article 34 CRR institutions shall apply the prudent valuation requirements of Article 105 CRR to all assets measured at fair value and shall deduct from CET 1 capital the amount of any additional value adjustments necessary.

We determined the amount of the additional value adjustments based on the methodology defined in the Commission Delegated Regulation (EU) 2016/101.

As of December 31, 2017 the amount of the additional value adjustments was € 1.2 billion.

Based on Article 159 CRR the total amount of general and specific credit risk adjustments and additional value adjustments for exposures that are treated under the Internal Ratings Based Approach for credit risk and that are in scope of the expected loss calculation may be subtracted from the total expected loss amount related to these exposures. Any remaining positive difference must be deducted from CET 1 capital pursuant to Article 36 (1) lit. d. CRR.

As of December 31, 2017 the reduction of the expected loss from subtracting the additional value adjustments was € 0.3 billion, which partly mitigated the negative impact of the additional value adjustments on our CET 1 capital.

Nontrading Market Risk

Nontrading market risk arises primarily from outside the activities of our trading units, in our banking book and from certain off-balance sheet items. Significant market risk factors the Group is exposed to and are overseen by risk management groups in that area are:

– Interest rate risk (including risk from embedded optionality and changes in behavioral patterns for certain product types), credit spread risk, foreign exchange risk, equity risk (including investments in public and private equity as well as real estate, infrastructure and fund assets).
– Market risks from off-balance sheet items such as pension schemes and guarantees as well as structural foreign exchange risk and equity compensation risk.

Interest Rate Risk in the Banking Book

Interest rate risk in the banking book is the current or prospective risk, to both the Group's capital and earnings, arising from movements in interest rates, which affect the Group's banking book exposures. This includes gap risk, which arises from the term structure of banking book instruments, basis risk, which describes the impact of relative changes in interest rates for financial instruments that are priced using different interest rate curves, as well as option risk, which arises from option derivative positions or from optional elements embedded in financial instruments.

The Group manages its IRRBB exposures using economic value as well as earnings based measures. Our Group Treasury division is mandated to manage the interest rate risk centrally on a fiduciary basis, with Market Risk Management acting as an independent oversight function.

Economic value based measures look at the change in economic value of banking book of assets, liabilities and off-balance sheet exposures resulting from interest rate movements, independent of the accounting treatment. Thereby the Group measures the change in Economic Value of Equity ("ΔEVE") as the maximum decrease of the banking book economic value under the 6 standard scenarios defined by Basel Committee on Banking Supervision (BCBS).

Earnings-based measures look at the expected change in Net Interest Income ("NII"), compared to a defined benchmark scenario, over a defined time horizon resulting from interest rate movements. Thereby the Group measures ΔNII as the maximum reduction in NII under the 6 standard scenarios defined by Basel Committee on Banking Supervision (BCBS), compared to the Group's official capital planning, over a period of 12 months.

The Group employs mitigation techniques to immunize the interest rate risk arising from nontrading positions. The majority of our interest rate risk arising from nontrading asset and liability positions are managed through Treasury Pool Management. Treasury Pool Management hedges the transferred net banking book risk with Deutsche Bank's trading books within the CIB division. The treatment of interest rate risk in our trading portfolios and the application of the value-at-risk model is discussed in the "Trading Market Risk" section of this document.

Positions in our banking books as well as the hedges described in the aforementioned paragraph follow the accounting principles as detailed in the “Notes to the Consolidated Financial Statements” section of this document.

The Global Model Validation and Governance group performs independent validation of models used for IRRBB measurement in line with Deutsche Bank’s group-wide risk governance framework.

The most notable exceptions from the aforementioned paragraphs are in some Private & Commercial Bank (“PCB”) entities (e.g. Postbank). These entities manage interest rate risk through their entity specific Asset and Liability Management departments.

The measurement and reporting of economic value interest rate risk is performed daily, and earnings risk is monitored on a monthly basis. The Group generally uses the same metrics in its internal management systems as it applies for the disclosure in this report. This is applicable to both the methodology as well as the modelling assumptions used when calculating the metrics. The only notable exception is the usage of a steady (i.e. unchanged) rates scenario as benchmark for the ∆NII calculation in the public disclosures, whereas the internal quantitative risk appetite metric will use the Group’s official capital planning curve.

Deutsche Bank’s key modelling assumptions are applied to the positions in our PCB division and parts of our CIB Division. Those positions are subject to risk of changes in our client’s behavior with regard to their deposits as well as loan products.

The Group manages the interest rate risk exposure of its Non-Maturity Deposits (NMDs) through a replicating portfolio approach to determine the average repricing maturity of the portfolio. For the purpose of constructing the replicating portfolio, the portfolio of NMDs is clustered by dimensions such as Business Unit, Currency, Product and Geographical Location. The main dimensions influencing the repricing maturity are elasticity of deposit rates to market interest rates, volatility of deposit balances and observable client behavior. For the reporting period the average repricing maturity assigned across all such replicating portfolio is 1.6 years and Deutsche Bank uses 15 years as the longest repricing maturity.

In the Loan and some of the Term deposit products Deutsche Bank considers early prepayment/withdrawal behavior of its customers. The parameters are based on historical observations, statistical analyses and expert assessments.

Furthermore, the Group generally calculates IRRBB related metrics in contractual currencies and aggregates the resulting metrics for reporting purposes. When calculating economic value based metrics without the exclusion of the commercial margin, the appropriate yield curve is selected that represents the characteristics of the instrument concerned.

Credit Spread Risk in the Banking Book

Deutsche Bank is exposed to credit spread risk of bonds held in the banking book, mainly as part of the Treasury Liquidity Reserves portfolio and in Postbank. This risk category is closely associated with interest rate risk in the banking book as changes in the perceived credit quality of individual instruments may result in fluctuations in spreads relative to underlying interest rates.

Foreign Exchange Risk

Foreign exchange risk arises from our nontrading asset and liability positions that are denominated in currencies other than the functional currency of the respective entity. The majority of this foreign exchange risk is transferred through internal hedges to trading books within Corporate & Investment Bank and is therefore reflected and managed via the value-at-risk figures in the trading books. The remaining foreign exchange risks that have not been transferred are mitigated through match funding the investment in the same currency, so that only residual risk remains in the portfolios. Small exceptions to above approach follow the general Market Risk Management monitoring and reporting process, as outlined for the trading portfolio.

The bulk of nontrading foreign exchange risk is related to unhedged structural foreign exchange exposure, mainly in our U.S., U.K. and China entities. Structural foreign exchange exposure arises from local capital (including retained earnings) held in the Group’s consolidated subsidiaries and branches and from investments accounted for at equity. Change in foreign exchange rates of the underlying functional currencies are booked as Currency Translation Adjustments ("CTA").

The primary objective for managing our structural foreign exchange exposure is to stabilize consolidated capital ratios from the effects of fluctuations in exchange rates. Therefore the exposure remains unhedged for a number of core currencies with considerable amounts of risk-weighted assets denominated in that currency in order to avoid volatility in the capital ratio for the specific entity and the Group as a whole.

Equity and Investment Risk

Nontrading equity risk arising predominantly from our non-consolidated investment holdings in the banking book and from our equity compensation plans.

Our non-consolidated investment holdings in the banking book are categorized into strategic and alternative investment assets. Strategic investments typically relate to acquisitions made to support our business franchise and are undertaken with a medium to long-term investment horizon. Alternative assets are comprised of principal investments and other non-strategic investment assets. Principal investments are direct investments in private equity (including leveraged buy-out fund commitments and equity bridge commitments), real estate (including mezzanine debt) and venture capital, undertaken for capital appreciation. In addition, principal investments are made in hedge funds and mutual funds in order to establish a track record for sale to external clients. Other non-strategic investment assets comprise assets recovered in the workout of distressed positions or other legacy investment assets in private equity and real estate of a non-strategic nature.

Pension Risk

We are exposed to market risk from a number of defined benefit pension schemes for past and current employees. The ability of the pension schemes to meet the projected pension payments is maintained through investments and ongoing plan contributions. Market risk materializes due to a potential decline in the market value of the assets or an increase in the liability of each of the pension plans. Market Risk Management monitors and reports all market risks both on the asset and liability side of our defined benefit pension plans including interest rate risk, inflation risk, credit spread risk, equity risk and longevity risk. For details on our defined benefit pension obligation see additional Note 36 “Employee Benefits”.

Other Risks

Market risks in our asset management activities in Deutsche Asset Management, primarily results from principal guaranteed funds or accounts, but also from co-investments in our funds.

Nontrading market risk Economic Capital

Nontrading market risk economic capital is calculated either by applying the standard traded market risk EC methodology or through the use of non-traded market risk models that are specific to each risk class and which consider, among other factors, historically observed market moves, the liquidity of each asset class, and changes in client’s behavior in relation to products with behavioral optionalities.

Operational Risk Management

Operational Risk Management Framework

Operational Risk means the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes Legal Risk. Operational Risk excludes Business and Reputational Risk. It forms a subset of the Bank’s Non-Financial Risks, as does Reputational Risk.

The governance of our operational risks follows the Three Lines of Defence (“3LoD”) approach, to protect the Bank, its customers and shareholders against risk losses and resulting reputational damages. It seeks to ensure that all our operational risks are identified and covered, that accountabilities regarding the management of operational risks are clearly assigned and risks are taken on and managed in the best and long term interest of the Bank. The 3LoD approach and its underlying principles, i.e., the full accountability of the First Line of defence (“1st LoD”) to manage its own risks and the existence of an independent Second Line of Defence (“2nd LoD”) to oversee and challenge risk taking and risk management, applies to all levels of the organization including the Group-level, regions, countries, and legal entities.

Deutsche Bank’s Operational Risk appetite sets out the amount of Operational Risk we are willing to accept as a consequence of doing business. We take on operational risks consciously, both strategically as well as in day-to-day business. While the Bank may have no appetite for certain types of Operational Risk failures (such as serious violations of laws or regulations), in other cases a certain amount of Operational Risk must be accepted if the Bank is to achieve its business objectives. In case a residual risk is assessed to be outside our risk appetite, further risk reducing actions must be undertaken including further remediating risks, insuring risks or ceasing business.

Non-Financial Risk Management (“NFRM”) is the Risk function for the Non-Financial Risk types of the Bank, including Operational Risk and owns the overarching Operational Risk Management Framework (ORMF).

The ORMF is a set of interrelated tools and processes that are used to identify, assess, measure, monitor and remediate operational risks. Its components have been designed to operate together to provide a comprehensive approach to managing the Bank's most material operational risks. ORMF components include the setup of the 1st and 2nd LoD as well as roles and responsibilities for the Operational Risk management process and appropriate independent challenge, the Group's approach to setting Operational Risk appetite and adhering to it, the Operational Risk type and control taxonomies, the minimum standards for Operational Risk management processes including tools, independent governance, and the Bank's Operational Risk capital model.

The following four principles form the foundation of Operational Risk management and the Group ORMF at Deutsche Bank:

Operational Risk Principle I: NFRM establishes and maintains the Group Operational Risk Management Framework. As the 2nd LoD control function, NFRM is the independent reviewer and challenger of the 1st LoD's risk and control assessments and risk management activities. As the subject matter expert for Operational Risk it provides independent risk views to facilitate forward looking management of operational risks, actively engages with risk owners and facilitates the implementation of risk management standards across the Bank. NFRM provides the oversight of risk and control mitigation plans to return risk within risk appetite, where required.

Operational Risk Principle II: Risk owners as the 1st LoD have full accountability for their operational risks and have to manage these against a defined risk specific appetite.

Risk owners are those roles in the Bank that generate risks, whether financial or non-financial. The heads of business divisions and infrastructure functions must determine the appropriate organizational structure to identify their organizations' Operational Risk profile, implement risk management and control standards within their organization, take business decisions on the mitigation or acceptance of operational risks within the risk appetite and establish and maintain risk owner (i.e. Level 1) controls.

Operational Risk Principle III: Risk Type Controllers ("RTCs") as 2nd LoD control functions establish the framework and define risk appetite statements for the specific risk type they control. They monitor the risk type's profile against risk appetite and exercise a veto on risk appetite breaches.

RTCs define risk management and control standards and independently oversee and challenge risk owners' implementation of these standards as well as their risk-taking and management activities. RTCs establish independent Operational Risk governance and prepare aggregated risk type profile reporting. As risk type experts, RTCs define the risk type and its taxonomy and support and facilitate the implementation of risk management standards and processes in the 1st LoD. To maintain their independence, RTC roles are located only in infrastructure functions.

Operational Risk Principle IV: NFRM is to ensure that sufficient capital is held to underpin Operational Risk. NFRM is accountable for the design, implementation and maintenance of the approach to determine a sufficient level of capital demand for Operational Risk for recommendation to the Management Board.

To fulfil this requirement, NFRM is accountable for the calculation and allocation of Operational Risk capital demand and Expected Loss planning under the Advanced Measurement Approach ("AMA"). NFRM is also accountable for the facilitation of the annual Operational Risk capital planning and monthly review process.

Organizational & Governance Structure

While the day-to-day management of Operational Risk is the primary responsibility of our business divisions and infrastructure functions as risk owners, NFRM oversees the Group-wide management of operational risks, identifies and reports risk concentrations and promotes a consistent application of the ORMF across the Bank. NFRM is part of the Group Risk function which is headed by the Chief Risk Officer.

The Chief Risk Officer appoints the Head of Non-Financial Risk Management who is accountable for the design, implementation and maintenance of an effective, efficient and regulatory compliant ORMF, including the Operational Risk capital model.

The Non-Financial Risk Committee ("NFRC"), which is co-chaired by the Chief Risk Officer and the Chief Regulatory Officer, is responsible for the oversight, governance and coordination of the management of Operational Risk in the Group on behalf of the Management Board by establishing a cross-risk and holistic perspective of the key operational risks of the Group. Its decision-making and policy related authorities include the review, advice and management of all Operational Risk issues which may impact the risk profile of our business divisions and infrastructure functions. Several sub-fora with attendees from both, the 1st and 2nd LoDs support the Non-Financial Risk Committee (NFRC) to effectively fulfil its mandate. In 2017, we have established additional councils to enhance the effectiveness of the NFRC with regards to e.g. new technology, framework and culture themes.

Managing Our Operational Risk

We manage operational risks by employing the tools and processes provided by our ORMF, which enables us to determine our Operational Risk profile in comparison to our risk appetite for Operational Risk, to systematically identify Operational Risk themes and concentrations, and to define risk mitigating measures and priorities.

In 2017, we enhanced the ORMF and the management of operational risks by simplifying our risk management processes, focusing on the identification of the most material operational risks and their effective mitigation, and by promoting an active and continuous dialogue between the 1st and 2nd LoDs. This allows challenge to be raised throughout the various risk management processes and makes the management of operational risks more transparent, meaningful and embedded in day-to-day business decisions.

In order to cover the broad range of risk types underlying Operational Risk, our ORMF contains a number of management techniques that apply to all Operational Risk types. These include:

Loss Data Collection: In a timely manner, we collect, categorize and analyze data on internal (with a P&L impact ≥ €10.000) and relevant external Operational Risk events. This data is used for senior management information, in a variety of risk management processes and the calculation of Operational Risk capital requirements.

Lessons Learned reviews analyze the causes of significant Operational Risk events, identify their root causes, and document appropriate remediation actions to reduce the likelihood of reoccurrence. They are required for all Operational Risk events that meet defined quantitative or qualitative criteria. The area in which the Operational Risk failure occurred that caused the event is formally responsible to complete the review, though engagement with other relevant 2nd LoD functions throughout the process is encouraged. NFRM provides independent review and challenge over the appropriateness of the review's conclusions. In 2017, we harmonized several existing processes, moved to a workshop based approach and, thus, enhanced the consistency and quality of reviews.

Read Across reviews take the conclusions of the Lessons Learned process and seek to analyze whether similar risks and control weaknesses identified in a Lessons Learned review exist in other areas of the Bank, even if they have not yet resulted in problems. This allows preventative actions to be undertaken. Read Across reviews may also be undertaken based on events that have occurred at other relevant financial firms where sufficient information exists to allow meaningful analysis.

We complement our Operational Risk profile by using a set of scenarios including relevant external cases provided by a public database and additional internal scenarios. We thereby systematically utilize information on external loss events occurring in the banking industry to prevent similar incidents from happening to us, for example through particular deep dive analyses or risk profile reviews.

The Risk & Control Assessment process (RCA) comprises of a series of bottom-up assessments of the risks generated by businesses and infrastructure functions, the effectiveness of the controls in place to manage them, and the remediation actions required to bring the outsized risks back into risk appetite. This enables both the 1st and 2nd LoDs to have a clear view of the Bank's material operational risks. Through 2017, we simplified the RCA process and made it easier to repeat by producing a smaller number of higher quality assessments that are easier to use for decision-making purposes. We developed control assessment and consequence management frameworks and held interactive workshops instead of running a sequential process. This increased the continuous engagement between risk owners, NFRM and RTCs and allowed for challenge to be raised throughout the process.

We regularly report and perform analyses on our Top Risks. Top Risks are rated in terms of both the likelihood that they could occur and the impact on the Bank should they do so. The reporting provides a forward-looking perspective on the impact of planned remediation and control enhancements. It also contains emerging risks and themes that have the potential to evolve as a Top Risk in future. Top Risk Reduction Programs comprise the most significant risk reduction activities that are key to bringing our operational top risk themes back within risk appetite.

Key Risk Indicators are used to monitor the Operational Risk profile, including against the Bank's defined risk appetite, and to alert the organization to impending problems in a timely fashion. Key Risk Indicators enable the monitoring of the Bank's major risks, its control culture and overall business environment and trigger risk mitigating actions. They facilitate the forward-looking management of operational risks, based on early warning signals.

Operational Risk Type Frameworks

The ORMF, which provides the overarching set of standards, tools and processes that apply to the management of all risk types underlying Operational Risk, is complemented by the Operational Risk type frameworks, risk management and control standards and tools set up by the respective Risk Type Controllers for the Operational Risk types they control. These include the following with respect to the following risk types:

– Compliance Risk is the risk of incurring criminal or administrative sanctions, financial loss or damage to reputation as a result of failing to comply with laws, regulations, rules, expectations of regulators, the standards of self-regulatory organizations, and codes of conduct/ethics in connection with the Bank’s regulated activities (collectively the “Rules”). Failure to appropriately manage Compliance Risk can give rise to fines, penalties, judgments, damages, sanctions, settlements and/or increased costs, limitations on businesses related to regulatory or legal actions due to non-compliance with established policies and procedures and Rules governing the activities of a business or entity, and potential reputational damage. The Compliance department, as the second line of defence control function for the Compliance-owned risk types, identifies relevant effective procedures and corresponding controls to support the Bank’s business divisions and Infrastructure functions in managing their Compliance risk. The Compliance department further provides advisory services on the above; performs monitoring activities in relation to the coverage of new or amended material rules and regulations; and assesses the control environment. The results of these assessments are regularly reported to the Management Board and Supervisory Board.
– Financial Crime risks are managed by our Anti-Financial Crime (“AFC”) function via maintenance and development of a dedicated program. The AFC program is based on regulatory and supervisory requirements. AFC has defined roles and responsibilities and established dedicated functions for the identification and management of financial crime risks resulting from money laundering, terrorism financing, non-compliance with sanctions and embargoes as well as other criminal activities including fraud, bribery and corruption and other crimes. AFC assures further update of its strategy on financial crime prevention via regular development of internal policies and procedures, institution-specific risk assessment and staff training.
– Group Legal is primarily responsible for managing the Bank’s legal risk, and carries out its mandate as infrastructure control function through, among other things, the following legal services: (i) provision of legal advice, (ii) drafting of legal content of documentation that defines rights and obligations of the Bank such as contracts, (iii) the management of all contentious matters and (iv) retaining external counsel. These activities are the key pillars of the legal control framework to mitigate the Bank´s legal risk. Legal has established a Legal Risk Management function responsible for implementing and maintaining the ORMF in respect of legal risk types which includes overseeing Legal’s participation in the Bank’s Risk and Control Assessment process and Lessons Learned reviews as well as managing the interface into the Non-Financial Risk Management function. LRM also conducts quality assurance reviews on Legal’s processes, thereby testing the robustness of the legal control framework, identifying related control enhancements and fostering legal risk management awareness via regular communication and training.
– Non-Financial Risk Management Risk Type Control (“NFRM RTC”) is Risk Type Controller for a number of operational risks. Its mandate includes controls over transaction processing activities, as well as infrastructure risks to prevent technology or process disruption, maintain the confidentiality, integrity and availability of data, records and information security, and ensure businesses have robust plans in place to recover critical business processes and functions in the event of disruption from technical or building outage, or the effects of cyber-attack or natural disaster. NFRM RTC also manages the risks arising from the Bank’s internal and external vendor engagements via the provision of a comprehensive vendor risk management framework.

Measuring Our Operational Risks

We calculate and measure the regulatory and economic capital requirements for Operational Risk using the Advanced Measurement Approach (“AMA”) methodology. Our AMA capital calculation is based upon the Loss Distribution Approach. Gross losses from historical internal and external loss data (Operational Riskdata eXchange Association consortium data) and external scenarios from a public database (IBM OpData) complemented by internal scenario data are used to estimate the risk profile (i.e., a loss frequency and a loss severity distribution). Our Loss Distribution Approach model includes conservatism by recognizing losses on events that arise over multiple years as single events in our historical loss profile.

Within the Loss Distribution Approach model, the frequency and severity distributions are combined in a Monte Carlo simulation to generate potential losses over a one year time horizon. Finally, the risk mitigating benefits of insurance are applied to each loss generated in the Monte Carlo simulation. Correlation and diversification benefits are applied to the net losses in a manner compatible with regulatory requirements to arrive at a net loss distribution at Group level, covering expected and unexpected losses. Capital is then allocated to each of the business divisions after considering qualitative adjustments and expected loss.

The regulatory capital requirement for Operational Risk is derived from the 99.9 % percentile. Since Q4 2017, the economic capital is also set at 99.9 % percentile, see the section “Internal Capital Adequacy”. Both regulatory and economic capital requirements are calculated for a time horizon of one year.

The Regulatory and Economic Capital demand calculations are performed on a quarterly basis. NFRM aims to ensure that for the approach for capital demand quantification appropriate development, validation and change governance processes are in place, whereby the validation is performed by an independent validation function and in line with the Group's model risk management process.

Drivers for Operational Risk Capital Development

In 2017, our Operational Risk losses have been predominantly driven by losses and provisions arising from civil litigation and regulatory enforcement. Such losses account for 70 % of Operational Risk losses and account for the majority of Operational Risk regulatory and economic capital demand. For a description of our current legal and regulatory proceedings, please see section "Current Individual Proceedings" in Note 29 "Provisions" to our consolidated financial statements. The Operational Risk losses from civil litigation and regulatory enforcement decreased by € 2.5 billion or 85 % while our non-legal Operational Risk losses were € 29 million or 19% higher compared to 2016.

In view of the relevance of legal risks within our Operational Risk profile, we dedicate specific attention to the management and measurement of our open civil litigation and regulatory enforcement matters where the Bank relies both on information from internal as well as external data sources to consider developments in legal matters that affect the Bank specifically but also the banking industry as a whole. Reflecting the multi-year nature of legal proceedings the measurement of these risks furthermore takes into account changing levels of certainty by capturing the risks at various stages throughout the lifecycle of a legal matter.

Conceptually, the Bank measures Operational Risk including legal risk by determining the maximum loss that will not be exceeded with a given probability. This maximum loss amount includes a component that due to the IFRS criteria is reflected in our financial statements and a component that is expressed as regulatory or economic capital demand that is above the amount reflected as provisions within our financial statements.

The legal losses which the Bank expects with a likelihood of more than 50 % are already reflected in our IFRS group financial statements. These losses include net changes in provisions for existing and new cases in a specific period where the loss is deemed probable and is reliably measurable in accordance with IAS 37. The development of our legal provisions for civil litigations and regulatory enforcement is outlined in detail in Note 29 "Provisions" to our consolidated financial statements.

Uncertain legal losses which are not reflected in our financial statements as provisions because they do not meet the recognition criteria under IAS 37 are expressed as "regulatory or economic capital demand" reflecting our risk exposure that consumes regulatory and economic capital.

To quantify the litigation losses in the AMA model the Bank takes into account historic losses, provisions, contingent liabilities and legal forecasts. Legal forecasts are generally comprised of ranges of potential losses from legal matters that are not deemed probable but are reasonably possible. Reasonably possible losses may result from ongoing and new legal matters which are reviewed at least quarterly by the attorneys handling the legal matters.

We include the legal forecasts in the "Relevant Loss Data" used in our AMA model. Hereby the projection range of the legal forecasts is not restricted to the one year capital time horizon but goes beyond and conservatively assumes early settlement of the underlying losses in the reporting period - thus considering the multi-year nature of legal matters.

Liquidity Risk Management

Liquidity risk is the risk arising from our potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs. The objective of the Group's liquidity risk management framework is to ensure that the Group can fulfill its payment obligations at all times and can manage liquidity and funding risks within its risk appetite. The framework considers relevant and significant drivers of liquidity risk, whether on-balance sheet or off-balance sheet.

Liquidity Risk Management Framework

In accordance with the ECB's Supervisory Review and Evaluation Process (SREP), Deutsche Bank has implemented an annual Internal Liquidity Adequacy Assessment Process ("ILAAP"), which is reviewed and approved by the Management Board. The ILAAP provides comprehensive documentation of the Bank's Liquidity Risk Management framework, including: identifying the key liquidity and funding risks to which the Group is exposed; describing how these risks are identified, monitored and measured and describing the techniques and resources used to manage and mitigate these risks.

The Management Board defines the liquidity and funding risk strategy for the Bank, as well as the risk appetite, based on recommendations made by the Group Risk Committee ("GRC"). At least annually the Management Board reviews and approves the limits which are applied to the Group to measure and control liquidity risk as well as our long-term funding and issuance plan.

Treasury is mandated to manage the overall liquidity and funding position of the Bank, with Liquidity Risk Management acting as an independent control function, responsible for reviewing the liquidity risk framework, proposing the risk appetite to GRC and the validation of Liquidity Risk models which are developed by Treasury, to measure and manage the Group's liquidity risk profile.

Treasury manages liquidity and funding, in accordance with the Management Board-approved risk appetite across a range of relevant metrics, and implements a number of tools to monitor these and ensure compliance. In addition, Treasury works closely in conjunction with Liquidity Risk Management ("LRM"), and the business, to analyze and understand the underlying liquidity characteristics of the business portfolios. These parties are engaged in regular and frequent dialogue to understand changes in the Bank's position arising from business activities and market circumstances. Dedicated business targets are allocated to ensure the Group operates within its overall liquidity and funding appetite.

The Management Board is informed of performance against the risk appetite metrics, via a weekly Liquidity Dashboard. As part of the annual strategic planning process, we project the development of the key liquidity and funding metrics based on the underlying business plans to ensure that the plan is in compliance with our risk appetite.

Capital Markets Issuance

Deutsche Bank has a wide range of funding sources, including retail and institutional deposits, unsecured and secured wholesale funding and debt issuance in the capital markets. Debt issuance, encompassing senior unsecured bonds, covered bonds as well as capital securities, is a key source of term funding for the Bank and is managed directly by Treasury. At least once a year Treasury submits an annual long-term Funding Plan to the GRC for recommendation and then to the Management Board for approval. This plan is driven by global and local funding and liquidity requirements based on expected business development. Our capital markets portfolio is dynamically managed through our yearly issuance plans to avoid excessive maturity concentrations.

Short-term Liquidity and Wholesale Funding

Deutsche Bank tracks all contractual cash flows from wholesale funding sources, on a daily basis, over a 12-month horizon. For this purpose, we consider wholesale funding to include unsecured liabilities raised primarily by Treasury Pool Management, as well as secured liabilities raised by our Corporate & Investment Bank Division. Our wholesale funding counterparties typically include corporates, banks and other financial institutions, governments and sovereigns.

The Group has implemented a set of Management Board-approved limits to restrict the Bank's exposure to wholesale counterparties, which have historically shown to be the most susceptible to market stress. The wholesale funding limits are monitored daily, and apply to the total combined currency amount of all wholesale funding currently outstanding, both secured and unsecured with specific tenor limits covering the first 8 weeks. Our Liquidity Reserves are the primary mitigant against potential stress in short-term wholesale funding markets.

The tables in section "Liquidity Risk Exposure: Funding Diversification" show the contractual maturity of our short-term wholesale funding and capital markets issuance.

Liquidity Stress Testing and Scenario Analysis

Global liquidity stress testing and scenario analysis is one of the key tools for measuring liquidity risk and evaluating the Group's short-term liquidity position within the liquidity framework. It complements the intraday operational liquidity management process and the long-term liquidity strategy, represented by the Funding Matrix.

Our global liquidity stress testing process is managed by Treasury in accordance with the Management Board approved risk appetite. Treasury is responsible for the design of the overall methodology, including the definition of the stress scenarios, the choice of liquidity risk drivers and the determination of appropriate assumptions (parameters) to translate input data into model results. Liquidity Risk Management is responsible for the independent validation of liquidity risk models. Liquidity and Treasury Reporting & Analysis (LTRA) is responsible for implementing these methodologies in conjunction with Treasury and IT as well as for the stress test calculation.

We use stress testing and scenario analysis to evaluate the impact of sudden and severe stress events on our liquidity position. The scenarios we apply are based on historic events, such as the 2008 financial markets crisis.

Deutsche Bank has selected five scenarios to calculate the Group's stressed Net Liquidity Position ("sNLP"). These scenarios capture the historical experience of Deutsche Bank during periods of idiosyncratic and/or market-wide stress and are assumed to be both plausible and sufficiently severe as to materially impact the Group's liquidity position. A global market crisis, for example, is covered by a specific stress scenario (systemic market risk) that models the potential consequences observed during the financial crisis of 2008. Additionally, we have introduced regional market stress scenarios. Under each of the scenarios we assume a high degree of maturing loans to non-wholesale customers is rolled-over, to support our business franchise. Wholesale funding, from the most risk sensitive counterparties (including banks and money-market mutual funds) is assumed to roll-off at contractual maturity or even be bought back, in the acute phase of the stress.

In addition, we include the potential funding requirements from contingent liquidity risks which might arise, including credit facilities, increased collateral requirements under derivative agreements, and outflows from deposits with a contractual rating linked trigger.

We then model the actions we would take to counterbalance the outflows incurred. Countermeasures include utilizing the Liquidity Reserve and generating liquidity from unencumbered, marketable assets.

Stress testing is conducted at a global level and for defined individual legal entities. In addition to the global stress test, stress tests for material currencies (EUR, USD and GBP) are performed. We review our stress-testing assumptions on a regular basis and have made further enhancements to the methodology and severity of certain parameters through the course of 2017.

On a daily basis, we run the liquidity stress test over an eight-week horizon, which we consider the most critical time span in a liquidity crisis, and apply the relevant stress assumptions to risk drivers from on-balance sheet and off-balance sheet products. Beyond the eight week time horizon, we analyze the impact of a more prolonged stress period, extending to twelve months. This stress testing analysis is performed on a daily basis.

In the second half of 2016, the Bank experienced deposit outflows as a result of negative market perceptions concerning Deutsche Bank in the context of civil claims then being negotiated with the U.S. Department of Justice in connection with the Bank's issuance and underwriting of residential mortgage backed securities. As part of the lessons learned from this period, the risk appetite was increased from € 5 billion as per December 2016 to € 10 billion in January 2017. The risk appetite to maintain a surplus of at least € 10 billion throughout the 8 week stress horizon under all scenarios for our daily global liquidity stress test remained at this level for the rest of 2017.

The tables in section "Liquidity Risk Exposure: Stress Testing and Scenario Analysis" show the results of our internal global liquidity stress test under the various different scenarios.

Liquidity Coverage Ratio

In addition to our internal stress test result, the Group has a Management Board-approved risk appetite for the Liquidity Coverage Ratio (“LCR”). The LCR is intended to promote the short-term resilience of a bank’s liquidity risk profile over a 30 day stress scenario. The ratio is defined as the amount of High Quality Liquid Assets (“HQLA”) that could be used to raise liquidity, measured against the total volume of net cash outflows, arising from both actual and contingent exposures, in a stressed scenario.

This requirement has been implemented into European law, via the Commission Delegated Regulation (EU) 2015/61, adopted in October 2014. Compliance with the LCR was required in the EU from October 1, 2015.

The LCR complements the internal stress testing framework. By maintaining a ratio in excess of minimum regulatory requirements, the LCR seeks to ensure that the Group holds adequate liquidity resources to mitigate a short-term liquidity stress.

In 2017, the Bank has set its internal risk appetite more conservative by 5 % in order to maintain a LCR ratio of at least 110 %.

Key differences between the liquidity stress test and LCR include the time horizon (eight weeks versus 30 days), classification and haircut differences between Liquidity Reserves and the LCR HQLA, outflow rates for various categories of funding, and inflow assumption for various assets (for example, loan repayments). Our liquidity stress test also includes outflows related to intraday liquidity assumptions, which are not explicitly captured in the LCR.

Funding Risk Management

Structural Funding

Deutsche Bank’s primary tool for monitoring and managing funding risk is the Funding Matrix. The Funding Matrix assesses the Group’s structural funding profile for the greater than one year time horizon. To produce the Funding Matrix, all funding-relevant assets and liabilities are mapped into time buckets corresponding to their contractual or modeled maturities. This allows the Group to identify expected excesses and shortfalls in term liabilities over assets in each time bucket, facilitating the management of potential liquidity exposures.

The liquidity maturity profile is based on contractual cash flow information. If the contractual maturity profile of a product does not adequately reflect the liquidity maturity profile, it is replaced by modeling assumptions. Short-term balance sheet items (<1yr) or matched funded structures (asset and liabilities directly matched with no liquidity risk) can be excluded from the term analysis.

The bottom-up assessment by individual business line is combined with a top-down reconciliation against the Group’s IFRS balance sheet. From the cumulative term profile of assets and liabilities beyond 1 year, any long-funded surpluses or short-funded gaps in the Group’s maturity structure can be identified. The cumulative profile is thereby built up starting from the above 10 year bucket down to the above 1 year bucket.

The strategic liquidity planning process, which incorporates the development of funding supply and demand across business units, together with the bank’s targeted key liquidity and funding metrics, provides the key input parameter for our annual capital markets issuance plan. Upon approval by the Management Board the capital markets issuance plan establishes issuance targets for securities by tenor, volume and instrument. We also maintain a stand-alone U.S. dollar and GBP funding matrix which limits the maximum short position in any time bucket (more than 1 year to more than 10 years) to € 10 billion and € 5 billion respectively. This supplements the risk appetite for our global funding matrix which requires us to maintain a positive funding position in any time bucket (more than 1 year to more than 10 years).

Net Stable Funding Ratio

The Net Stable Funding Ratio (“NSFR”) was proposed as part of Basel 3, as the regulatory metric for assessing a bank’s structural funding profile. The NSFR is intended to reduce medium to long-term funding risks by requiring banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities. The ratio is defined as the amount of Available Stable Funding (the portion of capital and liabilities expected to be a stable source of funding), relative to the amount of Required Stable Funding (a function of the liquidity characteristics of various assets held).

In the EU, on November 23, 2016, the Commission published a legislative proposal to amend the CRR. The proposal defines, inter alia, a mandatory quantitative NSFR requirement which would apply two years after the proposal comes into force. The proposal remains subject to change in the EU legislative process. Therefore, for banks domiciled in the EU, the final definition of the ratio and associated implementation timeframe has not yet been confirmed.

We are currently in the process of assessing the impacts of the NSFR, and would expect to formally embed this metric within our overall liquidity risk management framework, once the relevant rules and timing within the EU have been finally determined.

Funding Diversification

Diversification of our funding profile in terms of investor types, regions, products and instruments is an important element of our liquidity risk management framework. Our most stable funding sources come from capital markets and equity, retail, and transaction banking clients. Other customer deposits and secured funding and short positions are additional sources of funding. Unsecured wholesale funding represents unsecured wholesale liabilities sourced primarily by our Treasury Pool Management. Given the relatively short-term nature of these liabilities, they are primarily used to fund cash and liquid trading assets.

To promote the additional diversification of our refinancing activities, we hold a Pfandbrief license allowing us to issue mortgage Pfandbriefe. In addition, we have established a program for the purpose of issuing Covered Bonds under Spanish law (Cedulas).

Unsecured wholesale funding comprises a range of unsecured products, such as Certificates of Deposit (CDs), Commercial Paper (CP) as well as term, call and overnight deposits across tenors primarily up to one year.

To avoid any unwanted reliance on these short-term funding sources, and to promote a sound funding profile, which complies with the defined risk appetite, we have implemented limits (across tenors) on these funding sources, which are derived from our daily stress testing analysis. In addition, we limit the total volume of unsecured wholesale funding to manage the reliance on this funding source as part of the overall funding diversification.

The chart “Liquidity Risk Exposure: Funding Diversification” shows the composition of our external funding sources that contribute to the liquidity risk position, both in EUR billion and as a percentage of our total external funding sources.

Funds Transfer Pricing

The funds transfer pricing framework applies to all businesses and regions and promotes pricing of (i) assets in accordance with their underlying liquidity risk, (ii) liabilities in accordance with their liquidity value and funding maturity and (iii) contingent liquidity exposures in accordance with the cost of providing for commensurate liquidity reserves to fund unexpected cash requirements.

Deutsche Bank’s funds transfer pricing framework reflects regulatory principles and guidelines. Within this framework all funding and liquidity risk costs and benefits are allocated to the firm’s business units based on market rates. Those market rates reflect the economic costs of liquidity for Deutsche Bank. Treasury might set further financial incentives in line with the Bank’s liquidity risk guidelines. While the framework promotes a diligent group-wide allocation of the Bank's funding costs to the liquidity users, it also provides an incentive-based compensation framework for businesses generating stable long-term and stress compliant funding. Funding relevant transactions are subject to liquidity (term) premiums and/or other funds transfer pricing mechanisms depending on market conditions. Liquidity premiums are set by Treasury and reflected in a segregated Treasury liquidity account which is the aggregator of liquidity costs and benefits. The management and allocation of the liquidity account cost base is the key variable for funds transfer pricing within Deutsche Bank.

Liquidity Reserves

Liquidity reserves comprise available cash and cash equivalents, highly liquid securities (includes government, agency and government guaranteed) as well as other unencumbered central bank eligible assets.

The volume of our liquidity reserves is a function of our expected daily stress result, both at an aggregate level as well as at an individual currency level. To the extent we receive incremental short-term wholesale liabilities which attract a high stress roll-off, we will largely keep the proceeds of such liabilities in cash or highly liquid securities as a stress mitigant. Accordingly, the total volume of our liquidity reserves will fluctuate as a function of the level of short-term wholesale liabilities held, although this has no material impact on our overall liquidity position under stress. Our liquidity reserves include only assets that are freely transferable or that can be utilized after taking into consideration local liquidity demands within the Group, including local limits on free transferability within the Group, or that can be applied against local entity stress outflows. As a result our liquidity reserves exclude surplus liquidity held in DBTCA due to requirements pursuant to Section 23A of the U.S. Federal Reserve Act and in Postbank due to the absence of a waiver concerning the full integration of Postbank assets. We hold the vast majority of our liquidity reserves centrally across the major currencies, at our parent and our foreign branches with further reserves held at key locations in which we are active.

Asset Encumbrance

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. We generally encumber loans to support long-term capital markets secured issuance such as Pfandbriefe or other self-securitization structures, while financing debt and equity inventory on a secured basis is a regular activity for our Corporate & Investment Bank business. Additionally, in line with the EBA technical standards on regulatory asset encumbrance reporting, we consider as encumbered assets placed with settlement systems, including default funds and initial margins, as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks. We also include derivative margin receivable assets as encumbered under these EBA guidelines.

Business (Strategic) Risk Management

Strategic Risk is the risk of suffering an operating income shortfall due to lower than expected performance in revenues not compensated by a reduction in costs. Strategic Risk may arise from changes to the competitive landscape or regulatory framework or ineffective positioning in the macroeconomic environment. Strategic Risk could also arise due to a failure to execute strategy and/ or failure to effectively take actions to address underperformance.

A Strategic and Capital plan is developed annually and presented to the Management Board for discussion and approval. The final plan is then presented to the Supervisory Board. During the year, execution of business strategies is regularly monitored to assess the performance against strategic objectives and to seek to ensure we remain on track to achieve targets. A more comprehensive description of this process is detailed in the section ‘Strategic and Capital Plan’.

Model Risk Management

Model risk is the potential for adverse consequences from incorrect or misused model outputs and reports using these outputs. Model risk can lead to financial loss, poor business or strategic decision making, or damage our reputation. The term ‘model’ refers to a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates.

Model risk is managed across Pricing models, Risk & Capital models, and other models:

– Pricing models are used to generate asset and liability fair value measurements reported in official books and records and/or risk sensitivities which feed Market Risk Management (MRM) processes;
– Risk & Capital models are related to risks used for regulatory or internal capital requirements, e.g. VaR, IMM, Stress tests etc.;
– Other models are those outside of the Bank’s Pricing and Risk & Capital models.

Model risk appetite is aligned to the Group’s qualitative statements, ensuring that model risk management is embedded in a strong risk culture and that risks are minimized to the extent possible.

The management of model risk includes:

– Performing robust independent model validation that provides effective challenge to the model development process and includes identification of conditions for use, methodological limitations that may require adjustments or overlays, and validation findings that require remediation;
– Establishing a strong model risk management and governance framework, including senior forums for monitoring and escalation of model risk related topics;
– Creating Bank-wide model risk related policies, aligned to regulatory requirements with clear roles and responsibilities for key stakeholders across the model life cycle; and
– Providing an assessment of the model risk control environment and reporting to the Management Board on a periodic basis.

Reputational Risk Management

Within our risk management process, we define reputational risk as the risk of possible damage to our brand and reputation, and the associated risk to earnings, capital or liquidity, arising from any association, action or inaction which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with Deutsche Bank's values and beliefs.

The Reputational Risk Framework (the Framework) is in place to manage primary reputational risk. It covers the process through which active decisions are taken on matters which may pose a reputational risk, before such risk materializes, and, in doing so, prevent damage to Deutsche Bank's reputation wherever possible. Reputational risks which may arise from a failure with another risk type, control or process (secondary reputational risk) are addressed separately via the associated risk type framework. The Framework is established to provide consistent standards for the identification, assessment and management of reputational risk issues. While every employee has a responsibility to protect our reputation, the primary responsibility for the identification, assessment, management, monitoring and, if necessary, referring or reporting, of reputational risk matters lies with our business divisions. Each employee is under an obligation, within the scope of his or her activities, to be alert to any potential causes of reputational risk and to address them according to the Framework. Reputational Risk Management has designed and implemented a comprehensive look back and lessons learned process in order to assess and control the effectiveness of the Framework, including in relation to reputational risk identification and referral.

If a matter is identified that is considered to pose, at a minimum, a moderate reputational risk then it is required to be referred for further consideration within the business division through its Unit Reputational Risk Assessment Process (Unit RRAP). In the event that a matter is deemed to pose a material reputational risk then it must be referred through to one of the four Regional Reputational Risk Committees (RRRCs) for further review. In addition to the materiality assessment, there are also certain criteria, known as mandatory referral criteria, which are considered inherently higher risk from a reputational perspective and therefore require mandatory referral to defined Subject Matter Experts (SMEs), e.g. Industry Reputational Risk or Group Sustainability, and/or referral to a Unit RRAP or RRRC.

The RRRCs are sub-committees of the Group Reputational Risk Committee (GRRC), which is itself a sub-committee of the Group Risk Committee (GRC), and are responsible for the oversight, governance and coordination of the management of reputational risk in their respective regions of Deutsche Bank on behalf of the Management Board. In exceptional circumstances, matters can also be referred by the RRRCs to the GRRC.

The modelling and quantitative measurement of reputational risk internal capital is implicitly covered in our economic capital framework primarily within operational and strategic risk.

Risk Concentration and Risk Diversification

Risk Concentrations

Risk concentrations refer to clusters of the same or similar risk drivers within specific risk types (intra-risk concentrations in credit, market, operational, liquidity and other risks) as well as across different risk types (inter-risk concentrations). They could occur within and across counterparties, businesses, regions/countries, industries and products. The management of concentrations is integrated as part of the management of individual risk types and monitored on an ongoing basis. The key objective is to avoid any undue concentrations in the portfolio, which is achieved through a quantitative and qualitative approach, as follows:

– Intra-risk concentrations are assessed, monitored and mitigated by the individual risk disciplines (credit, market, operational, liquidity risk management and others). This is supported by limit setting on different levels and/or management according to risk type.
– Inter-risk concentrations are managed through quantitative top-down stress-testing and qualitative bottom-up reviews, identifying and assessing risk themes independent of any risk type and providing a holistic view across the bank.

The most senior governance body for the oversight of risk concentrations throughout 2017 was the Enterprise Risk Committee (ERC), which is a subcommittee of the Group Risk Committee (GRC).

Risk Type Diversification Benefit

The risk type diversification benefit quantifies diversification effects between credit, market, operational and strategic risk in the economic capital calculation. To the extent correlations between these risk types fall below 1.0, a risk type diversification benefit results. The calculation of the risk type diversification benefit is intended to ensure that the standalone economic capital figures for the individual risk types are aggregated in an economically meaningful way.

Risk and Capital Performance

Capital and Leverage Ratio

Regulatory Capital

The calculation of our regulatory capital incorporates the capital requirements following the “Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms” (Capital Requirements Regulation or “CRR”) and the “Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms” (Capital Requirements Directive 4 or “CRD 4”) as implemented into German law. The information in this section as well as in the section “Development of risk-weighted Assets” is based on the regulatory principles of consolidation.

When referring to results according to full application of the final CRR/CRD 4 framework (without consideration of applicable transitional methodology) we use the term “CRR/CRD 4 fully loaded”. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. These relate, e.g., to the risk weighting of certain categories of assets and include rules permitting the grandfathering of equity investments at a risk-weight of 100 %. In this regard, we assumed in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions that the impact of the expiration of these transitional rules will be mitigated through sales of the underlying assets or other measures prior to the expiration of the grandfathering provisions by the end of 2017. Since the fourth quarter 2017 we have not applied this grandfathering rule anymore, but instead applied a risk weight between 190 % and 370 % determined based on Article 155 CRR under the CRR/CRD 4 fully loaded rules to all our equity positions. Consequently, no transitional arrangements are considered in our fully loaded RWA numbers for December 31, 2017. Only for the comparative period, yearend 2016, are these transitional rules within the risk weighting still applied.

This section refers to the capital adequacy of the group of institutions consolidated for banking regulatory purposes pursuant to the CRR and the German Banking Act (“Kreditwesengesetz” or “KWG”). Therein not included are insurance companies or companies outside the finance sector.

The total regulatory capital pursuant to the effective regulations as of year-end 2017 comprises Tier 1 and Tier 2 (T2) capital. Tier 1 capital is subdivided into Common Equity Tier 1 (CET 1) capital and Additional Tier 1 (AT1) capital.

Common Equity Tier 1 (CET 1) capital consists primarily of common share capital (reduced by own holdings) including related share premium accounts, retained earnings (including losses for the financial year, if any) and accumulated other comprehensive income, subject to regulatory adjustments (i.e. prudential filters and deductions). Prudential filters for CET 1 capital, according to Articles 32 to 35 CRR, include (i) securitization gain on sale, (ii) cash flow hedges and changes in the value of own liabilities, and (iii) additional value adjustments. CET 1 capital deductions comprise (i) intangible assets, (ii) deferred tax assets that rely on future profitability, (iii) negative amounts resulting from the calculation of expected loss amounts, (iv) net defined benefit pension fund assets, (v) reciprocal cross holdings in the capital of financial sector entities and, (vi) significant and non-significant investments in the capital (CET 1, AT1, T2) of financial sector entities above certain thresholds. All items not deducted (i.e., amounts below the threshold) are subject to risk-weighting.

Additional Tier 1 (AT1) capital consists of AT1 capital instruments and related share premium accounts as well as noncontrolling interests qualifying for inclusion in consolidated AT1 capital, and during the transitional period grandfathered instruments eligible under earlier frameworks. To qualify as AT1 capital under CRR/CRD 4, instruments must have principal loss absorption through a conversion to common shares or a write-down mechanism allocating losses at a trigger point and must also meet further requirements (perpetual with no incentive to redeem; institution must have full dividend/coupon discretion at all times, etc.).

Tier 2 (T2) capital comprises eligible capital instruments, the related share premium accounts and subordinated long-term debt, certain loan loss provisions and noncontrolling interests that qualify for inclusion in consolidated T2 capital. To qualify as T2 capital, capital instruments or subordinated debt must have an original maturity of at least five years. Moreover, eligible capital instruments may inter alia not contain an incentive to redeem, a right of investors to accelerate repayment, or a credit sensitive dividend feature.

Capital instruments that no longer qualify as AT1 or T2 capital under the CRR/CRD 4 fully loaded rules are subject to grandfathering rules during transitional period and are phased out from 2013 to 2022 with their recognition capped at 50 % in 2017 and the cap decreasing by 10 % every year.

Capital Instruments

Our Management Board received approval from the 2016 Annual General Meeting to buy back up to 137.9 million shares before the end of April 2021. Thereof 69.0 million shares can be purchased by using derivatives. These authorizations substitute the authorizations of the previous year. We have received approval from the ECB for share buybacks for 2016 and 2017 according to CRR/CRD 4 rules. During the period from the 2016 Annual General Meeting until the 2017 Annual General Meeting (May 18, 2017), 14.8 million shares have been purchased, of which 0.2 million shares through exercise of call options. The shares purchased were used for equity compensation purposes in the same period or were to be used in the upcoming period so that the number of shares held in Treasury from buybacks was 1.2 million as of the 2017 Annual General Meeting. In Q2 2017 we purchased under the 2016 AGM authorization 27.5 million call options on Deutsche Bank shares to hedge the risk of a rising share price for upcoming equity compensation liabilities. All options had a maturity of more than 18 months.

The 2017 Annual General Meeting granted our Management Board the approval to buy back up to 206.7 million shares before the end of April 2022. Thereof 103.3 million shares can be purchased by using derivatives, this includes 41.3 million derivatives with a maturity exceeding 18 months. These authorizations substitute the authorizations of the previous year. During the period from the 2017 Annual General Meeting until December 31, 2017, 14.1 million shares were purchased. The shares purchased were used for equity compensation purposes in the same period or were to be used in the upcoming period so that the number of shares held in Treasury from buybacks was 0.2 million as of December 31, 2017.

On March 5, 2017, Deutsche Bank announced a capital increase of up to 687.5 million new shares with subscription rights to existing shareholders and with the same dividend rights as all other outstanding shares. Deutsche Bank completed the capital increase on April 7, 2017. With the capital increase, the number of common shares of Deutsche Bank AG increased by 687.5 million, from 1,379.3 million to 2,066.8 million in early April 2017. The gross proceeds amounted to € 8.0 billion and the net proceeds amounted to € 7.9 billion. The recognition of the gross proceeds was formally approved by the ECB on July 26, 2017.

Since the 2017 Annual General Meeting, and as of December 31, 2017, authorized capital available to the Management Board is € 2,560 million (1,000 million shares). As of December 31, 2017, the conditional capital against cash stands at € 512 million (200 million shares). Additional conditional capital for equity compensation amounts to € 51.2 million (20 million shares).

Our legacy Hybrid Tier 1 capital instruments (substantially all noncumulative trust preferred securities) are not recognized under fully loaded CRR/CRD 4 rules as Additional Tier 1 capital, mainly because they have no write-down or equity conversion feature. However, they are to a large extent recognized as Additional Tier 1 capital under CRR/CRD 4 transitional provisions and can still be partially recognized as Tier 2 capital under the fully loaded CRR/CRD 4 rules. During the transitional phase-out period the maximum recognizable amount of Additional Tier 1 instruments from Basel 2.5 compliant issuances as of December 31, 2012 will be reduced at the beginning of each financial year by 10 % or € 1.3 billion, through 2022. For December 31, 2017, this resulted in eligible Additional Tier 1 instruments of € 8.6 billion (i.e. € 4.6 billion newly issued AT1 Notes plus € 3.9 billion of legacy Hybrid Tier 1 instruments recognizable during the transition period). In 2017, the Bank has called one legacy Hybrid Tier 1 instrument with a notional of € 0.5 billion and an eligible equivalent amount of € 0.5 billion and another legacy Hybrid Tier 1 instrument with a notional of U.S. $ 0.3 billion and an eligible equivalent amount of € 0.0 billion. The bank has also called one legacy Hybrid Tier 1 instrument with a notional of U.S. $ 2.0 billion and an eligible equivalent amount of € 1.6 billion effective as of February 20, 2018. € 3.9 billion of the legacy Hybrid Tier 1 instruments can still be recognized as Tier 2 capital under the fully loaded CRR/CRD 4 rules. Additional Tier 1 instruments recognized under fully loaded CRR/CRD 4 rules amounted to € 4.6 billion as of December 31, 2017.

On December 1, 2017, we issued fixed rate subordinated Tier 2 notes with an aggregate amount of U.S. $ 1.0 billion. The notes have a denomination of U.S. $ 200,000 and integral multiples of U.S. $ 1,000 in excess thereof and are due December 1, 2032. They were issued in accordance with the registration requirements of the US Securities Act of 1933.

The total of our Tier 2 capital instruments as of December 31, 2017 recognized during the transition period under CRR/CRD 4 was € 6.4 billion. As of December 31, 2017, there were no legacy Hybrid Tier 1 instruments that are counted as Tier 2 capital under transitional rules. The gross notional value of the Tier 2 capital instruments was € 8.3 billion. No Tier 2 capital instrument had been called in 2017. Tier 2 instruments recognized under fully loaded CRR/CRD 4 rules amounted to € 10.3 billion as of December 31, 2017 (including the € 3.9 billion legacy Hybrid Tier 1 capital instruments only recognizable as Additional Tier 1 capital during the transitional period).

Minimum capital requirements and additional capital buffers

The Pillar 1 CET 1 minimum capital requirement applicable to the Group is 4.50 % of risk-weighted assets (RWA). The Pillar 1 total capital requirement of 8.00 % demands further resources that may be met with up to 1.50 % Additional Tier 1 capital and up to 2.00 % Tier 2 capital.

Failure to meet minimum capital requirements can result in supervisory measures such as restrictions of profit distributions or limitations on certain businesses such as lending. We complied with the regulatory capital adequacy requirements in 2017.

In addition to these minimum capital requirements, the following combined capital buffer requirements have been phased in since 2016 (other than the systemic risk buffer, if any, which is not subject to any phase-in) and will become fully effective from 2019 onwards. The buffer requirements must be met in addition to the Pillar 1 minimum capital requirements, but can be drawn down in times of economic stress.

Deutsche Bank continues to be designated as a global systemically important institution (G-SII) by the German Federal Financial Supervisory Authority (BaFin) in agreement with Deutsche Bundesbank, resulting in a G-SII buffer requirement of 2.00 % CET 1 capital of RWA in 2019. This is in line with the Financial Stability Board (FSB) assessment of systemic importance based on the indicators as published in 2017. The additional buffer requirement of 2.00 % for G-SIIs was phased in with 0.5 % in 2016, 1.00 % in 2017 and in 2018 amounts to 1.50 %. We will continue to publish our indicators on our website.

The capital conservation buffer is implemented in Section 10c German Banking Act based on Article 129 CRD 4 and equals a requirement of 2.50 % CET 1 capital of RWA. The additional buffer requirement of 2.50 % was phased in with 0.625% in 2016, 1.25 % in 2017 and in 2018 amounts to 1.875 %.

The countercyclical capital buffer is deployed in a jurisdiction when excess credit growth is associated with an increase in system-wide risk. It may vary between 0 % and 2.50 % CET 1 capital of RWA by 2019. In exceptional cases, it could also be higher than 2.50 %. The institution specific countercyclical buffer that applies to Deutsche Bank is the weighted average of the countercyclical capital buffers that apply in the jurisdictions where our relevant credit exposures are located. As per December 31, 2017 (and currently), the institution-specific countercyclical capital buffer was at 0.02 %.

In addition to the aforementioned buffers, national authorities, such as the BaFin, may require a systemic risk buffer to prevent and mitigate long-term non-cyclical systemic or macro-prudential risks that are not covered by the CRR. They can require an additional buffer of up to 5.00 % CET 1 capital of RWA. As of the year-end 2017 (and currently), no systemic risk buffer applied to Deutsche Bank.

Additionally, Deutsche Bank AG has been classified by BaFin as other systemically important institution (O-SII) with an additional buffer requirement of 2.00 % that has to be met on a consolidated level. For Deutsche Bank, the O-SII buffer was introduced in first steps of 0.66 % in 2017 and in 2018 amounts to 1.32 %. Unless certain exceptions apply, only the higher of the systemic risk buffer, G-SII buffer and O-SII buffer must be applied. Accordingly, the O-SII buffer is not applicable as of December 31, 2017.

In addition, pursuant to the Pillar 2 Supervisory Review and Evaluation Process (SREP), the European Central Bank (ECB) may impose capital requirements on individual banks which are more stringent than statutory requirements (so-called Pillar 2 requirement). On December 8, 2016, following the results of the 2016 SREP, the ECB informed Deutsche Bank that it must maintain a phase-in CET 1 ratio of at least 9.52 % on a consolidated basis under applicable transitional rules under CRR/CRD 4 at all times, beginning on January 1, 2017. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50 %, the Pillar 2 requirement (SREP Add-on) of 2.75 %, the phase-in capital conservation buffer of 1.25 %, the countercyclical buffer (currently 0.02 %) and the phase-in G-SII buffer of 1.00 %. Correspondingly the requirements for Deutsche Bank's Tier 1 capital ratio were at 11.02 % and total capital ratio at 13.02 % as of December 31, 2017.

On December 19, 2017, Deutsche Bank was informed by the ECB of its decision regarding prudential minimum capital requirements for 2018, following the results of the 2017 SREP. The decision requires Deutsche Bank to maintain a phase-in CET 1 ratio of at least 10.65 % on a consolidated basis, beginning on January 1, 2018. This CET 1 capital requirement comprises the Pillar 1 minimum capital requirement of 4.50 %, the Pillar 2 requirement (SREP Add-on) of 2.75 %, the phase-in capital conservation buffer of 1.875 %, the countercyclical buffer (currently 0.02 %) and the phase-in G-SII buffer of 1.50 %. The new CET 1 capital requirement of 10.65 % for 2018 is higher than the CET 1 capital requirement of 9.52 %, which was applicable to Deutsche Bank in 2017, reflecting the further phase-in of the capital conservation buffer and the G-SII buffer. Correspondingly, 2018 requirements for Deutsche Bank's Tier 1 capital ratio are at 12.15 % and for its total capital ratio at 14.15 %. Also, following the results of the 2017 SREP, the ECB communicated to us an individual expectation to hold a further “Pillar 2” CET 1 capital add-on, commonly referred to as the ‘“Pillar 2” guidance’. The capital add-on pursuant to the “Pillar 2” guidance is separate from and in addition to the Pillar 2 requirement. The ECB has stated that it expects banks to meet the “Pillar 2” guidance although it is not legally binding, and failure to meet the “Pillar 2” guidance does not automatically trigger legal action.

The following table gives an overview of the different Pillar 1 and Pillar 2 minimum capital requirements (but excluding the “Pillar 2” guidance) as well as capital buffer requirements applicable to Deutsche Bank in the years 2017 and 2018 (articulated on a phase-in basis):

Overview total capital requirements and capital buffers

	2017	2018
Pillar 1		
Minimum CET 1 requirement	4.50 %	4.50 %
Capital Conservation Buffer	1.25 %	1.875 %
Countercyclical Buffer	0.02 %	0.02 %[1]
G-SII Buffer[3]	1.00 %	1.50 %
O-SII Buffer[3]	0.66 %	1.32 %
Systemic Risk Buffer[3]	0.00 %	0.00 %[2]
Pillar 2		
Pillar 2 SREP Add-on of CET 1 capital (excluding the "Pillar 2" guidance)	2.75 %	2.75 %
SREP CET 1 Requirement	8.50 %	9.125 %
Total CET 1 requirement from Pillar 1 and 2[4]	**9.52 %**	10.65 %
Total Tier 1 requirement from Pillar 1 and 2	**11.02 %**	12.15 %
Total capital requirement from Pillar 1 and 2	**13.02 %**	14.15 %

1 Deutsche Bank’s countercyclical buffer requirement is subject to country-specific buffer rates decreed by EBA and the Basel Committee of Banking Supervision (BCBS) as well as Deutsche Bank’s relevant credit exposures as per respective reporting date. The countercyclical buffer rate for 2018 has been assumed to be 0.02 % due to unavailability of 2018 data.
2 The systemic risk buffer has been assumed to remain at 0 % for the projected year 2018, subject to changes based on further directives.
3 Unless certain exceptions apply only the higher of the systemic risk buffer, G-SII and O-SII buffer must be applied.
4 The total Pillar 1 and Pillar 2 CET 1 requirement (excluding the “Pillar 2” guidance) is calculated as the sum of the SREP requirement, the higher of the G-SII, O-SII and systemic risk buffer requirement as well as the countercyclical buffer requirement.

Development of regulatory capital

Our CRR/CRD 4 Tier 1 capital as of December 31, 2017 amounted to € 57.6 billion, consisting of CET 1 capital of € 50.8 billion and AT1 capital of € 6.8 billion. The CRR/CRD 4 Tier 1 capital was € 2.1 billion higher than at the end of 2016, primarily driven by an increase in CET 1 capital of € 3.0 billion since year end 2016 while AT1 capital decreased by € 0.9 billion in the same period.

The € 3.0 billion increase of CRR/CRD 4 CET 1 capital was largely the result of the capital issuance completed in early April 2017 with net proceeds of € 7.9 billion and the reversal of 10 % threshold-related deductions of € 0.4 billion due to the higher capital base. These positive effects were then reduced by increased regulatory adjustments due to the higher phase-in rate of 80 % in 2017 compared to 60 % in 2016 and negative effects from Currency Translation Adjustments of € 2.6 billion with partially positive foreign exchange counter-effects in capital deduction items. Further reductions were due to the net loss attributable to Deutsche Bank shareholders and additional equity components of € 0.8 billion in 2017. Since we do not include an interim profit in our CET 1 capital as a consequence of the negative net income in the financial year 2017, neither AT1 coupon nor shareholder dividends are accrued in CET 1 capital in accordance with Art 26 (2) CRR.

The € 0.9 billion decrease in CRR/CRD 4 AT1 capital was mainly the result of reduced Legacy Hybrid Tier 1 instruments, recognizable as AT1 capital during the transition period, which were € 2.6 billion lower compared to year end 2016 largely due to the call of instruments (€ 2.4 billion) and foreign exchange effects. A positive counter-effect resulted from reduced transitional adjustments (€ 1.7 billion lower than at year end 2016) that were phased out from AT1 capital. These deductions reflect the residual amount of certain CET 1 deductions that are subtracted from CET 1 capital under fully loaded rules, but are allowed to reduce AT1 capital during the transitional period. The phase-in rate for these deductions on the level of CET 1 capital increased to 80 % in 2017 (60 % in 2016) and decreased correspondingly on the level of AT1 capital to 20 % in 2017 (40 % in 2016).

Our fully loaded CRR/CRD 4 Tier 1 capital as of December 31, 2017 was € 52.9 billion, compared to € 46.8 billion at the end of 2016. Our fully loaded CRR/CRD 4 CET 1 capital amounted to € 48.3 billion as of December 31, 2017, compared to € 42.3 billion as of December 31, 2016. Our fully loaded CRR/CRD 4 AT1 capital amounted to € 4.6 billion as of December 31, 2017, unchanged compared to year end 2016.

The increase of our fully loaded CET 1 capital of € 6.0 billion compared to year end 2016 capital was largely the result of the € 7.9 billion net proceeds from our capital issuance and the reversal of 10 % threshold-related deductions of € 0.6 billion due to the higher capital base. Further positive effects of € 0.4 billion resulted from regulatory adjustments from prudential filters (Debt Valuation Adjustments). These positive effects were partially reduced by our negative net income of € 0.8 billion and negative effects from Currency Translation Adjustments of € 2.6 billion with partially positive foreign exchange counter-effects in capital deduction items.

Based on ECB guidance and following the EBA Guidelines on payment commitments, Deutsche Bank will treat irrevocable payment commitments related to the Deposit Guarantee Scheme and the Single Resolution Fund as an additional CET 1 capital deduction instead of risk weighted assets, effective from January 2018 onwards. If these were treated as a capital deduction item for the financial year 2017, then our pro-forma fully loaded CET 1 capital would have been € 0.4 billion lower along with an RWA relief of € 1.0 billion resulting in a pro-forma fully loaded CET 1 capital ratio decrease of 8 basis points.

Transitional template for regulatory capital, RWA and capital ratios

	Dec 31, 2017		Dec 31, 2016	
in € m.	CRR/CRD 4 fully loaded	CRR/CRD 4	CRR/CRD 4 fully loaded	CRR/CRD 4
Common Equity Tier 1 (CET 1) capital: instruments and reserves				
Capital instruments and the related share premium accounts	45,195	45,195	37,290	37,290
Retained earnings	17,977	17,977	20,113	20,113
Accumulated other comprehensive income (loss), net of tax	696	660	3,708	3,645
Independently reviewed interim profits net of any foreseeable charge or dividend[1]	(751)	(751)	(2,023)	(2,023)
Other	0	33	0	79
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	**63,116**	**63,114**	59,088	59,104
Common Equity Tier 1 (CET 1) capital: regulatory adjustments				
Additional value adjustments (negative amount)	(1,204)	(1,204)	(1,398)	(1,398)
Other prudential filters (other than additional value adjustments)	(102)	(74)	(639)	(428)
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(8,394)	(6,715)	(8,436)	(5,062)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (negative amount)	(3,004)	(2,403)	(3,854)	(2,312)
Negative amounts resulting from the calculation of expected loss amounts	(502)	(408)	(297)	(188)
Defined benefit pension fund assets (negative amount)	(1,125)	(900)	(945)	(567)
Direct, indirect and synthetic holdings by an institution of own CET 1 instruments (negative amount)	(144)	(117)	(59)	(41)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10 % / 15 % thresholds and net of eligible short positions) (negative amount)	0	0	0	0
Deferred tax assets arising from temporary differences (net of related tax liabilities where the conditions in Art. 38 (3) CRR are met) (amount above the 10 % / 15 % thresholds) (negative amount)	0	0	(590)	(354)
Other regulatory adjustments[2]	(341)	(485)	(591)	(971)
Total regulatory adjustments to Common Equity Tier 1 (CET 1) capital	**(14,816)**	**(12,306)**	(16,810)	(11,321)
Common Equity Tier 1 (CET 1) capital	**48,300**	**50,808**	42,279	47,782
Additional Tier 1 (AT1) capital: instruments				
Capital instruments and the related share premium accounts	4,676	4,676	4,676	4,676
Amount of qualifying items referred to in Art. 484 (4) CRR and the related share premium accounts subject to phase out from AT1	N/M	3,904	N/M	6,516
Additional Tier 1 (AT1) capital before regulatory adjustments	**4,676**	**8,579**	4,676	11,191
Additional Tier 1 (AT1) capital: regulatory adjustments				
Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(55)	(26)	(125)	(51)
Residual amounts deducted from AT1 capital with regard to deduction from CET 1 capital during the transitional period pursuant to Art. 472 CRR	N/M	(1,730)	N/M	(3,437)
Other regulatory adjustments	0	0	0	0
Total regulatory adjustments to Additional Tier 1 (AT1) capital	**(55)**	**(1,756)**	(125)	(3,488)
Additional Tier 1 (AT1) capital	**4,621**	**6,823**	4,551	7,703
Tier 1 capital (T1 = CET 1 + AT1)	**52,921**	**57,631**	46,829	55,486
Tier 2 (T2) capital	**10,329**	**6,384**	12,673	6,672
Total capital (TC = T1 + T2)	**63,250**	**64,016**	59,502	62,158
Total risk-weighted assets	**344,212**	**343,316**	357,518	356,235
Capital ratios				
Common Equity Tier 1 capital ratio (as a percentage of risk-weighted assets)	14.0	14.8	11.8	13.4
Tier 1 capital ratio (as a percentage of risk-weighted assets)	15.4	16.8	13.1	15.6
Total capital ratio (as a percentage of risk-weighted assets)	18.4	18.6	16.6	17.4

N/M – Not meaningful
[1] As we do not include an interim profit in our CET 1 capital as a consequence of the negative net income in the financial year 2017, neither AT1 coupon nor shareholder dividends are accrued in CET 1 capital in accordance with Art 26 (2) CRR.
[2] Including an additional capital deduction of € 0.3 billion that was imposed on Deutsche Bank effective from October 2016 onwards based on a notification by the ECB pursuant to Article 16(1)(c), 16(2)(b) and (j) of Regulation (EU) No 1024/2013 as well as the additional filter for funds for home loans and savings protection ("Fonds für bauspartechnische Absicherung") of € 19 million.

Reconciliation of shareholders' equity to regulatory capital

	CRR/CRD 4	
in € m.	Dec 31, 2017	Dec 31, 2016
Total shareholders' equity per accounting balance sheet	63,174	59,833
Deconsolidation/Consolidation of entities	(58)	(123)
Thereof:		
Additional paid-in capital	(6)	(6)
Retained earnings	(228)	(276)
Accumulated other comprehensive income (loss), net of tax	176	159
Total shareholders' equity per regulatory balance sheet	63,116	59,710
Noncontrolling interest based on transitional rules	33	79
Accrual for dividend and AT1 coupons[1]	0	(621)
Reversal of deconsolidation/consolidation of the position Accumulated other comprehensive income (loss), net of tax, during transitional period	(35)	(63)
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	63,114	59,104
Additional value adjustments	(1,204)	(1,398)
Other prudential filters (other than additional value adjustments)	(74)	(428)
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 467 and 468 CRR	(144)	(380)
Goodwill and other intangible assets (net of related tax liabilities)	(6,715)	(5,062)
Deferred tax assets that rely on future profitability	(2,403)	(2,666)
Defined benefit pension fund assets	(900)	(567)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	0
Other regulatory adjustments	(866)	(820)
Common Equity Tier 1 capital	50,808	47,782

[1] As we do not include an interim profit in our CET 1 capital as a consequence of the negative net income in the financial year 2017, neither AT1 coupon nor shareholder dividends are accrued in CET 1 capital in accordance with Art 26 (2) CRR.

Development of regulatory capital

	CRR/CRD 4	
in € m.	Dec 31, 2017	Dec 31, 2016
Common Equity Tier 1 (CET 1) capital - opening amount	47,782	52,429
Common shares, net effect	1,760	0
Additional paid-in capital	6,153	192
Retained earnings	(795)	(1,826)
Common shares in treasury, net effect/(+) sales (–) purchase	(9)	10
Movements in accumulated other comprehensive income	(2,748)	231
Accrual for dividend and Additional Tier 1 (AT1) coupons[1]	0	(621)
Additional value adjustments	194	479
Goodwill and other intangible assets (net of related tax liabilities)	(1,653)	(1,686)
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	(91)	(988)
Negative amounts resulting from the calculation of expected loss amounts	(219)	(130)
Defined benefit pension fund assets	(333)	(97)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	278
Securitization positions not included in risk-weighted assets	0	0
Deferred tax assets arising from temporary differences (amount above 10 % and 15 % threshold, net of related tax liabilities where the conditions in Art. 38 (3) CRR are met)	354	(30)
Other, including regulatory adjustments	413	(457)
Common Equity Tier 1 (CET 1) capital - closing amount	50,808	47,782
Additional Tier 1 (AT1) Capital – opening amount	7,703	5,793
New Additional Tier 1 eligible capital issues	0	0
Matured and called instruments	(2,376)	(76)
Transitional arrangements	1,708	1,879
Thereof:		
Goodwill and other intangible assets (net of related tax liabilities)	1,696	1,689
Other, including regulatory adjustments	(212)	108
Additional Tier 1 (AT1) Capital – closing amount	6,823	7,703
Tier 1 capital	57,631	55,486
Tier 2 (T2) capital – closing amount	6,384	6,672
Total regulatory capital	64,016	62,158

[1] As we do not include an interim profit in our CET 1 capital as a consequence of the negative net income in the financial year 2017, neither AT1 coupon nor shareholder dividends are accrued in CET 1 capital in accordance with Art 26 (2) CRR.

Development of risk-weighted assets

The table below provides an overview of RWA broken down by risk type and business division. They include the aggregated effects of the segmental reallocation of infrastructure related positions, if applicable, as well as reallocations between the segments.

Risk-weighted assets by risk type and business division according to transitional rules

						Dec 31, 2017
in € m.	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total
Credit Risk	118,940	75,377	3,273	0	16,552	214,142
Settlement Risk	142	0	0	0	5	147
Credit Valuation Adjustment (CVA)	6,189	171	84	0	7	6,451
Market Risk	30,896	70	0	0	0	30,966
Operational Risk	74,936	11,654	5,020	0	0	91,610
Total	231,103	87,272	8,378	0	16,564	343,316

						Dec 31, 2016
in € m.	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total
Credit Risk	124,274	72,735	3,756	4,075	15,505	220,345
Settlement Risk	36	0	0	0	0	36
Credit Valuation Adjustment (CVA)	8,886	294	139	90	8	9,416
Market Risk	30,198	62	0	3,502	0	33,762
Operational Risk	73,610	12,696	4,957	1,413	0	92,675
Total	237,003	85,788	8,853	9,079	15,512	356,235

The RWA according to CRR/CRD 4 were € 343.3 billion as of December 31, 2017, compared to € 356.2 billion at the end of 2016. The overall decrease of € 12.9 billion mainly reflects decreases in credit risk RWA. Credit Risk RWA are € 6.2 billion lower mainly from foreign exchange reductions of € 10.2 billion which is partly offset by business driven increase in our Corporate & Investment Bank and Private & Commercial Bank segments. In addition book quality changes due to improved portfolio quality have contributed to the overall decrease in Credit Risk RWA. The decrease in RWA for market risk since December 31, 2016 was primarily driven by value-at-risk and stressed value-at-risk components, which was partly offset by an increase in the incremental risk charge and market risk standardized approach for securitizations. The € 2.9 billion reduction in RWA for CVA was mainly driven by de-risking of the portfolio. The slight decrease in Operational Risk RWA was mainly driven by the internal and external loss profile.

RWA calculated on CRR/CRD 4 fully loaded basis were € 344.2 billion as of December 31, 2016 compared with € 357.5 billion at the end of 2016. The decrease was driven by the same movements as outlined for the transitional rules. The fully loaded RWA were € 0.9 billion higher than the risk-weighted assets under the transitional rules due to the application under the transition rules of the equity investment grandfathering rule according to Article 495 CRR, pursuant to which certain equity investments receive a 100 % risk weight instead of a risk weight between 190 % and 370 % determined based on Article 155 CRR that would apply under the CRR/CRD 4 fully loaded rules.

As of December 31, 2017, we have not applied the grandfathering rule anymore, but instead applied a risk weight between 190 % and 370 % determined based on Article 155 CRR under the CRR/CRD 4 fully loaded rules to all our equity positions. Consequently, no transitional arrangements are considered in our fully loaded RWA numbers for December 31, 2017. Only for the comparative period, year-end 2016, are these transitional rules within the risk weighting still applied.

As of December 31, 2016, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA consisted of 15 transactions amounting to € 220 million in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been no more than € 816 million, and thus our Group fully loaded RWA would have been no more than € 358.1 billion as of December 31, 2016, rather than the Group fully loaded RWA of € 357.5 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2016 using fully loaded RWAs without application of the grandfathering rule, such capital ratios would have remained unchanged (due to rounding) at the 11.8 %, 13.1 % and 16.6 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

The tables below provide an analysis of key drivers for risk-weighted asset movements observed for credit, market, operational risk and the credit valuation adjustment in the reporting period.

Development of risk-weighted assets for Credit Risk including Counterparty Credit Risk

	Dec 31, 2017		Dec 31, 2016	
in € m.	Credit risk RWA	Capital requirements	Credit risk RWA	Capital requirements
Credit risk RWA balance, beginning of year	220,345	17,628	242,019	19,362
Book size	3,523	282	(8,085)	(647)
Book quality	506	40	(3,827)	(306)
Model updates	1,272	102	2,328	186
Methodology and policy	0	0	(1,280)	(102)
Acquisition and disposals	0	0	(12,701)	(1,016)
Foreign exchange movements	(10,162)	(813)	350	28
Other	(1,342)	(107)	1,539	123
Credit risk RWA balance, end of year	214,142	17,131	220,345	17,628

Thereof: Development of risk-weighted assets for Counterparty Credit Risk

	Dec 31, 2017		Dec 31, 2016	
in € m.	Counterparty credit risk RWA	Capital requirements	Counterparty credit risk RWA	Capital requirements
Counterparty credit risk RWA balance, beginning of year	35,614	2,849	37,276	2,982
Book size	(4,628)	(370)	(2,740)	(219)
Book quality	3,715	297	511	41
Model updates	1,272	102	1,439	115
Methodology and policy	0	0	(60)	(5)
Acquisition and disposals	0	0	(707)	(57)
Foreign exchange movements	(2,048)	(164)	(106)	(8)
Other	0	0	0	0
Counterparty credit risk RWA balance, end of year	33,924	2,714	35,614	2,849

Organic changes in our portfolio size and composition are considered in the category “Book size”. The category “Book quality” mainly represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage and netting activities. “Model updates” include model refinements and advanced model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the “Methodology and policy” category. “Acquisition and disposals” shows significant exposure movements which can be clearly assigned to new businesses or disposal-related activities. Changes that cannot be attributed to the above categories are reflected in the category “Other”.

The decrease in RWA for credit risk by 3 % or € 6.2 billion since December 31, 2016 is predominantly driven by reductions in “Foreign exchange movements”. This is partly offset by “Book Size” and “Model updates”. The increase in “Book size” is driven by the FX neutral business driven growth in our Corporate & Investment Bank and Private & Commercial Bank segments. The increase in “Model updates” corresponds predominantly to a revised treatment of the applicable margin period of risk and general wrong way risk of specific derivatives portfolios, which was partially offset by a refinement in the calculation of effective maturity for collateralized counterparties.

The increase in “Book quality” within the counterparty credit risk table is predominantly driven by the revised treatment of netting application of our security financing products which is partly offset by reductions from recalibrations of our risk parameters as well as process enhancements. This increase is offset by a decrease in “Book size” where there was a decline due to de-risking measures and exposure reductions.

Based on the CRR/CRD 4 regulatory framework, we are required to calculate RWA using the CVA which takes into account the credit quality of our counterparties. RWA for CVA covers the risk of mark-to-market losses on the expected counterparty risk in connection with OTC derivative exposures. We calculate the majority of the CVA based on our own internal model as approved by the BaFin.

Development of risk-weighted assets for Credit Valuation Adjustment

	Dec 31, 2017		Dec 31, 2016	
in € m.	CVA RWA	Capital requirements	CVA RWA	Capital requirements
CVA RWA balance, beginning of year	**9,416**	**753**	15,877	1,270
Movement in risk levels	(3,228)	(258)	(5,600)	(448)
Market data changes and recalibrations	0	0	278	22
Model updates	0	0	(1,000)	(80)
Methodology and policy	870	70	0	0
Acquisitions and disposals	0	0	0	0
Foreign exchange movements	(607)	(49)	(139)	(11)
CVA RWA balance, end of year	**6,451**	**516**	9,416	753

The development of CVA RWA is broken down into a number of categories: “Movement in risk levels”, which includes changes to the portfolio size and composition; “Market data changes and calibrations”, which includes changes in market data levels and volatilities as well as recalibrations; “Model updates” refers to changes to either the IMM credit exposure models or the value-at-risk models that are used for CVA RWA; “Methodology and policy” relates to changes to the regulation. Any significant business acquisitions or disposals would be presented in the category with that name.

As of December 31, 2017, the RWA for CVA amounted to € 6.5 billion, representing a decrease of € 2.9 billion (31%) compared with € 9.4 billion for December 31, 2016. The overall reduction was driven by de-risking of the portfolio and currency effects with some offset from “Methodology and policy” changes.

Development of risk-weighted assets for Market Risk

							Dec 31, 2017
in € m.	VaR	SVaR	IRC	CRM	Other	Total RWA	Total capital requirements
Market risk RWA balance, beginning of year	5,957	14,271	8,662	273	4,599	33,762	2,701
Movement in risk levels	(1,658)	(3,375)	2,598	(217)	922	(1,729)	(138)
Market data changes and recalibrations	81	0	0	0	581	661	53
Model updates/changes	0	0	(1,390)	0	(38)	(1,428)	(114)
Methodology and policy	0	0	0	0	0	0	0
Acquisitions and disposals	0	0	0	0	0	0	0
Foreign exchange movements	0	0	0	0	(301)	(301)	(24)
Other	0	0	0	0	0	0	0
Market risk RWA balance, end of year	4,380	10,896	9,871	56	5,763	30,966	2,477

							Dec 31, 2016
in € m.	VaR	SVaR	IRC	CRM	Other	Total RWA	Total capital requirements
Market risk RWA balance, beginning of year	6,931	17,146	11,608	2,378	11,491	49,553	3,964
Movement in risk levels	(655)	(1,547)	(2,716)	(3,553)	(8,852)	(17,323)	(1,386)
Market data changes and recalibrations	403	0	0	0	2,018	2,421	194
Model updates/changes	(57)	237	(230)	0	0	(50)	(4)
Methodology and policy	(665)	(1,565)	0	1,475	0	(754)	(60)
Acquisitions and disposals	0	0	0	0	0	0	0
Foreign exchange movements	0	0	0	(27)	(58)	(84)	(7)
Other	0	0	0	0	0	0	0
Market risk RWA balance, end of year	5,957	14,271	8,662	273	4,599	33,762	2,701

The analysis for market risk covers movements in our internal models for value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure as well as results from the market risk standardized approach, which are captured in the table under the category “Other”. The market risk standardized approach covers trading securitizations and nth-to-default derivatives, longevity exposures, relevant Collective Investment Undertakings and market risk RWA from Postbank.

The market risk RWA movements due to changes in market data levels, volatilities, correlations, liquidity and ratings are included under the “Market data changes and recalibrations” category. Changes to our market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of “Model updates”. In the “Methodology and policy” category we reflect regulatory driven changes to our market risk RWA models and calculations. Significant new businesses and disposals would be assigned to the line item “Acquisition and disposals”. The impacts of “Foreign exchange movements” are only calculated for the CRM and Standardized approach methods.

As of December 31, 2017 the RWA for market risk was € 31.0 billion which has decreased by € 2.8 billion (8.3 %) since December 31, 2016. The reduction was driven by the value-at-risk and stressed value-at-risk components in the "Movement in risk levels" category, partly offset by an increase in the incremental risk charge in the “Movement risk levels” category and the market risk standardized approach for securitization positions in the “Movement in risk levels” and “Market data changes” categories.

Development of risk-weighted assets for Operational Risk

	Dec 31, 2017		Dec 31, 2016	
in € m.	Operational risk RWA	Capital requirements	Operational risk RWA	Capital requirements
Operational risk RWA balance, beginning of year	**92,675**	**7,414**	89,923	7,194
Loss profile changes (internal and external)	(2,815)	(225)	7,048	564
Expected loss development	1,104	88	(1,798)	(144)
Forward looking risk component	(3,265)	(261)	(1,140)	(91)
Model updates	3,912	313	(358)	(29)
Methodology and policy	0	0	(1,000)	(80)
Acquisitions and disposals	0	0	0	0
Operational risk RWA balance, end of year	**91,610**	**7,329**	92,675	7,414

Changes of internal and external loss events are reflected in the category “Loss profile changes”. The category “Expected loss development” is based on divisional business plans as well as historical losses and is deducted from the AMA capital figure within certain constraints. The category “Forward looking risk component” reflects qualitative adjustments and as such the effectiveness and performance of the day-to-day Operational Risk management activities via Key Risk Indicators and Self-Assessment scores, focusing on the business environment and internal control factors. The category “Model updates” covers model refinements such as the implementation of model changes. The category “Methodology and policy” represents externally driven changes such as regulatory add-ons. The category “Acquisition and disposals” represents significant exposure movements which can be clearly assigned to new or disposed businesses.

The overall RWA decrease of € 1.1 billion was mainly driven by a lighter loss profile from internal and external losses feeding into our capital model. An additional increased benefit from the forward looking risk component overcompensated the impact of a model change regarding an enhanced scoring mechanism for the Self-Assessment results. This model change replaced the existing Self-Assessment process by our enhanced Risk and Control Assessment process. In Q4 2017, we have implemented a model change concerning the consistent use of loss data in our AMA model.

Economic Capital

Internal Capital Adequacy

Our internal capital adequacy assessment process (ICAAP) is aimed at maintaining the viability of Deutsche Bank on an ongoing basis. We assess our internal capital adequacy as the ratio of our internal capital supply divided by our internal economic capital demand as shown in the table below. While Deutsche Bank's ICAAP was historically based on a "gone concern approach", the approach was changed in November 2017 to take a perspective aimed at maintaining the viability of Deutsche Bank on an ongoing basis. As a result, the quantile used for the calculation of the internal economic capital demand has been changed from 99.98% to 99.9% improving comparability with regulatory capital demand along with the following implications for the internal capital supply definition: The revised internal capital supply definition excludes any Tier 1 capital instruments subject to grandfathering and Tier 2 capital instruments. Accruals for AT1 coupons and IFRS deferred tax assets that rely on future profitability excluding those arising from temporary differences are fully deducted. IFRS deferred tax assets arising from temporary differences are risk weighted and covered within business risk economic capital on the internal capital demand side. Previously, deferred tax assets had been fully deducted from internal capital supply. Fair value adjustments for assets reclassified where no matched funding is available are no longer deducted from the internal capital supply.

Total capital supply and demand

in € m. (unless stated otherwise)	Dec 31, 2017	Dec 31, 2016
Capital supply		
Shareholders' equity	63,174	59,833
Noncontrolling interests[1]	0	0
Accruals AT1 coupons	(213)	N/M
Gain on sale of securitizations, cash flow hedges	(29)	N/M
Fair value gains on own debt and debt valuation adjustments, subject to own credit risk[2]	(73)	(440)
Additional valuation adjustments[3]	(1,204)	(1,398)
Intangible assets	(8,839)	(8,982)
IFRS deferred tax assets excl. temporary differences[4]	(3,341)	N/M
IFRS deferred tax assets[4]	N/M	(8,666)
Expected loss shortfall	(502)	(297)
Defined benefit pension fund assets[5]	(1,125)	(945)
Holdings of own common equity tier 1 capital instruments	(131)	(45)
Home loans and savings protection ("Fonds zur bauspartechnischen Absicherung")	(19)	(231)
Other adjustments	(322)	N/M
Fair value adjustments for financial assets reclassified to loans[6]	N/M	(557)
Additional tier 1 equity instruments[7]	4,675	N/M
Hybrid tier 1 capital instruments	N/M	11,259
Tier 2 capital instruments	N/M	8,003
Capital supply	52,051	57,534
Total economic capital requirement		
Credit risk	10,769	13,105
Market risk	10,428	14,593
Operational risk	7,329	10,488
Business risk	5,677	5,098
Diversification benefit	(7,074)	(7,846)
Capital demand	27,129	35,438
Internal capital adequacy ratio	192 %	162 %

[1] Includes noncontrolling interest up to the economic capital requirement for each subsidiary.
[2] Includes deduction of fair value gains on own credit-effect relating to own liabilities designated under the fair value option as well as the debt valuation adjustments.
[3] As applied in the section Capital Management.
[4] Deduction-treatment of deferred tax assets arising from temporary differences was changed to inclusion in business risk economic capital demand.
[5] Reported as net assets (assets minus liabilities) of a defined pension fund, i.e. applicable for overfunded pension plans.
[6] Includes fair value adjustments for assets reclassified in accordance with IAS 39 and for banking book assets where no matched funding is available.
[7] As per Dec 31, 2016 included under 'Hybrid Tier 1 capital instruments'

A ratio of more than 100 % signifies that the total capital supply is sufficient to cover the capital demand determined by the risk positions. This ratio was 192 % as of December 31, 2017, compared with 162 % as of December 31, 2016. The change of the ratio was due to the fact that capital supply decreased proportionately less than the capital demand did. The decrease in capital demand was driven by lower economic capital requirements partly due to the change in quantile as explained in the section "Risk Profile". The capital supply decreased by € 5.4 billion mainly due to the new capital supply definition as per the new internal capital adequacy perspective implemented in November 2017.

The above capital adequacy measures apply to the consolidated Group as a whole (including Postbank) and form an integral part of our risk and capital management framework.

Leverage Ratio

We manage our balance sheet on a Group level and, where applicable, locally in each region. In the allocation of financial resources we favor business portfolios with the highest positive impact on our profitability and shareholder value. We monitor and analyze balance sheet developments and track certain market-observed balance sheet ratios. Based on this we trigger discussion and management action by the Group Risk Committee (GRC). Following the publication of the CRR/CRD 4 framework, we established a leverage ratio calculation according to that framework.

Leverage Ratio according to revised CRR/CRD 4 framework

The CRR/CRD 4 framework introduced a non-risk based leverage ratio that is intended to act as a supplementary measure to the risk based capital requirements. Its objectives are to constrain the build-up of leverage in the banking sector, helping avoid destabilizing deleveraging processes which can damage the broader financial system and the economy, and to reinforce the risk based requirements with a simple, non-risk based “backstop” measure. While the CRR/CRD 4 framework currently does not provide for a mandatory minimum leverage ratio to be complied with by the relevant financial institutions, a legislative proposal published by the European Commission on November 23, 2016 suggests introducing a minimum leverage ratio of 3 %. The legislative proposal provides that the leverage ratio would apply two years after the proposal’s entry into force and remains subject to political discussion among EU institutions.

We calculate our leverage ratio exposure on a fully loaded basis in accordance with Article 429 of the CRR as per Delegated Regulation (EU) 2015/62 of October 10, 2014 published in the Official Journal of the European Union on January 17, 2015 amending Regulation (EU) No 575/2013. In addition, we provide the leverage ratio on a phase-in basis as displayed below in the tables.

Our total leverage ratio exposure includes derivatives, securities financing transactions (SFTs), off-balance sheet exposure and other on-balance sheet exposure (excluding derivatives and SFTs).

The leverage exposure for derivatives is calculated by using the regulatory mark-to-market method for derivatives comprising the current replacement cost plus a regulatory defined add-on for the potential future exposure. Variation margin received in cash from counterparties is deducted from the current replacement cost portion of the leverage ratio exposure measure and variation margin paid to counterparties is deducted from the leverage ratio exposure measure related to receivables recognized as an asset on the balance sheet, provided certain conditions are met. Deductions of receivables for cash variation margin provided in derivatives transactions are shown under derivative exposure in the table “Leverage ratio common disclosure” below. The effective notional amount of written credit derivatives, i.e., the notional reduced by any negative fair value changes that have been incorporated in Tier 1 capital, is included in the leverage ratio exposure measure; the resulting exposure measure is further reduced by the effective notional amount of a purchased credit derivative on the same reference name provided certain conditions are met.

The securities financing transaction (SFT) component includes the gross receivables for SFTs, which are netted with SFT payables if specific conditions are met. In addition to the gross exposure a regulatory add-on for the counterparty credit risk is included.

The off-balance sheet exposure component follows the credit risk conversion factors (CCF) of the standardized approach for credit risk (0 %, 20 %, 50 %, or 100 %), which depend on the risk category subject to a floor of 10 %.

The other on-balance sheet exposure component (excluding derivatives and SFTs) reflects the accounting values of the assets (excluding derivatives and SFTs) as well as regulatory adjustments for asset amounts deducted in determining Tier 1 capital.

The following tables show the leverage ratio exposure and the leverage ratio, both on a fully loaded basis, in accordance with the disclosure tables of the implementing technical standards (ITS) which were adopted by the European Commission via Commission Implementing Regulation (EU) 2016/200 published in the Official Journal of the European Union on February 16, 2016. For additional information, they also contain the phase-in figures.

Summary reconciliation of accounting assets and leverage ratio exposures

in € bn.	Dec 31, 2017	Dec 31, 2016
Total assets as per published financial statements	1,475	1,591
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	5	0
Adjustments for derivative financial instruments	(172)	(276)
Adjustment for securities financing transactions (SFTs)	41	20
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	95	102
Other adjustments	(50)	(90)
Leverage ratio total exposure measure (fully loaded)	1,395	1,348
Leverage ratio total exposure measure (phase-in)	1,396	1,350

Leverage ratio common disclosure

in € bn. (unless stated otherwise)	Dec 31, 2017	Dec 31, 2016
Total derivative exposures	166	177
Total securities financing transaction exposures	158	135
Total off-balance sheet exposures	95	102
Other Assets	990	948
Asset amounts deducted in determining Tier 1 capital[1]	(14)	(15)
Tier 1 capital (fully loaded)	52.9	46.8
Leverage ratio total exposure measure (fully loaded)	1,395	1,348
Leverage ratio (fully loaded, in %)	3.8	3.5
Tier 1 capital (phase-in)	57.6	55.5
Leverage ratio total exposure measure (phase-in)	1,396	1,350
Leverage ratio (phase-in, in %)	4.1	4.1

[1] Using a fully loaded definition of Tier 1 capital. The amount using a transitional definition of Tier 1 capital is € (13) billion and € (13) billion as of December 31, 2017 and December 31, 2016, respectively.

Description of the factors that had an impact on the leverage ratio in 2017

As of December 31, 2017, our fully loaded CRR/CRD 4 leverage ratio was 3.8 % compared to 3.5 % as of December 31, 2016, taking into account as of December 31, 2017 a fully loaded Tier 1 capital of € 52.9 billion over an applicable exposure measure of € 1,395 billion (€ 46.8 billion and € 1,348 billion as of December 31, 2016, respectively).

Our CRR/CRD 4 leverage ratio according to transitional provisions was 4.1 % as of December 31, 2017 (4.1 % as of December 31, 2016), calculated as Tier 1 capital according to transitional rules of € 57.6 billion over an applicable exposure measure of € 1,396 billion (€ 55.5 billion and € 1,350 billion as of December 31, 2016, respectively). The exposure measure under transitional rules is € 1 billion (€ 2 billion as of December 31, 2016) higher compared to the fully loaded exposure measure as the asset amounts deducted in determining Tier 1 capital are lower under transitional rules.

Based on recent ECB guidance, we have included pending settlements in the calculation of the leverage exposure since the second quarter 2017 based on the asset values as recorded for financial accounting purposes, i.e., for Deutsche Bank Group under IFRS, trade date accounting. The application of trade date accounting leads to a temporary increase of the leverage exposure between trade date and settlement date for regular way asset purchases. The size of the reported increase was € 17 billion at December 31, 2017. It should be noted that under the proposed revision of the Capital Requirement Regulation ("CRR") as currently drafted this increase would materially reverse out once the revision becomes effective given it allows for the offsetting of pending settlement cash payables and cash receivables for regular way purchases and sales that are settled on a delivery-versus-payment basis.

Following a clarification by the EBA published on January 19, 2018 we have changed the treatment of sold options which form part of a regulatory netting set starting with the fourth quarter 2017. We no longer apply a cap at the maximum possible exposure increase of the netting set that may result from the option and this leads to an increase of the add-ons for potential future exposure for derivatives by € 15 billion.

Over the year 2017, our leverage ratio exposure increased by € 47 billion to € 1,395 billion. This is primarily driven by the € 41 billion increase in Other Assets which in addition to the above mentioned pending settlements also reflects the development on our balance sheet, in particular increases in cash and central bank balances and non-derivative trading assets, partly offset by a decrease in loans. Furthermore, there was an increase of € 23 billion in SFT exposures reflecting higher add-ons for counterparty credit risk and the overall growth on the balance sheet in the SFT related items (securities purchased under resale agreements and securities borrowed, under accrual and fair value accounting as well as receivables from prime brokerage). Derivative exposures decreased by € 11 billion mainly driven by lower replacement costs; the above-mentioned increase of the potential future exposure add-ons for sold options was largely offset by the change from the previous collateral model to a settlement model for the interest rate swaps transacted with the London Clearing House and other reductions. In addition, off-balance sheet exposures decreased by € 7 billion corresponding to lower notional amounts for irrevocable lending commitments and contingent liabilities.

The increase of the leverage ratio exposure in 2017 includes a negative foreign exchange impact of € 82 billion mainly due to the appreciation of the Euro against the U.S. dollar.

Our leverage ratio calculated as the ratio of total assets under IFRS to total equity under IFRS was 22 as of December 31, 2017 compared to 25 as of December 31, 2016.

For main drivers of the Tier 1 capital development please refer to section “Regulatory Capital” in this report.

Credit Risk Exposure

Counterparty credit exposure arises from our traditional non-trading lending activities which include elements such as loans and contingent liabilities, as well as from our direct trading activity with clients in certain instruments including OTC derivatives like foreign exchange forwards and Forward Rate Agreements. A default risk also arises from our positions in equity products and traded credit products such as bonds.

We define our credit exposure by taking into account all transactions where losses might occur due to the fact that counterparties may not fulfill their contractual payment obligations.

Maximum Exposure to Credit Risk

The maximum exposure to credit risk table shows the direct exposure before consideration of associated collateral held and other credit enhancements (netting and hedges) that do not qualify for offset in our financial statements for the periods specified. The netting credit enhancement component includes the effects of legally enforceable netting agreements as well as the offset of negative mark-to-markets from derivatives against pledged cash collateral. The collateral credit enhancement component mainly includes real estate, collateral in the form of cash as well as securities-related collateral. In relation to collateral we apply internally determined haircuts and additionally cap all collateral values at the level of the respective collateralized exposure.

Maximum Exposure to Credit Risk

					Dec 31, 2017
		Credit Enhancements			
in € m.[1]	Maximum exposure to credit risk[2]	Netting	Collateral	Guarantees and Credit derivatives[3]	Total credit enhancements
Cash and central bank balances	225,655	–	0	–	0
Interbank balances (w/o central banks)	9,265	–	0	7	7
Central bank funds sold and securities purchased under resale agreements	9,971	–	9,914	–	9,914
Securities borrowed	16,732	–	15,755	–	15,755
Financial assets at fair value through profit or loss[4]	550,313	286,149	136,650	265	423,065
Trading assets	98,730	–	2,635	146	2,781
Positive market values from derivative financial instruments	361,032	285,421	52,797	119	338,338
Financial assets designated at fair value through profit or loss	90,551	728	81,218	0	81,946
thereof:					
Securities purchased under resale agreement	57,843	728	56,566	0	57,294
Securities borrowed	20,254	–	20,034	0	20,034
Financial assets available for sale[4]	47,766	–	559	0	559
Loans[5]	405,621	–	211,578	20,063	231,641
Securities held to maturity	3,170	–	–	–	–
Other assets subject to credit risk	66,900	29,854	1,514	56	31,424
Financial guarantees and other credit related contingent liabilities[6]	48,212	–	4,024	6,579	10,604
Irrevocable lending commitments and other credit related commitments[6]	158,253	–	7,544	1,759	9,303
Maximum exposure to credit risk	1,541,858	316,003	387,538	28,730	732,271

1 All amounts at carrying value unless otherwise indicated.
2 Does not include credit derivative notional sold (€ 828,804 million) and credit derivative notional bought protection.
3 Bought credit protection is reflected with the notional of the underlying.
4 Excludes equities, other equity interests and commodities.
5 Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.
6 Figures are reflected at notional amounts.

					Dec 31, 2016
		Credit Enhancements			
in € m.[1]	Maximum exposure to credit risk[2]	Netting	Collateral	Guarantees and Credit derivatives[3]	Total credit enhancements
Cash and central bank balances	181,364	0	0	0	0
Interbank balances (w/o central banks)	11,606	0	0	25	25
Central bank funds sold and securities purchased under resale agreements	16,287	0	15,944	0	15,944
Securities borrowed	20,081	0	19,193	0	19,193
Financial assets at fair value through profit or loss[4]	667,411	389,475	139,274	1,241	529,990
Trading assets	95,410	0	3,601	1,007	4,607
Positive market values from derivative financial instruments	485,150	386,727	64,438	164	451,329
Financial assets designated at fair value through profit or loss	86,850	2,748	71,235	70	74,054
thereof:					
Securities purchased under resale agreement	47,404	2,748	44,591	0	47,339
Securities borrowed	21,136	0	20,918	0	20,918
Financial assets available for sale[4]	54,275	0	560	28	589
Loans[5]	413,455	0	210,776	30,189	240,965
Securities held to maturity	3,206	0	0	0	0
Other assets subject to credit risk	76,036	39,567	1,061	80	40,708
Financial guarantees and other credit related contingent liabilities[6]	52,341	0	5,094	8,661	13,756
Irrevocable lending commitments and other credit related commitments[6]	166,063	0	8,251	7,454	15,705
Maximum exposure to credit risk	1,662,125	429,042	400,153	47,679	876,874

1 All amounts at carrying value unless otherwise indicated.
2 Does not include credit derivative notional sold (€ 744,159 million) and credit derivative notional bought protection.
3 Bought credit protection is reflected with the notional of the underlying.
4 Excludes equities, other equity interests and commodities.
5 Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.
6 Figures are reflected at notional amounts.

The overall decrease in maximum exposure to credit risk for December 31, 2017 was driven by a € 124.1 billion decrease in positive market values from derivative financial instruments, € 9.1 billion decrease in Other assets subject to credit risk, € 7.8 billion decrease in loans and € 6.5 billion decrease in financial assets available for sale, partly offset by a € 44.3 billion increase in cash and central bank balances.

Included in the category of trading assets as of December 31, 2017, were traded bonds of € 87.3 billion (€ 81.3 billion as of December 31, 2016) of which over 82 % were investment-grade (over 81 % as of December 31, 2016). The above mentioned financial assets available for sale category primarily reflected debt securities of which more than 98 % were investment-grade (more than 98 % as of December 31, 2016).

Credit Enhancements are split into three categories: netting, collateral and guarantees / credit derivatives. Haircuts, parameter setting for regular margin calls as well as expert judgments for collateral valuation are employed to prevent market developments from leading to a build-up of uncollateralized exposures. All categories are monitored and reviewed regularly. Overall credit enhancements received are diversified and of adequate quality being largely cash, highly rated government bonds and third-party guarantees mostly from well rated banks and insurance companies. These financial institutions are domiciled mainly in European countries and the United States. Furthermore we have collateral pools of highly liquid assets and mortgages (principally consisting of residential properties mainly in Germany) for the homogeneous retail portfolio.

Credit Quality of Financial Instruments neither Past Due nor Impaired

We derive our credit quality from internal ratings and group our exposures into classes as shown below. Please refer to section “Measuring Credit Risk” for more details about our internal ratings.

Credit Quality of Financial Instruments neither Past Due nor Impaired

	Dec 31, 2017						
in € m.[1]	iAAA–iAA	iA	iBBB	iBB	iB	iCCC and below	Total
Cash and central bank balances	219,690	3,717	1,453	597	80	118	225,655
Interbank balances (w/o central banks)	3,921	2,743	1,450	808	23	320	9,265
Central bank funds sold and securities purchased under resale agreements	2,666	2,851	716	3,018	630	89	9,971
Securities borrowed	13,326	2,379	495	499	10	22	16,732
Financial assets at fair value through profit or loss[2]	251,554	193,193	50,326	41,347	10,004	3,888	550,313
Trading assets	49,305	12,186	11,833	16,496	6,684	2,226	98,730
Positive market values from derivative financial instruments	151,693	167,014	25,442	13,333	2,472	1,078	361,032
Financial assets designated at fair value through profit or loss	50,557	13,993	13,051	11,518	848	585	90,551
thereof:							
Securities purchased under resale agreement	25,389	11,498	9,662	10,367	324	603	57,843
Securities borrowed	18,309	1,277	644	24	0	0	20,254
Financial assets available for sale[2]	36,235	6,658	2,592	399	57	130	46,071
Loans[3]	40,765	54,383	126,071	117,807	43,872	12,236	395,132
thereof:							
IAS 39 reclassified loans	20	0	36	283	141	108	588
Securities held to maturity	3,170	0	0	0	0	0	3,170
Other assets subject to credit risk	16,705	25,909	8,128	14,704	754	700	66,900
Financial guarantees and other credit related contingent liabilities[4]	5,108	13,899	16,165	7,882	3,434	1,723	48,212
Irrevocable lending commitments and other credit related commitments[4]	18,643	44,388	51,021	25,652	15,286	3,264	158,253
Total	611,783	350,120	258,417	212,713	74,152	22,489	1,529,674

[1] All amounts at carrying value unless otherwise indicated.
[2] Excludes equities, other equity interests and commodities.
[3] Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.
[4] Figures are reflected at notional amounts.

							Dec 31, 2016
in € m.[1]	iAAA–iAA	iA	iBBB	iBB	iB	iCCC and below	Total
Cash and central bank balances	174,978	4,241	1,778	238	81	47	181,364
Interbank balances (w/o central banks)	5,546	3,452	1,612	689	112	195	11,606
Central bank funds sold and securities purchased under resale agreements	3,542	7,734	1,028	2,624	1,338	22	16,287
Securities borrowed	16,036	2,882	802	343	18	0	20,081
Financial assets at fair value through profit or loss[2]	277,645	258,627	61,162	52,904	11,183	5,889	667,411
Trading assets	46,398	10,956	12,024	17,729	5,833	2,471	95,410
Positive market values from derivative financial instruments	188,037	234,491	38,113	19,138	3,297	2,073	485,150
Financial assets designated at fair value through profit or loss	43,211	13,180	11,024	16,037	2,053	1,344	86,850
thereof:							
Securities purchased under resale agreement	13,622	10,684	7,401	13,667	1,165	866	47,404
Securities borrowed	18,697	1,498	937	4	0	0	21,136
Financial assets available for sale[2]	42,808	6,616	2,106	577	72	254	52,433
Loans[3]	44,116	52,421	127,682	121,213	42,941	14,273	402,645
thereof:							
IAS 39 reclassified loans	54	28	341	26	68	87	604
Securities held to maturity	3,206	0	0	0	0	0	3,206
Other assets subject to credit risk	26,594	25,791	9,656	13,091	630	273	76,036
Financial guarantees and other credit related contingent liabilities[4]	5,699	13,712	16,753	9,663	4,477	2,038	52,341
Irrevocable lending commitments and other credit related commitments[4]	21,479	45,635	47,480	29,274	18,173	4,022	166,063
Total	621,650	421,112	270,058	230,615	79,025	27,013	1,649,473

[1] All amounts at carrying value unless otherwise indicated.
[2] Excludes equities, other equity interests and commodities.
[3] Gross loans less deferred expense/unearned income before deductions of allowance for loan losses.
[4] Figures are reflected at notional amounts.

The overall decline in total credit exposure of € 119.8 billion for December 31, 2017 is mainly due to an decrease in positive market value from derivative financial instruments in investment-grade rating categories, mainly in the category iA.

Main Credit Exposure Categories

The tables in this section show details about several of our main credit exposure categories, namely loans, irrevocable lending commitments, contingent liabilities, over-the-counter ("OTC") derivatives, traded loans, traded bonds, debt securities available for sale and repo and repo-style transactions:

– "Loans" are net loans as reported on our balance sheet at amortized cost but before deduction of our allowance for loan losses.
– "Irrevocable lending commitments" consist of the undrawn portion of irrevocable lending-related commitments.
– "Contingent liabilities" consist of financial and performance guarantees, standby letters of credit and other similar arrangements (mainly indemnity agreements).
– "OTC derivatives" are our credit exposures from over-the-counter derivative transactions that we have entered into, after netting and cash collateral received. On our balance sheet, these are included in financial assets at fair value through profit or loss or, for derivatives qualifying for hedge accounting, in other assets, in either case, before netting and cash collateral received.
– "Traded loans" are loans that are bought and held for the purpose of selling them in the near term, or the material risks of which have all been hedged or sold. From a regulatory perspective this category principally covers trading book positions.
– "Traded bonds" include bonds, deposits, notes or commercial paper that are bought and held for the purpose of selling them in the near term. From a regulatory perspective this category principally covers trading book positions.
– "Debt securities" include debentures, bonds, deposits, notes or commercial paper, which are issued for a fixed term and redeemable by the issuer, which we have classified as available for sale.
– "Repo and repo-style transactions" consist of reverse repurchase transactions, as well as securities or commodities borrowing transactions before application of netting and collateral received.

Although considered in the monitoring of maximum credit exposures, the following are not included in the details of our main credit exposure: brokerage and securities related receivables, cash and central bank balances, interbank balances (without central banks), assets held for sale, accrued interest receivables, traditional securitization positions as well as equity investments.

Main Credit Exposure Categories by Business Divisions

									Dec 31, 2017
in € m.	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Corporate & Investment Bank	137,954	141,892	45,342	30,993	10,875	83,067	2,667	99,335	552,125
Private & Commercial Bank	267,554	16,201	2,802	422	1	0	14,421	835	302,235
Deutsche Asset Management	87	53	16	0	0	67	39	0	262
Non-Core Operations Unit	-	-	-	-	-	-	-	-	-
Consolidation & Adjustments	26	107	52	15	0	4,130	31,124	4,630	40,084
Total	405,621	158,253	48,212	31,430	10,876	87,264	48,251	104,800	894,707

1 Includes impaired loans amounting to € 6.2 billion as of December 31, 2017.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.1 billion as of December 31, 2017.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

									Dec 31, 2016
in € m.	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Corporate & Investment Bank	145,187	148,599	48,778	43,230	12,996	72,342	3,568	98,135	572,835
Private & Commercial Bank	264,385	16,976	2,985	737	0	1	17,360	4,290	306,734
Deutsche Asset Management	343	55	21	27	6	2,569	26	0	3,047
Non-Core Operations Unit	3,133	131	434	175	191	257	0	34	4,355
Consolidation & Adjustments	407	302	123	24	0	6,124	33,768	2,450	43,197
Total	413,455	166,063	52,341	44,193	13,193	81,293	54,722	104,909	930,169

1 Includes impaired loans amounting to € 7.4 billion as of December 31, 2016.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.3 billion as of December 31, 2016.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

As part of our resegmentation in 2017, Global Markets along with Corporate & Investment Banking were merged together to form Corporate & Investment Bank as a new business segment. Similarly, Private, Wealth and Commercial Clients along with Postbank were merged together to form Private & Commercial Bank. The divisional balances for 2017 and comparative balances for 2016 have been allocated as per the new segmentation. The activities of the Non-Core Operations Unit, including a total credit exposure of € 4.4 billion as of December 31, 2016 were moved to Private & Commercial Bank and Corporate & Investment Bank, in the beginning of 2017.

Our main credit exposure decreased by € 35.5 billion.

- From a divisional perspective, decreases in exposure are observed across all divisions. Corporate & Investment Bank decreased by € 20.7 billion is the main contributor to the overall decrease.
- From a product perspective strong exposure reductions have been observed for OTC derivatives, Loans, Irrevocable lending commitments and Debt securities while an increase is observed for Traded Bonds.

Main Credit Exposure Categories by Industry Sectors

									Dec 31, 2017
in € m.	Loans[1]	Irrevocable lending commit-ments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Financial intermediation	52,087	31,839	9,407	17,991	1,635	16,982	15,590	100,006	245,536
Fund management activities	18,668	6,213	173	1,232	306	737	53	44	27,426
Manufacturing	27,569	38,450	14,893	1,347	628	1,991	294	–	85,172
Wholesale and retail trade	19,246	10,684	5,623	413	388	501	50	–	36,905
Households	186,687	9,975	671	398	74	–	–	–	197,805
Commercial real estate activities	29,180	4,343	508	1,185	2,080	1,468	1	41	38,806
Public sector	13,510	844	138	3,510	611	54,989	30,301	4,694	108,597
Other	58,674	55,904	16,799	5,353	5,154	10,596	1,963	16	154,459
Total	405,621	158,253	48,212	31,430	10,876	87,264	48,251	104,800	894,707

1 Includes impaired loans amounting to € 6.2 billion as of December 31, 2017.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.1 billion as of December 31, 2017.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

									Dec 31, 2016
in € m.	Loans[1]	Irrevocable lending commit-ments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Financial intermediation	49,630	31,296	10,189	22,554	3,115	19,580	16,452	104,095	256,911
Fund management activities	26,062	6,843	53	1,441	115	1,322	183	59	36,077
Manufacturing	29,932	41,801	15,067	2,850	1,658	2,368	302	2	93,980
Wholesale and retail trade	16,733	10,473	5,607	518	443	556	30	0	34,360
Households	187,862	9,936	1,267	652	105	2	0	0	199,825
Commercial real estate activities	27,324	4,372	512	1,780	2,015	861	78	67	37,008
Public sector	15,707	1,795	189	6,457	629	47,265	35,515	480	108,037
Other	60,206	59,548	19,456	7,941	5,114	9,339	2,162	205	163,972
Total	413,455	166,063	52,341	44,193	13,193	81,293	54,722	104,909	930,169

1 Includes impaired loans amounting to € 7.4 billion as of December 31, 2016.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.3 billion as of December 31, 2016.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

The above table gives an overview of our credit exposure by industry, allocated based on the NACE code of the counterparty. NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) is a European industry standard classification system.

From an industry classification perspective, our credit exposure is lower compared with last year mainly due to a decrease in Financial Intermediation by € 11.4 billion, Other sectors by € 9.5 billion, Manufacturing sector by € 8.8 billion and Fund management activities by € 8.7 billion, driven by lower OTC derivatives, Loans and Irrevocable lending commitments.

Loan exposures to the industry sectors Financial Intermediation, Manufacturing and Public sector comprise predominantly investment-grade loans. The portfolio is subject to the same credit underwriting requirements stipulated in our “Principles for Managing Credit Risk”, including various controls according to single name, country, industry and product-specific concentration.

Material transactions, such as loans underwritten with the intention to syndicate, are subject to review by senior credit risk management professionals and (depending upon size) an underwriting credit committee and/or the Management Board. High emphasis is placed on structuring such transactions so that de-risking is achieved in a timely and cost effective manner. Exposures within these categories are mostly to good quality borrowers and also subject to further risk mitigation as outlined in the description of our Credit Portfolio Strategies Group’s activities.

Our household loans exposure amounting to € 186.7 billion as of December 31, 2017 (€ 187.9 billion as of December 2016) is principally associated with our Private & Commercial Bank portfolios. € 150.2 billion (80 %) of the portfolio comprises mortgages, of which € 121.4 billion are held in Germany. The remaining exposures (€ 36.5 billion, 20 %) are predominantly Consumer and small business financing related. Given the largely homogeneous nature of this portfolio, counterparty credit-worthiness and ratings are predominately derived by utilizing an automated decision engine.

Mortgage business is principally the financing of owner-occupied properties sold by various business channels in Europe, primarily in Germany but also in Spain, Italy and Poland, with exposure normally not exceeding real estate value. Consumer finance is divided into personal instalment loans, credit lines and credit cards. Various lending requirements are stipulated, including (but not limited to) maximum loan amounts and maximum tenors and are adapted to regional conditions and/or circumstances of the borrower (i.e., for consumer loans a maximum loan amount taking into account household net income). Interest rates are mostly fixed over a certain period of time, especially in Germany. Second lien loans are not actively pursued.

The level of credit risk of the mortgage loan portfolio is determined by assessing the quality of the client and the underlying collateral. The loan amounts are generally larger than consumer finance loans and they are extended for longer time horizons. Consumer finance loan risk depends on client quality. Given that they are uncollateralized, compared with mortgages they are also smaller in value and are extended for shorter time. Based on our underwriting criteria and processes, diversified portfolio (customers/properties) and low loan-to-value (LTV) ratios, the mortgage portfolio is categorized as lower risk and consumer finance as medium risk.

Our commercial real estate loans, primarily in the U.S. and Europe, are generally secured by first mortgages on the underlying real estate property. Credit underwriting policy guidelines provide that LTV ratios of generally less than 75 % are maintained. Additionally, given the significance of the underlying collateral independent external appraisals are commissioned for all secured loans by a valuation team (part of the independent Credit Risk Management function) which is also responsible for reviewing and challenging the reported real estate values regularly.

The Commercial Real Estate Group only in exceptional cases retains mezzanine or other junior tranches of debt (although we do underwrite mezzanine loans). Loans originated for distribution are carefully monitored under a pipeline limit. Securitized loan positions are entirely sold (except where regulation requires retention of economic risk), while we frequently retain a portion of syndicated bank loans. This hold portfolio, which is held at amortized cost, is also subject to the aforementioned principles and policy guidelines. We also participate in conservatively underwritten unsecured lines of credit to well-capitalized real estate investment trusts and other public companies, which are generally investment-grade. We provide both fixed rate (generally securitized product) and floating rate loans, with interest rate exposure subject to hedging arrangements. In addition, sub-performing and non-performing loans and pools of loans are acquired from other financial institutions at generally substantial discounts to both the notional amounts and current collateral values. The underwriting process for these is stringent and the exposure is managed under separate portfolio limits. Commercial real estate property valuations and rental incomes can be significantly impacted by macro-economic conditions and underlying properties to idiosyncratic events. Accordingly, the portfolio is categorized as higher risk and hence subject to the aforementioned tight restrictions on concentration.

The category Other loans, with exposure of € 58.7 billion as of December 31, 2017 (€ 60.2 billion as of December 31, 2016) relates to numerous smaller industry sectors with no individual sector greater than 7 % of total loans.

Our credit exposure to our ten largest counterparties accounted for 8 % of our aggregated total credit exposure in these categories as of December 31, 2017 compared with 7 % as of December 31, 2016. Our top ten counterparty exposures were with well-rated counterparties or otherwise related to structured trades which show high levels of risk mitigation.

The statement on focus industries below follows the Credit Risk Management view on industries, which can differ from the allocation on the basis of NACE codes.

Our credit exposure to the focus industry “Shipping & other maritime” accounts for approximately € 4.8 billion of which € 3.7 billion pertains to vessel financings. The difference consists of other maritime (e.g. port facilities, yards). The reduction of the vessel financing related exposure by more than € 1 billion in 2017 demonstrates the Bank’s applied discipline to reduce exposure to this higher risk industry as well as the impact of the weakening of the US Dollar versus the Euro. Over a number of years, the shipping industry has suffered from persistent low earnings in oversupplied markets. Demand is driven by the macroeconomic environment and affected by geopolitical tensions and oil price movements. Container and dry bulk transportation segments were most severely impacted in 2016 and have experienced slightly improved freight rates in 2017 driven by significant scrapping and moderate new building activity. The tanker segment faced very high levels of scheduled deliveries for 2017 and 2018, which caused freight rates to fall notably in early 2017 from 2016 levels. Overall freight rates have now stabilized at the lower levels. Ongoing new building activity on global markets, which is occurring to an unknown extent, for example in China, poses a threat for further market developments. Any significant improvement in charter rates and subsequent asset values is not expected in the short term. A high portion of the portfolio is non-investment-grade rated in reflection of the prolonged challenging market conditions over recent years. A net provision for credit losses of € 198 million before a release of provision for collectively assessed non-impaired loans was booked for the shipping industry portfolio in 2017.

The “Oil & Gas” and “Metals, Mining & Steel” industries both benefitted from recovering commodity prices in 2017. As of December 31, 2017, our loan exposure to the “Oil & Gas” industry is approximately € 7 billion and our loan exposure to the “Metals, Mining and Steel” industry is approximately € 4 billion. Overall, provisions for credit losses were lower than in 2016 for both industries.

Main credit exposure categories by geographical region

									Dec 31, 2017
in € m.	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Europe	299,937	65,739	27,574	18,353	3,149	33,120	35,304	26,648	509,825
thereof:									
Germany	199,867	27,483	10,739	1,661	146	4,912	12,414	3,421	260,644
United Kingdom	6,895	5,748	1,514	5,849	190	9,668	864	10,123	40,851
France	2,651	8,265	1,266	1,231	242	3,096	3,597	3,442	23,788
Luxembourg	15,983	2,858	484	1,102	247	1,017	6,142	711	28,544
Italy	21,836	1,642	3,657	1,750	497	4,167	642	820	35,012
Netherlands	8,304	6,498	1,627	2,292	493	2,022	2,793	82	24,112
Spain	13,250	1,866	3,046	704	227	2,188	946	987	23,213
Ireland	4,415	1,843	481	972	272	1,022	655	2,673	12,333
Switzerland	6,922	2,324	2,488	313	65	644	163	416	13,336
Poland	7,871	807	234	26	36	296	1,820	0	11,089
Belgium	1,177	1,280	405	352	12	601	1,574	0	5,401
Other Europe	10,765	5,124	1,633	2,099	723	3,486	3,696	3,975	31,500
North America	64,086	85,358	10,031	10,015	5,129	31,636	10,986	56,776	274,017
thereof:									
U.S.	53,795	80,776	9,489	8,036	4,750	29,972	10,623	44,659	242,101
Cayman Islands	2,312	1,951	52	700	103	1,041	17	9,162	15,336
Canada	838	1,564	110	1,092	87	272	346	1,688	5,996
Other North America	7,141	1,068	380	187	190	351	0	1,267	10,584
Asia/Pacific	34,469	4,447	8,967	2,254	1,735	20,319	1,025	19,909	93,126
thereof:									
Japan	1,093	276	349	366	66	4,760	15	10,354	17,278
Australia	1,477	1,076	128	277	310	3,716	588	1,453	9,026
India	7,034	717	1,645	219	86	3,973	0	1,517	15,191
China	4,393	378	1,195	263	2	836	0	3,130	10,198
Singapore	4,946	419	794	177	75	927	0	220	7,559
Hong Kong	4,224	385	598	144	551	399	2	45	6,348
Other Asia/Pacific	11,300	1,197	4,259	808	644	5,707	419	3,190	27,526
Other geographical areas	7,130	2,708	1,639	808	862	2,190	936	1,466	17,739
Total	405,621	158,253	48,212	31,430	10,876	87,264	48,251	104,800	894,707

1 Includes impaired loans amounting to € 6.2 billion as of December 31, 2017.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.1 billion as of December 31, 2017.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.

									Dec 31, 2016[6]
in € m.	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Traded Loans	Traded Bonds	Debt securities[4]	Repo and repo-style transactions[5]	Total
Europe	303,329	65,926	28,747	25,944	4,157	23,924	41,438	24,418	517,881
thereof:									
Germany	197,368	27,954	11,511	2,636	236	3,070	12,970	5,571	261,316
United Kingdom	7,942	7,331	1,422	7,925	519	4,224	1,929	9,327	40,620
France	2,703	5,854	1,373	1,436	216	2,255	4,866	1,830	20,534
Luxembourg	19,312	2,998	575	1,521	330	1,228	7,179	372	33,515
Italy	21,374	1,462	3,607	3,183	444	2,195	279	1,808	34,351
Netherlands	8,934	6,370	1,749	3,270	224	2,164	4,143	474	27,328
Spain	13,196	1,785	3,045	671	361	1,451	756	674	21,939
Ireland	5,113	1,742	465	1,525	305	1,251	746	1,216	12,364
Switzerland	7,350	2,285	2,044	243	162	1,134	186	230	13,635
Poland	7,402	702	208	65	6	281	1,542	0	10,205
Belgium	1,581	1,423	399	481	5	424	2,520	80	6,914
Other Europe	11,055	6,018	2,349	2,988	1,347	4,248	4,322	2,836	35,162
North America	69,921	92,699	12,013	12,162	6,471	36,332	11,444	61,771	302,814
thereof:									
U.S.	56,567	87,503	11,336	9,307	6,181	30,961	10,843	47,528	260,225
Cayman Islands	2,993	1,045	86	725	37	1,215	24	11,679	17,804
Canada	2,247	2,288	163	1,723	112	628	249	95	7,505
Other North America	8,115	1,863	428	406	142	3,528	328	2,470	17,279
Asia/Pacific	31,644	5,782	9,958	4,753	1,606	18,525	1,425	17,515	91,208
thereof:									
Japan	888	299	350	941	95	3,932	17	9,002	15,522
Australia	1,259	1,142	166	445	143	3,357	949	1,157	8,619
India	7,589	371	1,735	537	8	3,148	0	1,578	14,966
China	2,953	722	1,113	446	11	687	0	1,945	7,877
Singapore	3,885	434	807	142	419	1,528	1	280	7,497
Hong Kong	2,405	944	566	407	174	343	0	64	4,903
Other Asia/Pacific	12,664	1,869	5,221	1,834	757	5,531	458	3,490	31,824
Other geographical areas	8,561	1,655	1,624	1,334	960	2,513	414	1,204	18,266
Total	413,455	166,063	52,341	44,193	13,193	81,293	54,722	104,909	930,169

1 Includes impaired loans amounting to € 7.4 billion as of December 31, 2016.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.3 billion as of December 31, 2016.
3 Includes the effect of netting agreements and cash collateral received where applicable. Excludes derivatives qualifying for hedge accounting.
4 Includes debt securities on financial assets available for sale and securities held to maturity.
5 Before reflection of collateral and limited to securities purchased under resale agreements and securities borrowed.
6 Comparatives have been restated to reflect the changes in the reported geographical areas.

The above table gives an overview of our credit exposure by geographical region, allocated based on the counterparty's country of domicile, see also section "Credit Exposure to Certain Eurozone Countries" of this report for a detailed discussion of the "country of domicile view".

Our largest concentration of credit risk within loans from a regional perspective is in our home market Germany, with a significant share in households, which includes the majority of our mortgage lending business.

Within OTC derivatives, tradable assets as well as repo and repo-style transactions, our largest concentrations from a regional perspective were in Europe and North America. From the industry classification perspective, exposures from OTC derivative as well as repo and repo-style transactions have a significant share in highly rated Financial Intermediation companies. For tradable assets, a large proportion of exposure is also with Public Sector companies.

As of December 31, 2017, our loan book decreased to € 405.6 billion (compared to € 413.5 billion as of December 31, 2016) mainly as a result of lower levels of exposures in Luxembourg and the United States. Our Fund Management activities, household and manufacturing loan books experienced the largest decreases. The decrease in loans in Western Europe and United States was primarily due to reduced loan balances across businesses as well as by a strengthening of the Euro in comparison to the US dollar. Traded bonds increased by € 6.0 billion mainly in Europe region driven by an increased client activity and an increased bond positions in EU rates business. Debt securities reduced by € 6.5 billion majorly in the United Kingdom and the Netherlands mainly due to sale of available for sale bonds.

Credit Exposure to Certain Eurozone Countries

Certain Eurozone countries are presented within the table below due to concerns relating to sovereign risk.

In our "country of domicile view" we aggregate credit risk exposures to counterparties by allocating them to the domicile of the primary counterparty, irrespective of any link to other counterparties, or in relation to credit default swaps underlying reference assets from, these Eurozone countries. Hence we also include counterparties whose group parent is located outside of these countries and exposures to special purpose entities whose underlying assets are from entities domiciled in other countries.

The following table, which is based on the country of domicile view, presents our gross position, the included amount thereof of undrawn exposure and our net exposure to these Eurozone countries. The gross exposure reflects our net credit risk exposure grossed up for net credit derivative protection purchased with underlying reference assets domiciled in one of these countries, guarantees received and collateral. Such collateral is particularly held with respect to the retail portfolio, but also for financial institutions predominantly based on derivative margining arrangements, as well as for corporates. In addition, the amounts also reflect the allowance for credit losses. In some cases, our counterparties' ability to draw on undrawn commitments is limited by terms included in the specific contractual documentation. Net credit exposures are presented after effects of collateral held, guarantees received and further risk mitigation, including net notional amounts of credit derivatives for protection sold/bought. The provided gross and net exposures to certain European countries do not include credit derivative tranches and credit derivatives in relation to our correlation business which, by design, is structured to be credit risk neutral. Additionally, the tranche and correlated nature of these positions does not allow a meaningful disaggregated notional presentation by country, e.g., as identical notional exposures represent different levels of risk for different tranche levels.

Gross position, included undrawn exposure and net exposure to certain Eurozone countries – Country of Domicile View

	Sovereign		Financial Institutions		Corporates		Retail		Other		Total	
in € m.	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017[1]	Dec 31, 2016
Greece												
Gross	55	89	734	743	526	986	5	6	–	0	1,320	1,824
Undrawn	–	0	30	31	5	21	–	0	–	0	36	52
Net	38	83	270	258	8	15	1	1	–	0	317	357
Ireland												
Gross	865	826	927	908	7,556	9,280	31	31	2,275[2]	3,263[2]	11,654	14,308
Undrawn	–	0	4	42	2,005	2,000	–	1	316[2]	172[2]	2,326	2,214
Net	717	569	477	352	4,420	5,374	6	5	2,275[2]	3,459[2]	7,895	9,759
Italy												
Gross	2,875	2,735	3,338	3,051	12,050	10,591	16,489	17,122	147	358	34,898	33,857
Undrawn	13	32	28	74	5,162	4,730	96	208	–	26	5,300	5,069
Net	1,015	438	672	920	8,202	7,514	7,633	7,288	146	344	17,669	16,504
Portugal												
Gross	(227)	61	185	127	1,329	1,424	1,757	1,674	80	65	3,123	3,352
Undrawn	–	0	75	12	374	232	24	12	–	0	474	256
Net	(223)	79	115	73	893	1,205	134	143	80	65	998	1,564
Spain												
Gross	1,672	1,325	1,301	1,947	9,106	8,340	9,570	9,770	128	112	21,777	21,493
Undrawn	–	0	225	261	4,583	4,310	259	283	–	3	5,068	4,858
Net	1,554	1,195	552	971	7,113	6,643	2,117	1,935	128	265	11,464	11,009
Total gross	**5,240**	5,037	**6,485**	6,776	**30,566**	30,621	**27,851**	28,603	**2,629**	3,797	**72,771**	74,835
Total undrawn	**14**	33	**364**	419	**12,130**	11,292	**380**	504	**316**	202	**13,203**	12,449
Total net[3]	**3,102**	2,364	**2,086**	2,574	**20,637**	20,751	**9,891**	9,371	**2,629**	4,133	**38,344**	39,194

[1] Approximately 71 % of the overall exposure as per December 31, 2017 will mature within the next 5 years.
[2] Other exposures to Ireland include exposures to counterparties where the domicile of the group parent is located outside of Ireland as well as exposures to special purpose entities whose underlying assets are from entities domiciled in other countries.
[3] Total net exposure excludes credit valuation reserves for derivatives amounting to € 64.6 million as of December 31, 2017 and € 281 million as of December 31, 2016.

Total net exposure to the above selected Eurozone countries decreased by € 850 million in 2017 driven by decreased exposure in Ireland and Portugal, partly offset by an increase in Italy and Spain.

Sovereign Credit Risk Exposure to Certain Eurozone Countries

The amounts below reflect a net “country of domicile view” of our sovereign exposure.

Sovereign credit risk exposure to certain Eurozone countries

	Dec 31, 2017				Dec 31, 2016			
in € m.	Direct Sovereign exposure[1]	Net Notional of CDS referencing sovereign debt	Net sovereign exposure	Memo Item: Net fair value of CDS referencing sovereign debt[2]	Direct Sovereign exposure[1]	Net Notional of CDS referencing sovereign debt	Net sovereign exposure	Memo Item: Net fair value of CDS referencing sovereign debt[2]
Greece	55	(17)	38	0	89	(6)	83	2
Ireland	709	9	717	0	569	0	569	74
Italy	2,834	(1,818)	1,016	49	2,662	(2,223)	438	398
Portugal	(227)	3	(223)	0	61	17	79	(8)
Spain	1,669	(115)	1,554	35	1,322	(127)	1,195	279
Total	5,040	(1,938)	3,102	84	4,703	(2,339)	2,364	744

1 Includes sovereign debt classified as financial assets/liabilities at fair value through profit or loss, available for sale and loans carried at amortized cost. Direct Sovereign exposure is net of guarantees received and collateral.
2 The amounts reflect the net fair value in relation to credit default swaps referencing sovereign debt of the respective country representing the counterparty credit risk.

The increase of € 738 million in net sovereign exposure compared with year-end 2016 mainly reflects increases in debt securities in Italy and Spain.

The above represents direct sovereign exposure included the carrying value of loans held at amortized cost to sovereigns, which as of December 31, 2017, amounted to € 225 million for Italy and € 427 million for Spain and as of December 31, 2016 amounted to € 261 million for Italy and € 401 million for Spain.

Credit Exposure Classification

We also classify our credit exposure under two broad headings: consumer credit exposure and corporate credit exposure.

- Our consumer credit exposure consists of our smaller-balance standardized homogeneous loans, primarily in Germany, Italy and Spain, which include personal loans, residential and non-residential mortgage loans, overdrafts and loans to self-employed and small business customers of our private and retail business.
- Our corporate credit exposure consists of all exposures not defined as consumer credit exposure.

Corporate Credit Exposure

The tables below show our Corporate Credit Exposure by product types and internal rating bands. Please refer to section "Measuring Credit Risk" for more details about our internal ratings.

Main corporate credit exposure categories according to our internal creditworthiness categories of our counterparties – gross

in € m.
(unless stated otherwise)

	Dec 31, 2017						
Rating band	Probability of default in %[1]	Loans	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Debt securities[4]	Total
iAAA–iAA	> 0.00 ≤ 0.04	38,743	18,643	5,108	13,025	39,405	114,924
iA	> 0.04 ≤ 0.11	39,428	44,388	13,899	8,416	6,277	112,407
iBBB	> 0.11 ≤ 0.5	56,245	51,021	16,165	5,204	2,174	130,809
iBB	> 0.5 ≤ 2.27	41,888	25,652	7,882	3,390	371	79,183
iB	> 2.27 ≤ 10.22	23,556	15,286	3,434	1,174	5	43,456
iCCC and below	> 10.22 ≤ 100	13,688	3,264	1,723	220	19	18,913
Total		213,547	158,253	48,212	31,430	48,251	499,693

1 Reflects the probability of default for a one year time horizon.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.1 billion as of December 31, 2017.
3 Includes the effect of netting agreements and cash collateral received where applicable.
4 Includes debt securities on financial assets available for sale and securities held to maturity.

in € m.
(unless stated otherwise)

Rating band	Probability of default in %[1]	Loans	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Debt securities[4]	Total
							Dec 31, 2016
iAAA–iAA	> 0.00 ≤ 0.04	43,149	21,479	5,699	16,408	46,014	132,749
iA	> 0.04 ≤ 0.11	39,734	45,635	13,712	12,566	6,616	118,264
iBBB	> 0.11 ≤ 0.5	57,287	47,480	16,753	8,300	1,696	131,515
iBB	> 0.5 ≤ 2.27	46,496	29,274	9,663	5,333	366	91,132
iB	> 2.27 ≤ 10.22	22,920	18,173	4,477	1,053	9	46,631
iCCC and below	> 10.22 ≤ 100	15,069	4,022	2,038	533	21	21,683
Total		224,655	166,063	52,341	44,193	54,722	541,974

1 Reflects the probability of default for a one year time horizon.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.3 billion as of December 31, 2016.
3 Includes the effect of netting agreements and cash collateral received where applicable.
4 Includes debt securities on financial assets available for sale and securities held to maturity.

The above table shows an overall decrease in our corporate credit exposure in 2017 of € 42.3 billion or 7.8 %. Loans decreased by € 11.1 billion, mainly attributable to Luxembourg and the United States. The decrease is primarily due to reduced loan balance across businesses as well as by a strengthening of the Euro in comparison to the US Dollar. Debt securities decreased by € 6.5 billion, almost entirely related to the top rating band and mainly due to sale of debt securities available for sale. The decrease in irrevocable lending commitments of € 7.8 billion was primarily attributable to North America and Asia/Pacific. The quality of the corporate credit exposure before risk mitigation is at 72 % share of investment-grade rated exposures as of December 2017 compared to 71% as of December 31, 2016.

We use risk mitigation techniques as described above to optimize our corporate credit exposure and reduce potential credit losses. The tables below disclose the development of our corporate credit exposure net of collateral, guarantees and hedges.

Main corporate credit exposure categories according to our internal creditworthiness categories of our counterparties – net

in € m.
(unless stated otherwise)

Rating band	Probability of default in %[2]	Loans	Irrevocable lending commitments	Contingent liabilities	OTC derivatives	Debt securities	Total
							Dec 31, 2017[1]
iAAA–iAA	> 0.00 ≤ 0.04	27,580	18,281	4,272	7,370	39,405	96,907
iA	> 0.04 ≤ 0.11	25,355	42,104	11,882	6,528	6,277	92,146
iBBB	> 0.11 ≤ 0.5	32,131	49,095	13,461	4,490	2,174	101,351
iBB	> 0.5 ≤ 2.27	18,845	24,056	5,267	2,506	371	51,046
iB	> 2.27 ≤ 10.22	8,306	14,130	2,097	1,106	5	25,645
iCCC and below	> 10.22 ≤ 100	4,157	2,540	629	216	15	7,557
Total		116,374	150,206	37,608	22,216	48,247	374,652

1 Net of eligible collateral, guarantees and hedges based on IFRS requirements.
2 Reflects the probability of default for a one year time horizon.

in € m.
(unless stated otherwise)

Rating band	Probability of default in %[2]	Loans	Irrevocable lending commitments	Contingent liabilities	OTC derivatives	Debt securities	Total
							Dec 31, 2016[1]
iAAA–iAA	> 0.00 ≤ 0.04	32,305	19,653	4,351	10,480	46,014	112,802
iA	> 0.04 ≤ 0.11	24,970	41,435	11,393	10,032	6,616	94,448
iBBB	> 0.11 ≤ 0.5	28,369	43,659	13,845	7,439	1,672	94,984
iBB	> 0.5 ≤ 2.27	19,573	27,206	5,932	4,034	361	57,105
iB	> 2.27 ≤ 10.22	8,090	16,745	2,176	1,020	9	28,041
iCCC and below	> 10.22 ≤ 100	5,954	2,872	889	509	21	10,246
Total		119,261	151,571	38,586	33,514	54,694	397,626

1 Net of eligible collateral, guarantees and hedges based on IFRS requirements.
2 Reflects the probability of default for a one year time horizon.

The corporate credit exposure net of collateral amounted to € 374.7 billion as of December 31, 2017 reflecting a risk mitigation of 25 % or € 125.0 billion compared to the corporate gross exposure. This includes a more significant reduction of 46 % for our loans exposure which includes a reduction by 60 % for the lower rated sub-investment-grade rated loans and 37 % for the higher-rated investment-grade rated loans. The risk mitigation for the total exposure in the weakest rating band was 60 %, which was significantly higher than 16 % in the strongest rating band.

The risk mitigation of € 125.0 billion is split into 20 % guarantees and hedges and 80 % other collateral.

CPSG Risk Mitigation for the Corporate Credit Exposure

Our Credit Portfolio Strategies Group ("CPSG") helps mitigate the risk of our corporate credit exposures. The notional amount of CPSG's risk reduction activities decreased from € 43.3 billion as of December 31, 2016, to € 32.7 billion as of December 31, 2017. The notional of risk reduction activities reduced across the course of 2017 following Management Board approval granted in 2016 to increase the Group's risk appetite for Investment Grade exposures.

As of year-end 2017, CPSG mitigated the credit risk of € 32 billion of loans and lending-related commitments as of December 31, 2017, through synthetic collateralized loan obligations supported predominantly by financial guarantees. This position totaled € 42.2 billion as of December 31, 2016.

CPSG also held credit derivatives with an underlying notional amount of € 0.7 billion. The position totaled € 1.1 billion as of December 31, 2016. The credit derivatives used for our portfolio management activities are accounted for at fair value.

CPSG has elected to use the fair value option under IAS 39 to report loans and commitments at fair value, provided the criteria for this option are met. The notional amount of CPSG loans and commitments reported at fair value decreased during the year to € 2.8 billion as of December 31, 2017, from € 3.9 billion as of December 31, 2016.

Consumer Credit Exposure

In our consumer credit exposure we monitor consumer loan delinquencies in terms of loans that are 90 days or more past due and net credit costs, which are the annualized net provisions charged after recoveries.

Consumer credit exposure, consumer loan delinquencies and net credit costs

	Total exposure in € m.[1]		90 days or more past due as a % of total exposure[1]		Net credit costs as a % of total exposure[2]	
	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016
Consumer credit exposure Germany:	153,728	150,639	0.73	0.75	0.12	0.13
Consumer and small business financing	21,224	20,316	2.96	2.45	1.07	0.99
Mortgage lending	132,505	130,323	0.37	0.48	-0.03	0.00
Consumer credit exposure outside Germany	38,345	38,162	3.77	4.22	0.39	0.68
Consumer and small business financing	15,298	13,663	6.54	8.44	0.78	0.98
Mortgage lending	23,047	24,499	1.93	1.87	0.12	0.51
Total consumer credit exposure	**192,074**	188,801	**1.34**	1.45	**0.17**	0.24

1 Includes impaired loans amounting to € 2.8 billion as of December 31, 2017 and € 3.1 billion as of December 31, 2016.
2 Net credit costs for the twelve months period ended at the respective balance sheet date divided by the exposure at that balance sheet date.

The volume of our consumer credit exposure increased from year-end 2016 to December 31, 2017 by € 3.3 billion, or 1.7 %, driven by our loan books in Germany, which increased by € 3.1 billion and in India, which increased by € 239 million. Our loan book in Spain decreased by € 116 million and in Italy by € 111 million, which were partially driven by non-performing loan sales.

The 90 days or more past due ratio of our consumer credit exposure decreased from 1.45 % as of year-end 2016 to 1.34 % as of December 31, 2017. The total net credit costs as a percentage of our consumer credit exposure decreased from 0.24 % as of year-end 2016 to 0.17 % as of December 31, 2017. This ratio was positively affected by the further improved and stabilized environment in countries in which we operate and by non-performing loan sales in Spain and Italy.

Consumer mortgage lending exposure grouped by loan-to-value buckets[1]

	Dec 31, 2017	Dec 31, 2016
≤ 50 %	68 %	68 %
> 50 ≤ 70 %	16 %	16 %
> 70 ≤ 90 %	9 %	9 %
> 90 ≤ 100 %	3 %	3 %
> 100 ≤ 110 %	2 %	2 %
> 110 ≤ 130 %	1 %	1 %
> 130 %	1 %	1 %

1 When assigning the exposure to the corresponding LTV buckets, the exposure amounts are distributed according to their relative share of the underlying assessed real estate value.

The LTV expresses the amount of exposure as a percentage of assessed value of real estate.

Our LTV ratios are calculated using the total exposure divided by the current assessed value of the respective properties. These values are updated on a regular basis. The exposure of transactions that are additionally backed by liquid collateral is reduced by the respective collateral values, whereas any prior charges increase the corresponding total exposure. The LTV calculation includes exposure which is secured by real estate collateral. Any mortgage lending exposure that is collateralized exclusively by any other type of collateral is not included in the LTV calculation.

The creditor's creditworthiness, the LTV and the quality of collateral is an integral part of our risk management when originating loans and when monitoring and steering our credit risks. In general, we are willing to accept higher LTV's, the better the creditor's creditworthiness is. Nevertheless, restrictions of LTV apply for countries with negative economic outlook or expected declines of real estate values.

As of December 31, 2017, 68 % of our exposure related to the mortgage lending portfolio had a LTV ratio below or equal to 50 %, unchanged to the previous year.

Credit Exposure from Derivatives

All exchange traded derivatives are cleared through central counterparties ("CCPs"), the rules and regulations of which provide for daily margining of all current and future credit risk positions emerging out of such transactions. To the extent possible, we also use CCP services for OTC derivative transactions ("OTC clearing"); we thereby benefit from the credit risk mitigation achieved through the CCP's settlement system.

The Dodd-Frank Act provides for an extensive framework for the regulation of OTC derivatives, including mandatory clearing, exchange trading and transaction reporting of certain OTC derivatives, as well as rules regarding the registration of, and capital, margin and business conduct standards for, swap dealers, security-based swap dealers, major swap participants and major security-based swap participants. The Dodd-Frank Act and related CFTC rules introduced in 2013 mandatory OTC clearing in the United States for certain standardized OTC derivative transactions, including certain interest rate swaps and index credit default swaps. The European Regulation (EU) No 648/2012 on OTC Derivatives, Central Counterparties and Trade Repositories ("EMIR") introduced a number of risk mitigation techniques for non-centrally cleared OTC derivatives in 2013 and the reporting of OTC and exchange traded derivatives in 2014. Mandatory clearing for certain standardized OTC derivatives transactions in the EU began in June 2016, and margin requirements for uncleared OTC derivative transactions in the EU started in February 2017. Deutsche Bank implemented the exchange of both initial and variation margin in the EU from February 2017 for the first category of counterparties subject to the EMIR margin for uncleared derivatives requirements. All other in-scope entities followed the variation margin requirements from March 1, 2017. Initial margin requirements are subject to a phased implementation schedule which will be fully applied by September 2020.

The CFTC adopted final rules in 2016 that require additional interest rate swaps to be cleared, with a phased implementation schedule ending in October 2018. Deutsche Bank implemented the CFTC's expanded clearing requirements for the relevant interest rate swaps subject to the 2017 compliance schedule, covering identified instruments denominated in AUD, CAD, HKD, NOK, PLN, and SEK. In December 2016, also pursuant to the Dodd-Frank Act, the CFTC re-proposed regulations to impose position limits on certain commodities and economically equivalent swaps, futures and options. This proposal has not yet been finalized. The Securities and Exchange Commission ("SEC") has also finalized rules regarding registration, business conduct standards and trade acknowledgement and verification requirements for security- based swap dealers and major security-based swap participants, although these rules will not come into effect until the SEC completes further security-based swap rulemakings. Finally, U.S. prudential regulators (the Federal Reserve, the FDIC, the Office of the Comptroller of the Currency, the Farm Credit Administration and the Federal Housing Finance Agency) have adopted final rules establishing margin requirements for non-cleared swaps and security-based swaps, and the CFTC has adopted final rules establishing margin requirements for non-cleared swaps. The final margin rules follow a phased implementation schedule, with certain initial margin and variation margin requirements in effect as of September 2016, additional variation margin requirements in effect as of March 1, 2017 for all covered counterparties. Deutsche Bank implemented the exchange of both initial and variation margin for uncleared derivatives in the U.S. from September 2016, for the first category of counterparties subject to the U.S. prudential regulators' margin requirements. Additional initial margin requirements for smaller counterparties are phased in on an annual basis from September 2017 through September 2020, with the relevant compliance dates depending in each case on the transactional volume of the parties and their affiliates.

The following table shows a breakdown of notional amounts and gross market value of derivative transactions along with a breakdown of notional amounts of OTC derivative assets and liabilities on the basis of clearing channel.

Notional amounts of derivatives on basis of clearing channel and type of derivative

							Dec 31, 2017
	Notional amount maturity distribution						
in € m.	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total	Positive market value	Negative market value	Net market value
Interest rate related:							
OTC	18,389,853	9,644,152	5,862,868	33,896,874	224,783	202,492	22,291
Bilateral (Amt)	2,231,176	2,624,101	1,989,543	6,844,820	200,520	177,989	22,532
CCP (Amt)	16,158,677	7,020,051	3,873,326	27,052,054	24,262	24,503	(241)
Exchange-traded	4,100,955	1,379,528	155	5,480,638	250	275	(25)
Total Interest rate related	22,490,809	11,023,680	5,863,023	39,377,512	225,033	202,767	22,266
Currency related:							
OTC	4,265,081	1,036,897	470,541	5,772,518	82,392	75,535	6,858
Bilateral (Amt)	4,209,509	1,036,536	470,541	5,716,586	81,597	74,823	6,774
CCP (Amt)	55,572	361	0	55,932	795	712	83
Exchange-traded	48,252	0	0	48,252	19	18	1
Total Currency related	4,313,333	1,036,897	470,541	5,820,771	82,411	75,553	6,859
Equity/index related:							
OTC	301,662	156,272	19,248	477,182	18,201	23,010	(4,810)
Bilateral (Amt)	301,662	156,272	19,248	477,182	18,201	23,010	(4,810)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	732,870	107,631	5,398	845,900	9,986	12,708	(2,722)
Total Equity/index related	1,034,533	263,903	24,647	1,323,082	28,187	35,718	(7,531)
Credit derivatives related							
OTC	209,376	1,321,066	153,867	1,684,309	28,317	27,888	429
Bilateral (Amt)	91,919	204,583	49,442	345,944	5,363	4,779	584
CCP (Amt)	117,457	1,116,482	104,426	1,338,365	22,954	23,108	(154)
Exchange-traded	0	0	0	0	0	0	0
Total Credit derivatives related	209,376	1,321,066	153,867	1,684,309	28,317	27,888	429
Commodity related:							
OTC	3,431	995	2,015	6,441	35	1,485	(1,449)
Bilateral (Amt)	3,431	995	2,015	6,441	35	1,485	(1,449)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	39,955	4,163	0	44,119	187	214	(27)
Total Commodity related	43,386	5,158	2,015	50,560	222	1,699	(1,476)
Other:							
OTC	3,744	765	0	4,509	9	371	(362)
Bilateral (Amt)	3,744	765	0	4,509	9	371	(362)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	5,196	1	0	5,197	5	26	(20)
Total Other	8,940	766	0	9,706	14	397	(382)
Total OTC business	23,173,146	12,160,146	6,508,540	41,841,833	353,737	330,780	22,957
Total bilateral business	6,841,441	4,023,253	2,530,789	13,395,482	305,726	282,457	23,269
Total CCP business	16,331,705	8,136,894	3,977,751	28,446,351	48,012	48,324	(312)
Total exchange-traded business	4,927,230	1,491,323	5,553	6,424,106	10,447	13,240	(2,793)
Total	28,100,376	13,651,470	6,514,093	48,265,939	364,185	344,020	20,164
Positive market values after netting and cash collateral received	0	0	0	0	32,083	0	0

							Dec 31, 2016
	Notional amount maturity distribution						
in € m.	Within 1 year	> 1 and ≤ 5 years	After 5 years	Total	Positive market value	Negative market value	Net market value
Interest rate related:							
OTC	13,214,990	8,828,544	6,102,510	28,146,044	309,405	284,954	24,451
Bilateral (Amt)	2,777,349	3,625,915	2,645,075	9,048,340	272,059	248,396	23,664
CCP (Amt)	10,437,641	5,202,629	3,457,434	19,097,704	37,346	36,558	787
Exchange-traded	5,013,591	1,387,444	1,174	6,402,209	326	394	(68)
Total Interest rate related	18,228,581	10,215,988	6,103,684	34,548,253	309,731	285,348	24,382
Currency related:							
OTC	3,994,113	1,053,558	537,044	5,584,715	129,731	126,480	3,251
Bilateral (Amt)	3,938,295	1,053,434	537,044	5,528,773	129,288	126,049	3,239
CCP (Amt)	55,818	124	0	55,942	443	431	12
Exchange-traded	29,431	398	35	29,864	6	54	(48)
Total Currency related	4,023,544	1,053,956	537,078	5,614,579	129,738	126,534	3,203
Equity/index related:							
OTC	366,170	168,529	25,313	560,012	20,358	23,692	(3,334)
Bilateral (Amt)	366,170	168,529	25,313	560,012	20,358	23,692	(3,334)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	472,888	74,045	9,006	555,939	6,172	8,575	(2,402)
Total Equity/index related	839,058	242,574	34,319	1,115,951	26,531	32,266	(5,736)
Credit derivatives related							
OTC	297,563	1,076,954	142,572	1,517,089	21,297	22,399	(1,102)
Bilateral (Amt)	157,950	298,313	58,852	515,115	7,426	8,238	(811)
CCP (Amt)	139,613	778,640	83,720	1,001,974	13,870	14,161	(291)
Exchange-traded	0	0	0	0	0	0	0
Total Credit derivatives related	297,563	1,076,954	142,572	1,517,089	21,297	22,399	(1,102)
Commodity related:							
OTC	2,660	1,657	9,222	13,539	479	653	(175)
Bilateral (Amt)	2,660	1,657	9,222	13,539	479	653	(175)
CCP (Amt)	0	0	0	0	0	0	0
Exchange-traded	53,757	8,766	0	62,523	440	503	(63)
Total Commodity related	56,417	10,423	9,222	76,062	918	1,156	(238)
Other:							
OTC	13,994	6,856	98	20,948	443	719	(276)
Bilateral (Amt)	13,963	6,856	98	20,917	433	698	(265)
CCP (Amt)	31	0	0	31	10	21	(11)
Exchange-traded	4,929	0	0	4,929	10	29	(18)
Total Other	18,923	6,856	98	25,877	453	747	(295)
Total OTC business	17,889,490	11,136,098	6,816,759	35,842,347	481,712	458,897	22,816
Total bilateral business	7,256,387	5,154,704	3,275,604	15,686,696	430,043	407,725	22,318
Total CCP business	10,633,102	5,981,394	3,541,155	20,155,651	51,669	51,172	497
Total exchange-traded business	5,574,597	1,470,653	10,214	7,055,464	6,954	9,555	(2,600)
Total	23,464,086	12,606,751	6,826,973	42,897,811	488,667	468,451	20,215
Positive market values after netting and cash collateral received	0	0	0	0	44,784	0	0

Equity Exposure

The table below presents the carrying values of our equity investments according to IFRS definition split by trading and non-trading for the respective reporting dates. We manage our respective positions within our market risk and other appropriate risk frameworks.

Composition of our Equity Exposure

in € m.	Dec 31, 2017	Dec 31, 2016
Trading Equities	85,932	75,633
Nontrading Equities[1]	2,496	2,979
Total Equity Exposure	88,427	78,613

[1] Includes equity investment funds amounting to € 367 million as of December 31, 2017 and € 288 million as of December 31, 2016.

As of December 31, 2017, our Trading Equities exposure was mainly composed of € 84.8 billion from Corporate & Investment Bank activities and € 1.2 billion from the Deutsche Asset Management business. Overall trading equities increased by € 10.3 billion year on year driven mainly by increased exposure in Corporate & Investment Bank activities.

Asset Quality

This section describes the asset quality of our loans. All loans where known information about possible credit problems of borrowers causes our management to have serious doubts as to the collectability of the borrower's contractual obligations are included in this section.

Overview of performing, renegotiated, past due and impaired loans by customer groups

	Dec 31, 2017			Dec 31, 2016		
in € m.	Corporate loans	Consumer loans	Total	Corporate loans	Consumer loans	Total
Loans neither past due, nor renegotiated or impaired	208,457	185,979	394,436	219,106	182,760	401,865
Past due loans, neither renegotiated nor impaired	1,167	2,778	3,945	882	2,445	3,327
Loans renegotiated, but not impaired	518	488	1,006	357	459	816
Impaired loans	3,406	2,828	6,234	4,310	3,137	7,447
Total	213,547	192,074	405,621	224,655	188,801	413,455

Past Due Loans

Loans are considered to be past due if contractually agreed payments of principal and/or interest remain unpaid by the borrower, except if those loans are acquired through consolidation. The latter are considered to be past due if payments of principal and/or interest, which were expected at a certain payment date at the time of the initial consolidation of the loans, are unpaid by the borrower.

Non-impaired past due loans at amortized cost by past due status

in € m.	Dec 31, 2017	Dec 31, 2016
Loans less than 30 days past due	2,747	2,116
Loans 30 or more but less than 60 days past due	482	494
Loans 60 or more but less than 90 days past due	250	268
Loans 90 days or more past due	776	484
Total	4,255	3,363

Non-impaired past due loans at amortized cost by industry

in € m.	Dec 31, 2017	Dec 31, 2016
Financial intermediation	267	95
Fund management activities	40	28
Manufacturing	179	278
Wholesale and retail trade	233	172
Households	2,481	2,076
Commercial real estate activities	363	190
Public sector	10	12
Other	682	512
Total	4,255	3,363

Non-impaired past due loans at amortized cost by region

in € m.	Dec 31, 2017	Dec 31, 2016
Germany	1,810	1,299
Western Europe (excluding Germany)	1,758	1,531
Eastern Europe	158	155
North America	343	233
Central and South America	6	18
Asia/Pacific	161	113
Africa	19	14
Other	0	0
Total	4,255	3,363

Our non-impaired past due loans increased by € 892 million to € 4.3 billion as of December 31, 2017, largely caused by loans, that were overdue by a few days. Businesswise, the main driver was PCB.

Aggregated value of collateral – with the fair values of collateral capped at loan outstanding – held against our non-impaired past due loans

in € m.	Dec 31, 2017	Dec 31, 2016
Financial and other collateral	2,364	1,775
Guarantees received	148	148
Total	2,512	1,923

Our aggregated value of collateral held against our non-impaired past due loans as of December 31, 2017 increased in line with the increase of non-impaired past due loans compared to prior year.

Renegotiated and Forborne Loans

For economic or legal reasons we might enter into a forbearance agreement with a borrower who faces or will face financial difficulties in order to ease the contractual obligation for a limited period of time. A case –by -case approach is applied for our corporate clients considering each transaction and client -specific facts and circumstances. For consumer loans we offer forbearances for a limited period of time, in which the total or partial outstanding or future instalments are deferred to a later point of time. However, the amount not paid including accrued interest during this period must be re-compensated at a later point of time. Repayment options include distribution over residual tenor, a one-off payment or a tenor extension. Forbearances are restricted and depending on the economic situation of the client, our risk management strategies and the local legislation. In case a forbearance agreement is entered into, an impairment measurement is conducted as described below, an impairment charge is taken if necessary and the loan is subsequently recorded as impaired.

In our management and reporting of forborne loans, we are following the EBA definition for forbearances and non-performing loans (Implementing Technical Standards (ITS) on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013). Once the conditions mentioned in the ITS are met, we report the loan as being forborne; we remove the loan from our forbearance reporting, once the discontinuance criteria in the ITS are met (i.e., the contract is considered as performing, a minimum 2 year probation period has passed, regular payments of more than an insignificant aggregate amount of principal or interest have been made during at least half of the probation period, and none of the exposures to the debtor is more than 30 days past-due at the end of the probation period).

Forborne Loans

	Dec 31, 2017				Dec 31, 2016			
	Performing		Non-performing	Total forborne loans	Performing		Non-performing	Total forborne loans
in € m.	Nonimpaired	Nonimpaired	Impaired		Nonimpaired	Nonimpaired	Impaired	
German	1,109	569	711	2,390	907	374	983	2,264
Non-German	445	529	1,248	2,222	799	709	1,697	3,204
Total	1,554	1,099	1,959	4,612	1,706	1,083	2,679	5,468

The total forborne loans in 2017 decreased by € 857 million mainly driven by non-performing forborne loans to non-German clients mainly reflecting non-performing loan sales in our shipping portfolio reported in CIB as well as in PCC International.

Development of Forborne Loans

in € m.	Dec 31, 2017
Balance beginning of period	5,468
Classified as forborne during the year	1,015
Transferred to non-forborne during the year (including repayments)	(1,518)
Charge-offs	(234)
Exchange rate and other movements	(119)
Balance end of period	4,612

Impaired Loans

Credit Risk Management regularly assesses whether there is objective evidence that a loan or group of loans is impaired. A loan or group of loans is impaired and impairment losses are incurred if:

– there is objective evidence of impairment as a result of a loss event that occurred after the initial recognition of the asset and up to the balance sheet date (a “loss event”). When making our assessment we consider information on such events that is reasonably available up to the date the financial statements are authorized for issuance in line with the requirements of IAS 10;
– the loss event had an impact on the estimated future cash flows of the financial asset or the group of financial assets, and
– a reliable estimate of the loss amount can be made.

Credit Risk Management’s loss assessments are subject to regular review in collaboration with Group Finance. The results of this review are reported to and approved by Group Finance and Risk Senior Management.

For further details with regard to impaired loans please refer to Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

Impairment Loss and Allowance for Loan Losses

If there is evidence of impairment the impairment loss is generally calculated on the basis of discounted expected cash flows using the original effective interest rate of the loan. If the terms of a loan are renegotiated or otherwise modified because of financial difficulties of the borrower without qualifying for de-recognition of the loan, the impairment loss is measured using the original effective interest rate before modification of terms. We reduce the carrying amount of the impaired loan by the use of an allowance account and recognize the amount of the loss in the consolidated statement of income as a component of the provision for credit losses. We record increases to our allowance for loan losses as an increase of the provision for loan losses in our income statement. Charge-offs reduce our allowance while recoveries, if any, are credited to the allowance account. If we determine that we no longer require allowances which we have previously established, we decrease our allowance and record the amount as a reduction of the provision for loan losses in our income statement. When it is considered that there is no realistic prospect of recovery and all collateral has been realized or transferred to us, the loan and any associated allowance for loan losses is charged off (i.e., the loan and the related allowance for loan losses are removed from the balance sheet).

While we assess the impairment for our corporate credit exposures individually, we assess the impairment of our smaller-balance standardized homogeneous loans collectively.

Our collectively assessed allowance for non-impaired loans reflects allowances to cover for incurred losses that have neither been individually identified nor provided for as part of the impairment assessment of smaller-balance homogeneous loans.

For further details regarding our accounting policies regarding impairment loss and allowance for credit losses, please refer to Note 1 “Significant Accounting Policies and Critical Accounting Estimates”.

Impaired loans, allowance for loan losses and coverage ratios by business division

	Dec 31, 2017			Dec 31, 2016[3]			2017 increase (decrease) from 2016	
in € m.	Impaired loans	Loan loss allowance	Impaired loan coverage ratio in %	Impaired loans	Loan loss allowance	Impaired loan coverage ratio in %	Impaired loans	Impaired loan coverage ratio in ppt
Corporate & Investment Bank	2,517	1,565	62	3,007	1,893	63	(490)	(1)
Private & Commercial Bank	3,717	2,355	63	3,646	2,217	61	71	3
Deutsche Asset Management	0	0	N/M	0	1	N/M[1]	0	N/M
Non-Core Operations Unit[2]	0	0	N/M	794	462	58	(794)	N/M
thereof: assets reclassified to loans and receivables according to IAS 39	0	0	N/M	92	69	75	(92)	N/M
Consolidation & Adjustments	1	1	N/M[1]	0	4	N/M[1]	0	N/M
Total	6,234	3,921	63	7,447	4,546	61	(1,213)	2

N/M – not meaningful.
1 Allowance in Consolidation & Adjustments and Other and Deutsche Asset Management fully consists of collectively assessed allowance for non-impaired loans.
2 From 2017 onwards, Non-Core Operations Unit (NCOU) ceased to exist as a standalone division. The remaining impaired assets and the corresponding loan loss allowance as of December 31, 2016 are now managed by the corresponding core operating segments, predominantly Private & Commercial Bank.
3 2016 Impaired loans and Loan loss allowance numbers have been restated to reflect restructuring of business areas.

Impaired loans, allowance for loan losses and coverage ratios by industry

								Dec 31, 2017
	Impaired Loans			Loan loss allowance				
in € m.	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	Impaired loan coverage ratio in %
Financial intermediation	121	8	129	1	3	40	44	34
Fund management activities	8	8	16	1	0	3	4	24
Manufacturing	520	165	685	439	146	51	635	93
Wholesale and retail trade	333	188	521	211	156	27	394	76
Households	155	2,233	2,388	153	1,290	83	1,526	64
Commercial real estate activities	345	30	376	115	11	42	168	45
Public sector	74	0	74	6	0	12	17	24
Other[1]	1,792	254	2,046	840	139	153	1,132	55
Total	3,348	2,886	6,234	1,766	1,745	410	3,921	63

[1] Thereof: 'Transportation, storage and communication' - Total Impaired Loans € 808 million/Total Loan loss allowance € 469 million. 'Real estate; renting and business activities' - € 482 million/ € 234 million, 'Construction' - € 378 million/ € 144 million, 'Mining and quarrying' - € 169 million/ € 116 million.

								Dec 31, 2016
	Impaired Loans			Loan loss allowance				
in € m.	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	Impaired loan coverage ratio in %
Financial intermediation	122	11	133	27	3	47	77	58
Fund management activities	14	7	21	1	0	4	5	26
Manufacturing	524	229	754	476	149	82	707	94
Wholesale and retail trade	472	234	707	223	161	29	413	58
Households	193	2,467	2,661	220	1,466	67	1,754	66
Commercial real estate activities	385	37	422	168	25	39	233	55
Public sector	19	0	19	4	0	3	7	35
Other[1]	2,397	334	2,731	953	168	230	1,351	49
Total	4,126	3,321	7,447	2,071	1,972	503	4,546	61

[1] Thereof: 'Transportation, storage and communication' - Total Impaired Loans € 1.1 billion/Total Loan loss allowance € 650 million, 'Real estate; renting and business activities' - € 489 million/ € 230 million, 'Construction': € 309 million/ € 170 million, 'Mining and quarrying' - € 232 million/ € 103 million.

Impaired loans, allowance for loan losses and coverage ratios by region

								Dec 31, 2017
	Impaired Loans			Loan loss allowance				
in € m.	Individually assessed	Collectively assessed	Total	Individually assessed allowance	Collectively assessed allowance for impaired loans	Collectively assessed allowance for non-impaired loans	Total	Impaired loan coverage ratio in %
Germany	953	1,312	2,266	600	823	104	1,527	67
Western Europe (excluding Germany)	1,471	1,422	2,892	815	822	113	1,749	60
Eastern Europe	45	123	168	45	92	11	147	88
North America	497	1	498	67	0	102	170	34
Central and South America	70	0	70	14	0	21	35	50
Asia/Pacific	264	28	292	223	8	41	272	93
Africa	48	0	49	1	0	9	10	20
Other	0	0	0	0	0	11	11	N/M
Total	3,348	2,886	6,234	1,766	1,745	410	3,921	63

N/M – not meaningful

in € m.	Impaired Loans: Individually assessed	Impaired Loans: Collectively assessed	Impaired Loans: Total	Loan loss allowance: Individually assessed allowance	Loan loss allowance: Collectively assessed allowance for impaired loans	Loan loss allowance: Collectively assessed allowance for non-impaired loans	Loan loss allowance: Total	Impaired loan coverage ratio in % (Dec 31, 2016)
Germany	1,154	1,486	2,639	563	804	122	1,489	56
Western Europe (excluding Germany)	2,021	1,688	3,709	1,008	1,057	130	2,195	59
Eastern Europe	46	132	179	39	106	10	154	86
North America	495	1	496	148	0	128	277	56
Central and South America[1]	4	0	5	3	0	14	16	363
Asia/Pacific[1]	341	14	355	286	5	76	367	103
Africa	63	1	64	24	0	8	32	50
Other[1]	2	0	2	0	0	17	17	908
Total	4,126	3,321	7,447	2,071	1,972	503	4,546	61

[1] Impaired Loans in Central & South America, Asia Pacific and Other are more than fully covered by loan loss allowance due to the latter including collectively assessed allowance for non-impaired loans.

Development of Impaired Loans

in € m.	Dec 31, 2017: Individually assessed	Dec 31, 2017: Collectively assessed	Dec 31, 2017: Total	Dec 31, 2016: Individually assessed	Dec 31, 2016: Collectively assessed	Dec 31, 2016: Total
Balance, beginning of year	4,126	3,321	7,447	4,236	3,915	8,151
Classified as impaired during the year	1,370	1,248	2,618	2,177	1,291	3,469
Transferred to not impaired during the year[1]	(1,127)	(961)	(2,088)	(1,080)	(723)	(1,803)
Charge-offs	(540)	(605)	(1,146)	(979)	(987)	(1,966)
Disposals of impaired loans	(267)	(116)	(383)	(266)	(161)	(427)
Exchange rate and other movements	(215)	(1)	(216)	38	(15)	23
Balance, end of year	3,348	2,886	6,234	4,126	3,321	7,447

[1] Includes repayments.

Our impaired loans decreased in 2017 by € 1.2 billion or 16 % to € 6.2 billion. The reduction in our individually assessed portfolio mainly reflects charge-offs in CIB along with de-risking of former NCOU assets, while the reduction in our collectively assessed portfolio was driven by charge-offs related to disposals in PCC International.

The impaired loan coverage ratio (defined as total on-balance sheet allowances) for all loans individually impaired or collectively assessed divided by IFRS impaired loans (excluding collateral) increased from 61 % as of year-end 2016 to 63 % as of December 31, 2017.

Provision for loan losses and recoveries by Industry

in € m.	2017: Provision for loan losses before recoveries: For individually assessed loans	2017: For collectively assessed impaired loans	2017: For collectively assessed non-impaired loans	2017: Total	2017: Recoveries	2016: Provision for loan losses before recoveries (total)	2016: Recoveries
Financial intermediation	25	(2)	(3)	20	4	(3)	4
Fund management activities	0	0	(2)	(1)	0	(2)	0
Manufacturing	48	18	(28)	38	19	209	14
Wholesale and retail trade	46	19	1	66	5	58	4
Households	11	322	20	354	66	531	99
Commercial real estate activities	(20)	4	5	(10)	12	76	36
Public sector	2	0	9	11	0	0	0
Other[1]	239	23	(62)	201	20	665	31
Total	352	385	(59)	678	127	1,534	187

[1] In 2017, the largest contributions to risk provisioning in the "Other" category came from the "Transport, Storage and Communications" sector (€ 107 million) and the "Mining and quarrying" sector (€ 72 million). In 2016, the “Transport, Storage and Communications” sector contributed € 422 million and the “Mining and Quarrying” sector € 91 million.

Our existing commitments to lend additional funds to debtors with impaired loans amounted to € 28 million as of December 31, 2017 and € 117 million as of December 31, 2016.

Collateral held against impaired loans, with fair values capped at transactional outstanding

in € m.	Dec 31, 2017	Dec 31, 2016
Financial and other collateral[1]	1,757	2,016
Guarantees received	309	343
Total collateral held for impaired loans	**2,066**	2,359

[1] Defaulted mortgage loans secured by residential real estate properties, where the loan agreement has been terminated/cancelled are generally subject to formal foreclosure proceedings.

Our total collateral held for impaired loans as of December 31, 2017 decreased by € 293 million or 12 % compared to previous year, while coverage ratio including collateral (defined as total on-balance sheet allowances for all loans individually impaired or collectively assessed plus collateral held against impaired loans, with fair values capped at transactional outstanding, divided by IFRS impaired loans) increased to 96 % as of December 31, 2017 compared to 93 % as of December 31, 2016.

Financial assets available for sale

The impairment concept is also applicable for available for sale debt instruments, which are otherwise carried at fair value with changes in fair value reported in other comprehensive income. If an available for sale debt instrument is considered impaired, the cumulative impairment loss reflects the difference between the amortized cost and the current fair value of the instrument. For a detailed discussion of our accounting procedures please refer to Note 1 “Significant Accounting policies and Critical Accounting Estimates”.

Non-impaired past due and impaired financial assets available for sale, accumulated impairments, coverage ratio and collateral held against impaired financial assets available for sale

in € m.	Dec 31, 2017	Dec 31, 2016
Financial assets non-impaired past due available for sale	1,538	1,661
thereof:		
Less than 30 days past due	176	178
30 or more but less than 60 days past due	23	24
60 or more but less than 90 days past due	138	23
90 days or more past due	1,201	1,436
Impaired financial assets available for sale	157	229
Accumulated impairment for financial assets available for sale	113	131
Impaired financial assets available for sale coverage ratio in %	71	57
Collateral held against impaired financial assets available for sale	17	20
thereof:		
Financial and other collateral	17	20
Guarantees received	0	0

Collateral Obtained

We obtain collateral on the balance sheet only in certain cases by either taking possession of collateral held as security or by calling upon other credit enhancements. Collateral obtained is made available for sale in an orderly fashion or through public auctions, with the proceeds used to repay or reduce outstanding indebtedness. Generally we do not occupy obtained properties for our business use. The commercial and residential real estate collateral obtained in 2017 refers predominantly to our exposures in Spain.

Collateral obtained during the reporting periods

in € m.	2017	2016
Commercial real estate	9	9
Residential real estate[1]	63	55
Other	0	0
Total collateral obtained during the reporting period	72	64

[1] Carrying amount of foreclosed residential real estate properties amounted to € 67 million as of December 31, 2017 and € 78 million as of December 31, 2016.

The collateral obtained, as shown in the table above, excludes collateral recorded as a result of consolidating securitization trusts under IFRS 10. In 2017 as well as in 2016 the Group did not obtain any collateral related to these trusts.

Allowance for Credit Losses

Development of allowance for credit losses

							2017
	Allowance for Loan Losses			Allowance for Off-Balance Sheet Positions			
in € m.	Individually assessed	Collectively assessed[1]	Subtotal	Individually assessed	Collectively assessed[2]	Subtotal	Total
Balance, beginning of year	2,071	2,475	4,546	162	183	346	4,892
Provision for credit losses	299	253	552	(23)	(4)	(27)	525
thereof: (Gains)/Losses from disposal of impaired loans	(83)	(32)	(115)	0	0	0	(115)
Net charge-offs:	(487)	(532)	(1,019)	0	0	0	(1,019)
Charge-offs	(541)	(605)	(1,146)	0	0	0	(1,146)
Recoveries	54	73	127	0	0	0	127
Other changes	(117)	(41)	(158)	(18)	(16)	(34)	(191)
Balance, end of year	1,766	2,155	3,921	122	163[1]	285	4,207
Changes compared to prior year							
Provision for credit losses							
Absolute	(444)	(351)	(795)	(47)	(16)	(62)	(857)
Relative	(60) %	(58) %	(59) %	(196) %	(132) %	(175) %	(62) %
Net charge-offs							
Absolute	407	338	745	0	0	0	745
Relative	(45) %	(39) %	(42) %	0 %	0 %	0 %	(42) %
Balance, end of year							
Absolute	(305)	(320)	(625)	(41)	(20)	(60)	(685)
Relative	(15) %	(13) %	(14) %	(25) %	(11) %	(17) %	(14) %

[1] Thereof 'Transfer risk reserve' € 5 million.
[2] Thereof 'Transfer risk reserve' € 8 million.

Allowance for credit losses as of December 31, 2017 amounted to € 4.2 billion compared to € 4.9 billion as of December 31, 2016. The reduction was driven by charge-offs, partly compensated by additional provision for credit losses.

As of December 31, 2017, provision for credit losses decreased by € 857 million compared to year-end 2016, driven by a decrease in provision for loan losses of € 795 million, as well as by a reduction in provisions for off-balance sheet positions of € 62 million. The decrease in our individually assessed loan portfolio mainly resulted from CIB, driven by all portfolios including shipping. Despite the year-over-year reduction, shipping continued to be the main driver of provision for credit losses in 2017, in part related to the re-evaluation of the respective impairment method during the year as discussed in Note 1 of this report. A further year-over-year reduction in PCB was driven by a significant release in Postbank. The decrease in provisions for our collectively assessed loan portfolio mainly resulted from the non-recurrence of one-off items related to assets reported under NCOU in the prior year and further reflected the good portfolio quality and ongoing benign economic environment in PCB.

The decrease in net charge-offs of € 745 million compared to 2016 was mainly driven by non-recurrence of net charge offs related to assets reported under NCOU in the prior year as well as in Postbank.

							2016
	Allowance for Loan Losses			Allowance for Off-Balance Sheet Positions			
in € m.	Individually assessed	Collectively assessed[1]	Subtotal	Individually assessed	Collectively assessed[2]	Subtotal	Total
Balance, beginning of year	2,252	2,776	5,028	144	168	312	5,340
Provision for credit losses	743	604	1,347	24	12	36	1,383
thereof: (Gains)/Losses from disposal of impaired loans	3	(16)	(13)	0	0	0	(13)
Net charge-offs:	(894)	(870)	(1,764)	0	0	0	(1,764)
Charge-offs	(979)	(972)	(1,951)	0	0	0	(1,951)
Recoveries	85	101	187	0	0	0	187
Other changes	(30)	(35)	(65)	(5)	3	(2)	(67)
Balance, end of year	2,071	2,475[1]	4,546	162	183[1]	346	4,892
Changes compared to prior year							
Provision for credit losses							
Absolute	409	56	465	(34)	(4)	(39)	427
Relative	123 %	10 %	53 %	(59) %	(27) %	(52) %	45 %
Net charge-offs							
Absolute	(412)	(258)	(670)	0	0	0	(670)
Relative	85 %	42 %	61 %	0 %	0 %	0 %	61 %
Balance, end of year							
Absolute	(181)	(301)	(482)	18	15	34	(448)
Relative	(8) %	(11) %	(10) %	13 %	9 %	11 %	(8) %

[1] Thereof 'Transfer risk reserve' € 5 million.
[2] Thereof 'Transfer risk reserve' € 6 million.

Allowance for credit losses as of December 31, 2016 amounted to € 4.9 billion compared to € 5.3 billion as of December 31, 2015. The reduction was driven by charge-offs, partly compensated by additional provision for credit losses.

As of December 31, 2016, provision for credit losses increased by € 427 million compared to year-end 2015, driven by an increase in provision for loan losses of € 465 million partly offset by a reduction in provisions for off-balance sheet positions of € 39 million. The increase in our individually assessed portfolio mainly resulted from CIB reflecting the continued market weakness of the shipping sector as well as lower commodity prices in the metals and mining and oil and gas sectors. The increase in provisions for our collectively assessed loan portfolio was mainly driven by NCOU partly relating to higher charges for IAS 39 reclassified assets and partly offset by PCB, among other factors reflecting the good quality of the loan book and the benign economic environment. The reduction in provisions for off-balance sheet positions was driven by CIB and reflects releases caused by crystallization into cash of a few guarantee exposures leading to higher provision for loan losses.

The increase in net charge-offs of € 670 million compared to 2015 was mainly driven by NCOU caused by IAS 39 reclassified assets along with disposals.

Our allowance for loan losses for IAS 39 reclassified assets, which were reported in NCOU, amounted to € 69 million as of December 31, 2016, representing 2 % of our total allowance for loan losses, down 82 % from the level at the end of 2015 which amounted to € 389 million (8 % of total allowance for loan losses). This reduction was driven by charge offs of € 355 million along with reduction driven by foreign exchange as most IAS 39 reclassified assets are denominated in non-Euro currencies and partly offset by additional provisions of € 66 million.

Compared to 2015, provision for loan losses for IAS 39 reclassified assets increased by € 110 million mainly related to our European mortgage portfolios. Net charge offs increased by € 242 million mainly driven by the European mortgage portfolio and one large single booking.

Derivatives – Credit Valuation Adjustment

We establish counterparty Credit Valuation Adjustment (“CVA”) for OTC derivative transactions to cover expected credit losses. The adjustment amount is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the credit risk, based on available market information, including CDS spreads.

Treatment of Default Situations under Derivatives

Unlike standard loan assets, we generally have more options to manage the credit risk in our derivatives transactions when movement in the current replacement costs or the behavior of our counterparty indicate that there is the risk that upcoming payment obligations under the transactions might not be honored. In these situations, we are frequently able under the relevant derivatives agreements to obtain additional collateral or to terminate and close-out the derivative transactions at short notice.

The master agreements for OTC derivative transactions executed with our clients usually provide for a broad set of standard or bespoke termination rights, which allow us to respond swiftly to a counterparty’s default or to other circumstances which indicate a high probability of failure. We have less comfort under the rules and regulations applied by clearing CCPs, which rely primarily on the clearing members default fund contributions and guarantees and less on the termination and close-out of contracts, which will be considered only at a later point in time after all other measures failed. Considering the severe systemic disruptions to the financial system, that could be caused by a disorderly failure of a CCP, the Financial Stability Board (“FSB”) recommended in October 2014 to subject CCPs to resolution regimes that apply the same objectives and provisions that apply to global systematically important banks (G-SIBs).

Our contractual termination rights are supported by internal policies and procedures with defined roles and responsibilities which ensure that potential counterparty defaults are identified and addressed in a timely fashion. These procedures include necessary settlement and trading restrictions. When our decision to terminate derivative transactions results in a residual net obligation owed by the counterparty, we restructure the obligation into a non-derivative claim and manage it through our regular work-out process. As a consequence, for accounting purposes we typically do not show any nonperforming derivatives.

Wrong-way risk occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. In compliance with Article 291(2) and (4) CRR we, excluding Postbank, had established a monthly process to monitor several layers of wrong-way risk (specific wrong-way risk, general explicit wrong-way risk at country/industry/ region levels and general implicit wrong-way risk, whereby exposures arising from transactions subject to wrong-way risk are automatically selected and presented for comment to the responsible credit officer). A wrong-way risk report is then sent to Credit Risk senior management on a monthly basis. In addition, we, excluding Postbank, utilized our established process for calibrating our own alpha factor (as defined in Article 284 (9) CRR) to estimate the overall wrong-way risk in our derivatives and securities financing transaction portfolio. Postbank derivative counterparty risk is immaterial to the Group and collateral held is typically in the form of cash.

Trading Market Risk Exposures

Value-at-Risk Metrics of Trading Units of Deutsche Bank Group (excluding Post-bank)

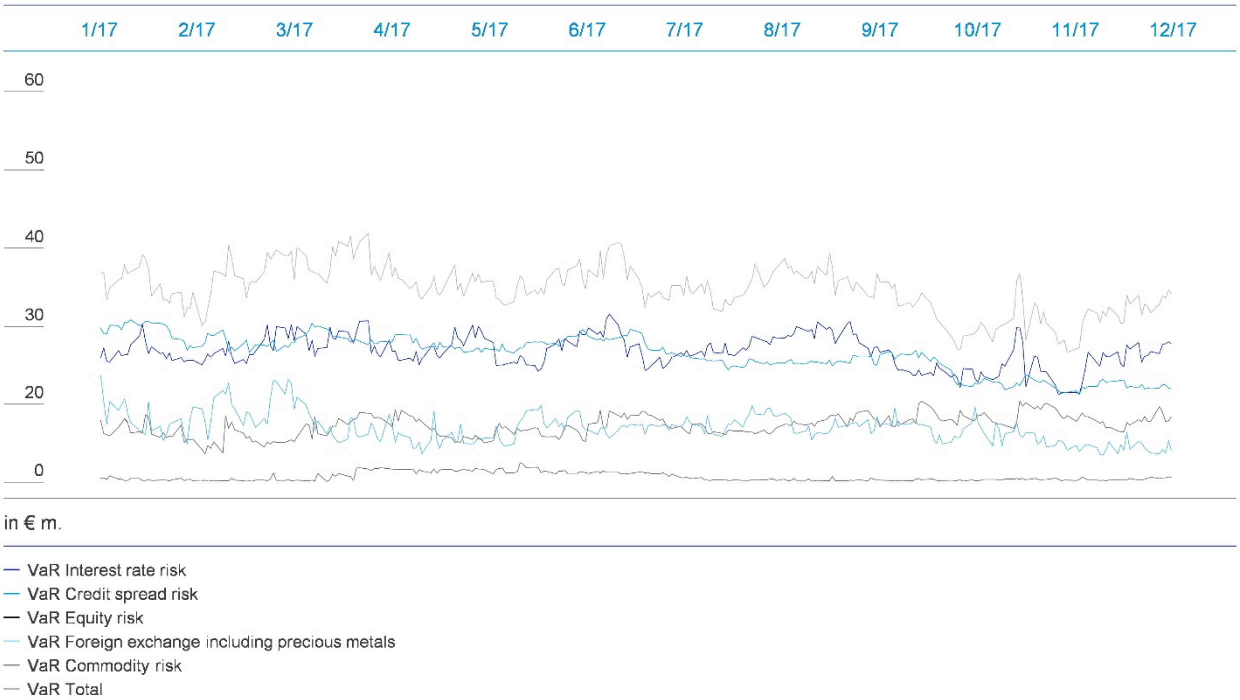
The tables and graph below present the value-at-risk metrics calculated with a 99 % confidence level and a one-day holding period for our trading units. They exclude contributions from Postbank trading book which are calculated on a stand-alone basis.

Value-at-Risk of our Trading Units by Risk Type

	Total		Diversification effect		Interest rate risk		Credit spread risk		Equity price risk		Foreign exchange risk[1]		Commodity price risk	
in € m.	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Average	29.8	32.0	(28.1)	(35.0)	20.2	19.7	19.7	26.6	8.7	9.3	8.4	10.7	0.8	0.7
Maximum	38.4	59.4	(37.6)	(57.6)	26.0	29.5	25.1	32.5	12.5	52.4	16.5	16.7	3.0	3.3
Minimum	20.1	20.4	(21.4)	(25.6)	13.5	14.8	13.5	22.3	4.4	4.4	4.2	3.6	0.1	0.2
Period-end	29.1	30.1	(22.5)	(36.9)	21.4	19.9	14.4	24.3	10.1	10.0	4.9	12.6	0.7	0.2

[1] Includes value-at-risk from gold and other precious metal positions.

Development of value-at-risk by risk types in 2017



The average value-at-risk over 2017 was € 29.8 million, which is a decrease of € 2.2 million compared with the full year 2016. The average credit spread value-at-risk decreased due to a reduction in idiosyncratic risk.

The period end value-at-risk reduction was driven by reductions across the credit spread and foreign exchange asset classes.

Regulatory Trading Market Risk Measures (excluding Postbank)

The table below presents the stressed value-at-risk metrics calculated with a 99 % confidence level and a one-day holding period for our trading units. It excludes contributions from Postbank's trading book which are calculated on a stand-alone basis

Average, Maximum and Minimum Stressed Value-at-Risk by Risk Type

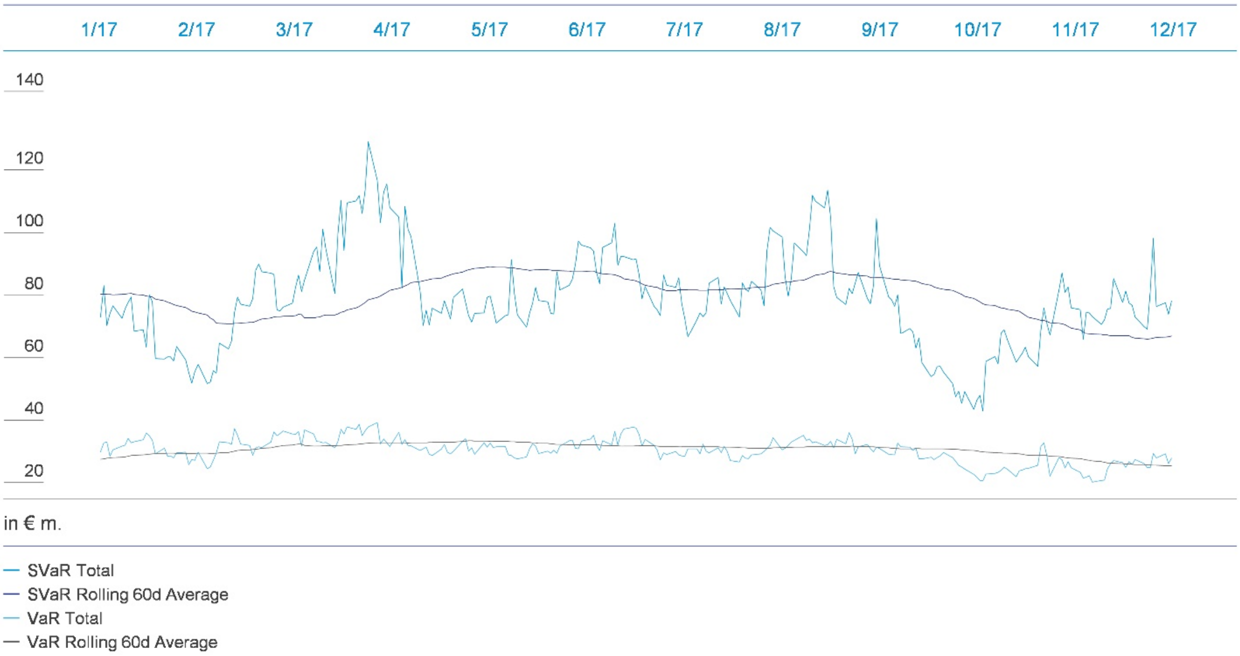
	Total		Diversification effect		Interest rate risk		Credit spread risk		Equity price risk		Foreign exchange risk[1]		Commodity price risk	
in € m.	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Average	76.7	85.2	(88.4)	(78.2)	69.8	51.9	62.1	74.9	18.8	20.6	12.6	14.8	1.8	1.3
Maximum	125.0	143.7	(115.8)	(150.0)	92.0	82.5	73.2	99.3	66.8	144.5	28.0	30.4	6.1	3.9
Minimum	42.0	60.4	(73.0)	(53.4)	48.3	37.4	54.3	59.0	1.5	2.4	6.9	3.4	0.3	0.4
Period-end	85.6	75.8	(81.0)	(91.3)	67.8	51.9	64.3	63.0	19.9	29.6	12.6	22.1	1.9	0.5

[1] Includes value-at-risk from gold and other precious metal positions.

The average stressed value-at-risk was € 76.7 million over 2017, a decrease of € 8.5 million compared with the full year 2016. The reduction in the average was driven by a decrease in credit spread stressed value-at-risk due to a reduction in idiosyncratic risk as well as a small reduction coming from a model enhancement to the credit spread component. This has been partly offset by an increase in interest rate stressed value-at-risk due to a change in directional exposure on average over 2017.

The following graph compares the development of the daily value-at-risk with the daily stressed value-at-risk and their 60 day averages, calculated with a 99 % confidence level and a one-day holding period for our trading units. Amounts are shown in millions of euro and exclude contributions from Postbank's trading book which are calculated on a stand-alone basis.

Development of value-at-risk and stressed value-at-risk in 2017



For regulatory reporting purposes, the incremental risk charge for the respective reporting dates represents the higher of the spot value at the reporting dates, and their preceding 12-week average calculation.

Average, Maximum and Minimum Incremental Risk Charge of Trading Units (with a 99.9 % confidence level and one-year capital horizon)[1,2,3,]

	Total		Non-Core Operations Unit		Global Credit Trading		Core Rates		Fixed Income & Currencies APAC		Emerging Markets - Debt		Other	
in € m.	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Average	802.1	840.2	0.0	52.0	544.6	393.0	107.1	200.4	168.1	188.6	37.2	116.8	(54.8)	(110.5)
Maximum	899.3	944.4	0.0	57.3	597.4	405.8	172.5	229.6	229.0	243.0	62.9	128.0	(20.4)	(65.6)
Minimum	754.8	693.0	0.0	44.5	503.7	368.0	48.7	173.7	92.4	119.6	(1.4)	111.6	(90.0)	(141.8)
Period-end	789.6	693.0	0.0	51.8	540.1	368.0	133.2	173.7	142.3	119.6	19.9	121.8	(45.9)	(141.8)

1 Amounts show the bands within which the values fluctuated during the 12-weeks preceding December 31, 2017 and December 31, 2016, respectively.
2 Business line breakdowns have been updated for 2017 reporting to better reflect the current business structure.
3 All liquidity horizons are set to 12 months.

The incremental risk charge as at the end of 2017 was € 790 million an increase of € 97 million (14 %) compared with year end 2016. The 12-week average of the incremental risk charge as at the end of 2017 was € 802 million and thus € 38 million (5 %) lower compared with the average for the 12-week period ended December 31, 2016. The decreased average incremental risk charge is driven by a decrease in credit exposures in the Core Rates and Emerging Markets Debt business areas when compared to the full year 2016.

For regulatory reporting purposes, the comprehensive risk measure for the respective reporting dates represents the higher of the internal spot value at the reporting dates, their preceding 12-week average calculation, and the floor, where the floor is equal to 8 % of the equivalent capital charge under the standardized approach securitization framework.

Average, Maximum and Minimum Comprehensive Risk Measure of Trading Units (with a 99.9 % confidence level and one-year capital horizon)[1,2,3]

in € m.	2017	2016
Average	5.4	31.3
Maximum	6.3	39.8
Minimum	4.5	21.9
Period-end	4.4	17.9

1 Regulatory Comprehensive Risk Measure calculated for the 12-week period ending December 29.
2 Period end is based on the internal model spot value.
3 All liquidity horizons are set to 12 months.

The internal model comprehensive risk measure as at the end 2017 was € 4.4 million a decrease of € 13.5 million (-75 %) compared with year end 2016. The 12-week average of our regulatory comprehensive risk measure as at the end of 2017 was € 5.4 million and thus € 25.8 million (83 %) lower compared with the average for the 12-week period ending December 31, 2016. The reduction was due to continued de-risking on this portfolio.

Market Risk Standardized Approach

As of December 31, 2017, the securitization positions, for which the specific interest rate risk is calculated using the market risk standardized approach, generated capital requirements of € 379.5 million corresponding to risk weighted-assets of € 4.7 billion. As of December 31, 2016 these positions generated capital requirements of € 278.4 million corresponding to risk weighted-assets of € 3.5 billion.

For nth-to-default credit default swaps the capital requirement decreased to € 2.8 million corresponding to risk weighted-assets of € 35 million compared with € 6.4 million and € 80 million as of December 31, 2016.

The capital requirement for Collective Investment Undertakings under the market risk standardized approach was € 45 million corresponding to risk weighted-assets of € 556 million as of December 31, 2017, compared with € 39 million and € 487 million as of December 31, 2016.

The capital requirement for longevity risk under the market risk standardized approach was € 32 million corresponding to risk-weighted assets of € 395 million as of December 31, 2017, compared with € 46 million and € 570 million as of December 31, 2016.

Value-at-Risk at Postbank

The value-at-risk of Postbank's trading book calculated with a 99 % confidence level and a one-day holding period amounted to zero as of December 31, 2017. Postbank's current trading strategy does not allow any new trading activities with regard to the trading book. Therefore, Postbank's trading book did not contain any positions as of December 31, 2017. Nevertheless, Postbank will remain classified as a trading book institution.

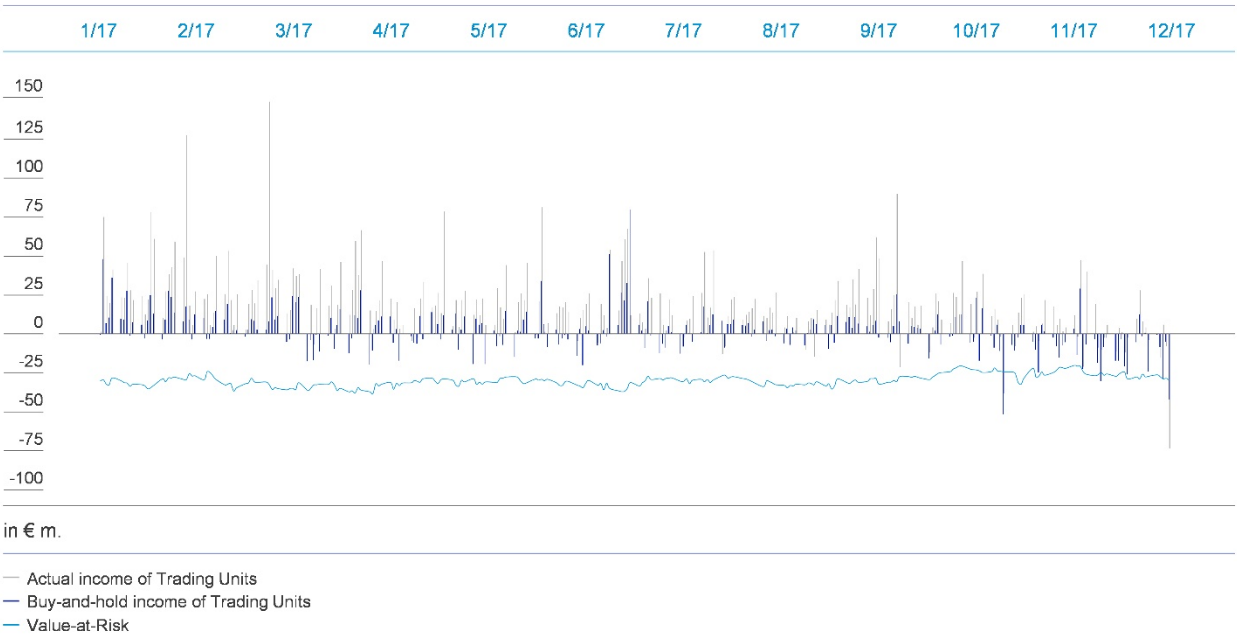
Results of Regulatory Backtesting of Trading Market Risk

In 2017 we observed three global outliers, where our loss on a buy-and-hold basis exceeded the value-at-risk of our Trading Books, compared with one outlier in 2016. The outliers in 2017 all occurred in the fourth quarter. The first was driven by an idiosyncratic event that led to losses in our Non-Strategic and Emerging Markets Debt business areas. The second was an idiosyncratic event primarily impacting our Equities business. The final outlier was at the year end and was caused by losses across a number of business areas. The first and third of these events also led to an outlier on an Actual Backtesting basis, which compares the VaR to Total Income less Fees & Commissions, and excluding Debt Valuation Adjustments. There were two Actual Backtesting outliers in 2017 compared to four in 2016.

Based on the backtesting results, our analysis of the underlying reasons for outliers and enhancements included in our value-at-risk methodology, we continue to believe that our value-at-risk model will remain an appropriate measure for our trading market risk under normal market conditions. The following graph presents trading units' daily comparison of the VAR measure as of the close of the previous business day with both hypothetical (buy-and-hold income, i.e. one-day change in portfolio's value) and the actual backtesting outcomes (as defined above), in order to highlight the frequency and the extent of the backtesting exceptions. The value-at-risk is presented in negative amounts to visually compare the estimated potential loss of our trading positions with the buy and hold income. The chart shows that our trading units achieved a positive buy and hold income for 57 % of the trading days in 2017 (versus 54 % in 2016), as well as displaying the global outliers experienced in 2017.

The capital requirements for the value-at-risk model, for which the backtesting results are shown here, accounts for 1.3% of the total capital requirement for the Group.

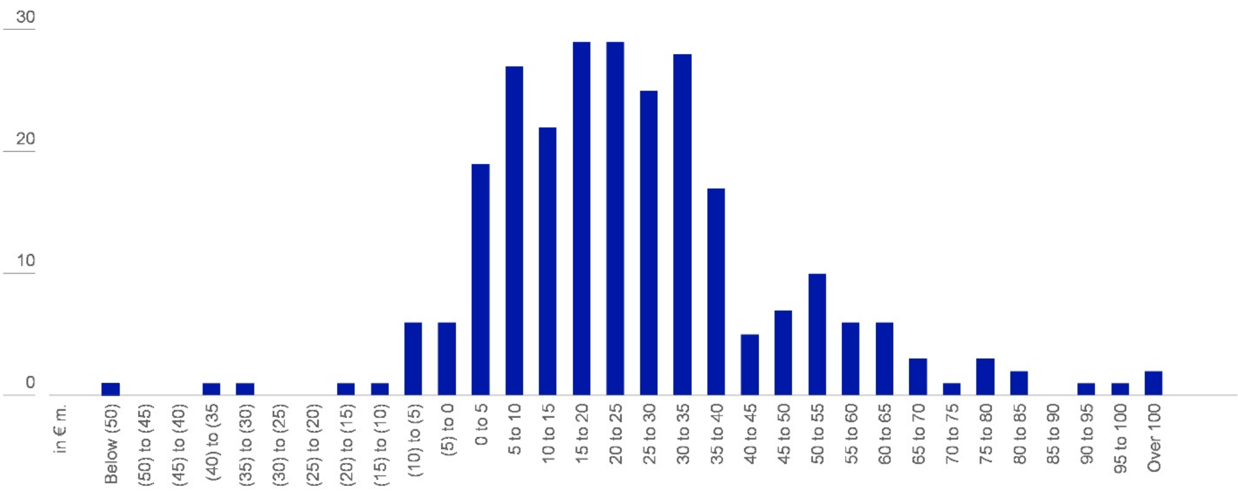
EU MR4 – Comparison of VAR estimates with gains/losses



Daily Income of our Trading Units

The following histogram shows the distribution of daily income of our trading units (excluding Postbank). Daily income is defined as total income which consists of new trades, fees & commissions, buy & hold income, reserves, carry and other income. It displays the number of trading days on which we reached each level of trading income shown on the horizontal axis in millions of euro.

Distribution of daily income of our trading units in 2017



Our trading units achieved a positive revenue for 93 % of the trading days in 2017 compared with 87 % in the full year 2016.

Nontrading Market Risk Exposures

Economic Capital Usage for Nontrading Market Risk

The following table shows the Nontrading Market Risk economic capital usage by risk type:

Economic Capital Usage by risk type

	Economic capital usage	
in € m.	Dec 31, 2017	Dec 31, 2016
Interest rate risk	1,743	1,921
Credit spread risk	722	1,419
Equity and Investment risk	1,431	1,834
Foreign exchange risk	1,509	2,485
Pension risk	1,174	1,007
Guaranteed funds risk	49	1,699
Total nontrading market risk portfolios	6,628	10,364

The economic capital figures do take into account diversification benefits between the different risk types.

Economic Capital Usage for Nontrading Market Risk totaled € 6.6 billion as of December 31, 2017, which is € 3.7 billion below our economic capital usage at year-end 2016. The decrease in economic capital usage driven by the quantile change from 99.98 % to 99.90 % including reductions in capital supply items due to going concern adjustments amounted to approximately half of the total decrease, or € 1.8 billion.

- Interest rate risk. Economic capital charge for interest rate risk in the banking book, including gap risk, basis risk and option risk, such as the risk of a change in client behavior embedded in modelled non-maturity deposits or prepayment risk. In total the economic capital usage for December 31, 2017 was € 1,743 million, compared to € 1,921 million for December 31, 2016. The decrease in economic capital contribution was mainly driven by the quantile change from 99.98 % to 99.90 %.
- Credit spread risk. Economic capital charge for portfolios in the banking book subject to material credit spread risk. Economic capital usage was € 722 million as of December 31, 2017, versus € 1,419 million as of December 31, 2016. The decrease in economic capital contribution was mainly driven by the quantile change from 99.98 % to 99.90 %.
- Equity and Investment risk. Economic capital charge for equity risk from our non-consolidated investment holdings, such as our strategic investments and alternative assets, and from a structural short position in our own share price arising from our equity compensation plans. The economic capital usage was € 1,431 million as of December 31, 2017, compared with € 1,834 million as of December 31, 2016, predominately driven by the quantile change from 99.98 % to 99.90 %.
- Pension risk. This risk arises from our defined benefit obligations, including interest rate risk and inflation risk, credit spread risk, equity risk and longevity risk. The economic capital usage was € 1,174 million and € 1,007 million as of December 31, 2017 and December 31, 2016 respectively. The increase in Pension economic capital is mainly related to an increase in interest rate and credit risk.
- Foreign exchange risk. Foreign exchange risk predominately arises from our structural position in unhedged capital and retained earnings in non-euro currencies in certain subsidiaries. Our economic capital usage was € 1,509 million as of December 31, 2017 versus € 2,485 million as of December 31, 2016. The decrease in economic capital contribution was mainly driven by reductions in capital supply items due to going concern adjustments and the quantile change from 99.98 % to 99.90 %.
- Guaranteed funds risk. Economic capital usage was € 49 million as of December 31, 2017, versus € 1,699 million as of December 31, 2016. The decrease in economic capital contribution was largely driven by redesign of the economic capital model for guaranteed retirement accounts and the removal of conservative placeholders.

Interest Rate Risk in the Banking Book

The following table shows the impact on the Group's net interest income in the banking book as well as the change of the economic value for the banking book positions from interest rate changes under the six standard scenarios defined by Basel Committee on Banking Supervision (BCBS):

Economic value & net interest income interest rate risk in the banking book by scenario

	Delta EVE		Delta NII[1]	
in € bn.	Dec 31, 2017	Dec 31, 2016	Dec 31, 2017	Dec 31, 2016
Parallel up	(0.4)	(0.3)	2.8	2.1
Parallel down	(1.1)	(0.4)	(0.8)	(0.6)
Steepener	0.2	0.4	(0.6)	N/A
Flattener	(0.6)	(0.5)	2.7	N/A
Short rate up	(0.5)	(0.6)	3.5	N/A
Short rate down	0.0	(0.0)	(0.7)	N/A
Maximum	**(1.1)**	(0.6)	**(0.8)**	(0.6)

in € bn.	Dec 31, 2017	Dec 31, 2016
Tier 1 Capital	**57.6**	55.5

N/A – Not applicable
[1] Delta Net Interest Income (NII) reflects the difference between projected NII in the respective scenario with shifted rates vs. unchanged rates. Sensitivities are based on a static balance sheet at constant exchange rates, excluding trading positions and Deutsche Asset Management. Figures do not include Mark to Market (MtM) / Other Comprehensive Income (OCI) effects on centrally managed positions not eligible for hedge accounting.

A sudden parallel increase in the yield curve would positively impact the Group's earnings (net interest income) from the banking book positions. Deutsche Bank estimates that the total one-year net interest income change resulting from parallel yield curve shifts of +200 and (200) basis points (floored by a rate of zero) would be € 2.8 billion and € (0.8) billion, respectively, at December 31, 2017.

The maximum Economic Value of Equity (EVE) loss was € (1.1) billion as of December 2017, compared to € (0.6) billion as of December 2016. The increase in EVE loss was mainly driven by an increased interest rate risk position in Deutsche Bank's Pension portfolio. As per December 2017 the maximum EVE loss represents 1.9 % of Tier 1 Capital.

The following table shows the variation of the economic value for Deutsche Bank's banking book positions resulting from downward and upward interest rate shocks by currency:

Economic value interest rate risk in the banking book by currency

	Dec 31, 2017	
in € bn.	-200 bp[1]	+200 bp
EUR	(1.3)	(0.3)
GBP	(0.0)	(0.0)
USD	0.3	(0.2)
JPY	(0.0)	0.1
Other	0.0	0.0
Total	(1.1)	(0.4)

[1] Floored at zero

The estimated change in the economic value resulting from the impact of the BCBS parallel yield curve shifts of -200 bp (floored by a rate of zero) and +200 bp would be € (1.1) billion and € (0.4) billion, respectively, at December 31, 2017. Both scenarios, downward and upward shock, lead to a decrease in the economic value mainly due to a negative convexity in Deutsche Bank's Pension portfolio and the impact of the applied zero floor on portfolios with offsetting positions in the long and short tenors.

Operational Risk Exposure

Operational Risk – Risk Profile

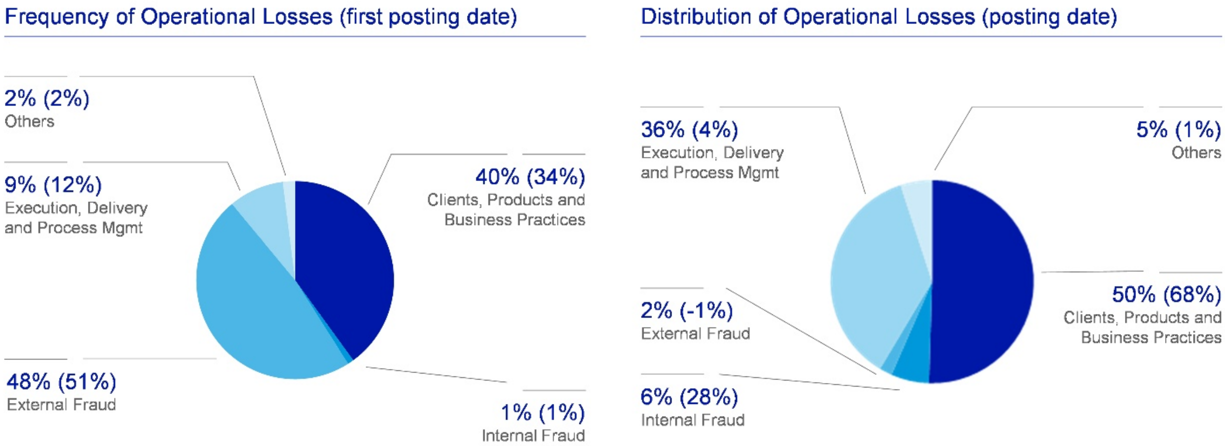
Operational Risk Losses by Event Type (Profit and Loss view)

in € m.	2017	2016[1]
Clients, Products and Business Practices	309	2,512
Internal Fraud	38	397
External Fraud	15	18
Execution, Delivery and Process Management	223	119
Others	30	25
Group	615	3,072

[1] Changed 2016 loss figures due to subsequent capture of losses and reclassification.

As of December 31, 2017, profit and loss based operational losses decreased by € 2.5 billion or 80 % compared to year-end 2016. The decrease was driven by the event types "Clients, Products and Business Practices" and "Internal Fraud", due to settlements reached and increased litigation reserves for unsettled cases in 2016.

Operational Losses by Event Type occurred in the period 2017 (2012-2016)[1]



[1] Percentages in brackets correspond to loss frequency respectively to loss amount for losses occurred in 2012-2016 period. Frequency and amounts can change subsequently.

The above left chart “Frequency of Operational Losses” summarizes Operational Risk events which occurred in 2017 compared to the five-year period 2012-2016 in brackets based on the period in which a loss was first recognized for that event. For example, for a loss event that was first recognized in 2010 with an additional profit/loss event recognized in 2017, the frequency chart would not include the loss event, but the loss distribution chart would include the profit/loss recognized in the respective period.

Frequencies are driven by the event types “External Fraud” with a frequency of 48 % and the event type “Clients, Product and Business Practices” with 40 % of all observed loss events. “Execution, Delivery and Process Management” contributes 9 %. “Others” are stable at 2 %. The event type “Internal Fraud” has a low frequency, resulting in less than 1 % of the loss events in the period 2017.

The above right chart “Distribution of Operational Losses” summarizes Operational Risk loss postings recognized in the profit/loss in 2017 compared to the five-year period 2012-2016. The event type “Clients, Product and Business Practices” dominates the operational loss distribution with a share of 50 % and is determined by outflows related to litigation, investigations and enforcement actions. “Execution, Delivery and Process Management” has the second highest share (36 %) which is related to one large event in 2017. The absolute loss amount of this event type only shows a small increase, but the relative increase is high, given the smaller basis of the total Operational Risk Losses. Finally, the event types “Internal Fraud” (6 %), “Others” (5 %) and “External Fraud” (2 %) are minor, compared to other event types.

Liquidity Risk Exposure

Funding Markets and Capital Markets Issuance

Credit markets in 2017 were affected by continued political uncertainties and the ongoing low interest rate environment. Our 5 year CDS traded within a range of 71 to 166 basis points, substantially lower compared to 2016.The peak was observed in the beginning of January, since then, the spread has declined significantly and as of year-end was trading at 73 basis points, at the low end of the range for the year. The spreads on our bonds exhibited similar behavior. For example, our 1.5 % EUR benchmark maturing in January 2022 traded in a range of 43 to 150 basis points, closing at 49 basis points at year end 2017.

Our 2017 funding plan of up to € 25 billion, comprising debt issuance with an original maturity in excess of one year, was completed and we concluded 2017 having raised € 24.8 billion in term funding. This funding was broadly spread across the following funding sources: Senior unsecured plain-vanilla issuance, including benchmarks (€ 14.7 billion), Tier 2 benchmark issuance (€ 0.8 billion), covered bond issuance (€ 1.1 billion), and other unsecured structured issuance (€ 8.2 billion). The € 24.8 billion total is divided into Euro (€ 9.2 billion), US dollar (€ 13.2 billion), British Pound (€ 0.9 billion) and other currencies aggregated (€ 1.5 billion). In addition to direct issuance, we use long-term cross currency swaps to manage our funding needs outside of EUR. Our investor base for 2017 issuances comprised retail customers (29 %), banks (6 %), asset managers and pension funds (38 %), insurance companies (8 %) and other institutional investors (19 %). The geographical distribution was split between Germany (21 %), rest of Europe (28 %), US (31 %), Asia/Pacific (16 %) and Other (3 %). Of our total capital markets issuance outstanding as of December 31, 2017, approximately 93 % was issued on an unsecured basis.

The average spread of our issuance over 3-months-Euribor (all non-Euro funding spreads are rebased versus 3-months Euribor) was 71 basis points for the full year, substantially lower compared to 129 basis points average spread in 2016. The average tenor was 6.7 years. Our issuance activities were slightly higher in the first half of the year. We issued the following volumes over each quarter: Q1: € 8.5 billion, Q2: € 4.8 billion, Q3: € 6.0 billion and Q4: € 5.5 billion, respectively.

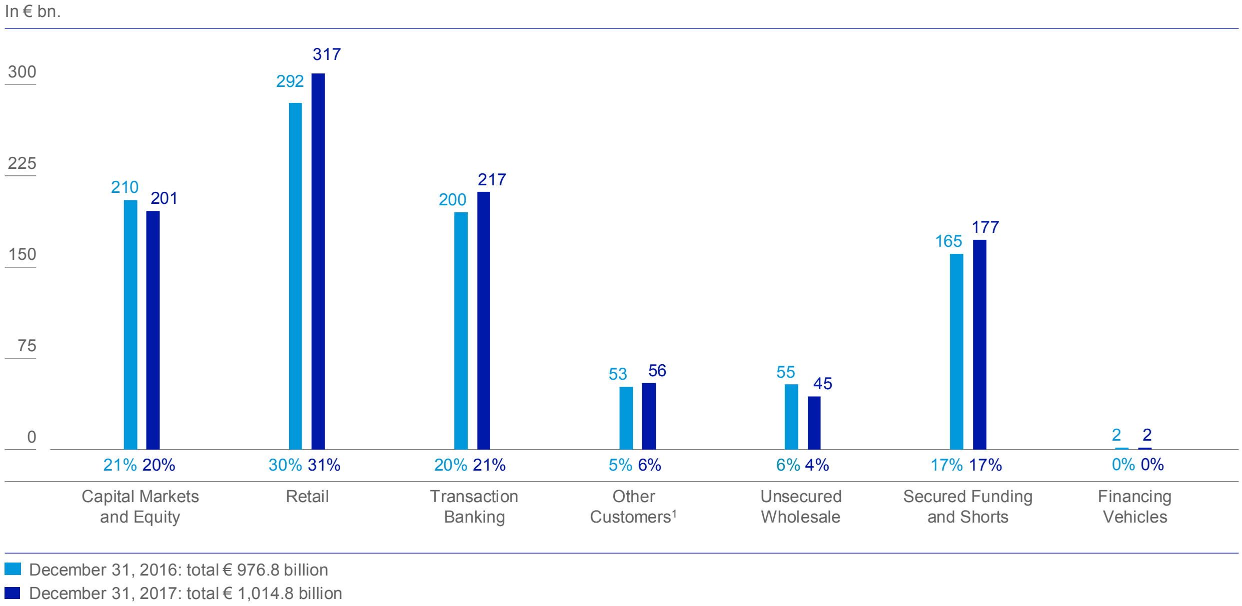
In 2018, our funding plan is € 30 billion which we plan to cover by accessing the above sources, without being overly dependent on any one source. We also plan to raise a portion of this funding in U.S. dollar and may enter into cross currency swaps to manage any residual requirements. We have total capital markets maturities, excluding legally exercisable calls of approximately € 16 billion in 2018.

Funding Diversification

In 2017, total external funding increased by € 38.0 billion from € 976.8 billion at December 31, 2016 to € 1,014.8 billion at December 31, 2017. This is primarily driven by increased balances in Retail deposits by € 24.9 billion (8.5 %), Transaction Banking by € 16.5 billion (8.3 %), secured funding and shorts by € 11.8 billion (7.1 %) and other customers by € 3.5 billion (6.6 %). The total increase is slightly offset by reduction in unsecured wholesale funding by € 9.7 billion (17.6 %) and Capital Markets and Equity volume by € 8.9 billion (4.2 %).

The overall proportion of our most stable funding sources (comprising capital markets and equity, retail, and transaction banking) remained constant at 72 %.

Composition of External Funding Sources



[1] Other includes fiduciary, self-funding structures (e.g. X-markets), margin / Prime Brokerage cash balances (shown on a net basis)

Reference: Reconciliation to total balance sheet: Derivatives & settlement balances € 369.4 billion (€ 503.6 billion), add-back for netting effect for Margin & Prime Brokerage cash balances (shown on a net basis) € 59.2 billion (€ 67.9 billion), other non-funding liabilities € 31.3 billion (€ 42.2 billion) for December 31, 2017 and December 31, 2016 respectively; figures may not add up due to rounding.

Maturity of unsecured wholesale funding, ABCP and capital markets issuance[1]

Dec 31, 2017

in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	9,709	3,477	2,196	1,172	16,554	721	54	17,330
Deposits from other wholesale customers	3,451	5,884	4,112	3,974	17,421	483	525	18,429
CDs and CP	1,579	2,595	2,381	2,873	9,427	6	82	9,516
ABCP	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla	405	4,038	3,231	3,288	10,961	16,009	44,399	71,368
Senior unsecured structured notes	345	868	1,654	2,952	5,818	3,044	16,893	25,756
Covered bonds/ABS	90	194	1,711	737	2,731	2,190	17,248	22,169
Subordinated liabilities	50	234	5,265	700	6,250	135	11,694	18,079
Other	4	0	0	0	4	0	0	4
Total	15,632	17,289	20,550	15,695	69,167	22,588	90,895	182,650
thereof:								
Secured	90	194	1,711	737	2,731	2,190	17,248	22,169
Unsecured	15,542	17,096	18,840	14,959	66,436	20,398	73,647	160,481

[1] Includes additional Tier 1 notes reported as additional equity components in the financial statements. Liabilities with call features are shown at earliest legally exercisable call date. No assumption is made as to whether such calls would be exercised.

The total volume of unsecured wholesale liabilities, ABCP and capital markets issuance maturing within one year amount to € 69 billion as of December 31, 2017, and should be viewed in the context of our total Liquidity Reserves of € 280 billion.

								Dec 31, 2016
in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	15,626	5,294	6,961	1,588	29,469	40	659	30,168
Deposits from other wholesale customers	4,164	5,712	3,992	4,111	17,979	703	422	19,104
CDs and CP	1,117	1,379	1,973	1,060	5,529	4	1	5,534
ABCP	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla	626	4,111	4,735	11,825	21,296	8,085	49,993	79,374
Senior unsecured structured notes	430	696	858	1,715	3,698	3,578	20,217	27,494
Covered bonds/ABS	0	482	678	1,284	2,445	2,718	18,601	23,764
Subordinated liabilities	0	8	1,576	972	2,556	4,620	11,712	18,887
Other	0	0	0	0	0	0	0	0
Total	21,963	17,682	20,773	22,555	82,973	19,749	101,605	204,326
thereof:								
Secured	0	482	678	1,284	2,445	2,718	18,601	23,764
Unsecured	21,963	17,199	20,094	21,271	80,528	17,031	83,004	180,563

The following table shows the currency breakdown of our short-term unsecured wholesale funding, of our ABCP funding and of our capital markets issuance.

Unsecured wholesale funding, ABCP and capital markets issuance (currency breakdown)

					Dec 31,2017					Dec 31,2016
in € m.	in EUR	in USD	in GBP	in other CCYs	Total	in EUR	in USD	in GBP	in other CCYs	Total
Deposits from banks	2,310	11,096	2,423	1,502	17,330	3,554	22,122	3,649	843	30,168
Deposits from other whole-sale customers	14,109	3,743	233	344	18,429	15,396	2,964	541	203	19,104
CDs and CP	6,401	1,942	310	863	9,516	4,456	259	259	560	5,534
ABCP	0	0	0	0	0	0	0	0	0	0
Senior unsecured plain vanilla	36,407	27,482	864	6,616	71,368	39,510	33,504	8	6,352	79,374
Senior unsecured structured notes	9,937	12,301	31	3,487	25,756	11,037	12,697	133	3,626	27,494
Covered bonds/ ABS	22,142	25	0	2	22,169	23,745	16	0	2	23,764
Subordinated liabilities	7,940	8,960	801	378	18,079	8,540	9,196	799	353	18,887
Other	0	4	0	0	4	0	0	0	0	0
Total	**99,245**	**65,552**	**4,662**	**13,192**	**182,650**	106,239	80,758	5,390	11,940	204,326
thereof:										
Secured	22,142	25	0	2	22,169	23,745	16	0	2	23,764
Unsecured	77,103	65,527	4,662	13,190	160,481	82,494	80,742	5,390	11,938	180,563

Liquidity Reserves

Composition of our liquidity reserves by parent company (including branches) and subsidiaries

	Dec 31, 2017		Dec 31, 2016	
in € bn.	Carrying Value	Liquidity Value	Carrying Value	Liquidity Value
Available cash and cash equivalents (held primarily at central banks)	222	222	178	178
Parent (incl. foreign branches)	189	189	136	136
Subsidiaries	33	33	42	42
Highly liquid securities (includes government, government guaranteed and agency securities)	39	37	27	25
Parent (incl. foreign branches)	24	23	25	24
Subsidiaries	15	15	2	1
Other unencumbered central bank eligible securities	19	13	14	9
Parent (incl. foreign branches)	11	8	9	6
Subsidiaries	8	5	5	3
Total liquidity reserves	**280**	**272**	219	212
Parent (incl. foreign branches)	223	219	171	166
Subsidiaries	56	53	48	46

As of December 31, 2017, our liquidity reserves amounted to € 280 billion compared with € 219 billion as of December 31, 2016. The increase of € 61 billion comprised a € 44 billion increase in cash and cash equivalents, a € 12 billion increase in highly liquid securities and a € 5 billion increase in other unencumbered securities. The development was largely driven by a steady growth of stable funding sources, as well as an adaption of internal and regulatory liquidity models that resulted in an increase in the requirement for liquidity buffers. Our average liquidity reserves during the year were € 269.3 billion compared with € 212.4 billion during 2016. In the table above the carrying value represents the market value of our liquidity reserves while the liquidity value reflects our assumption of the value that could be obtained, primarily through secured funding, taking into account the experience observed in secured funding markets at times of stress.

The liquidity value (weighted) of our Liquidity Reserves of € 272 billion exceeds the liquidity value (weighted) of our High Quality Liquid Assets (HQLA) of € 247 billion. The major drivers of this difference are that Liquidity Reserves include central bank eligible, but otherwise less liquid securities (for example traded loans, other investment grade corporate bonds and ABS) which are not recognized in HQLA. Additionally, HQLA includes major index equities, but excludes cash balances deposited with central banks to satisfy minimum cash requirements as well as cash balances deposited with non EU Central Banks rated below AA- which are included in the LCR but not as part of the HQLA.

Liquidity Coverage Ratio

The final EBA guidelines on LCR disclosure released on March 8, 2017 (EBA/GL/2017/01) requires us to disclose the average of month-end observations over twelve months preceding the end of each quarter instead of the year-end LCR. Therefore, this year’s disclosed LCR for 2016 will differ slightly from the disclosed LCR in the previous year. For reference, we have additionally included the year-end LCR numbers below.

Our weighted average LCR of 144 % (twelve months average) has been calculated in accordance with the Commission Delegated Regulation (EU) 2015/61 and the EBA Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 CRR. Due to changes of the calculation method in October 2016, the December 2016 weighted average LCR of 121 % includes 3 data points (October – December 2016) whereas the December 2017 LCR includes 12 data points (January – December 2017).

The year-end LCR as of December 31, 2017 stands at 140 % compared to 128 % as of December 31, 2016

LCR components

	Dec 31, 2017	Dec 31, 2016
in € bn. (unless stated otherwise)	Total adjusted weighted value (average)	Total adjusted weighted value (average)
Number of data points used in the calculation of averages	**12**	3
Liquidity buffer	**247**	191
Total net cash outflows	**172**	158
Liquidity Coverage Ratio (LCR) in %	144 %	121 %

Funding Risk Management

Structural Funding

All funding matrices (the aggregate currency, the U.S. dollar and the GBP funding matrix) were in line with the respective risk appetite as of year ends 2017 and 2016.

Stress Testing and Scenario Analysis

During 2017, our stressed Net Liquidity Position remained well above the risk appetite and finished 2017 with a surplus of € 33 billion.

Global All Currency Daily Stress Testing Results

	Dec 31, 2017			Dec 31, 2016		
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]
Systemic market risk	121	284	163	64	204	141
Emerging markets	28	228	200	10	190	180
1 notch downgrade (DB specific)	79	252	173	43	195	152
Severe downgrade (DB specific)	287	331	43	178	224	46
Combined[4]	318	351	33	206	242	36

1 Funding gap caused by impaired rollover of liabilities and other projected outflows.
2 Based on liquidity generation through Liquidity Reserves and other countermeasures.
3 2017 scenario shows the minimum net liquidity position over the stress period, whereas 2016 shows the net liquidity position at the end of the stress period.
4 Combined impact of systemic market risk and severe downgrade.

Global EUR Daily Stress Testing Results[5]

	Dec 31, 2017			Dec 31, 2016		
in €	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]
Combined[4]	157	172	15	-	-	-

1 Funding gap caused by impaired rollover of liabilities and other projected outflows.
2 Based on liquidity generation through Liquidity Reserves and other countermeasures.
3 2017 scenario shows the minimum net liquidity position over the stress period.
4 Combined impact of systemic market risk and severe downgrade.
5 Standalone EUR Stress test has been implemented in 2017, therefore no comparison to 2016.

Global USD Daily Stress Testing Results

	Dec 31, 2017			Dec 31, 2016		
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]
Combined[4]	114	127	13	94	164	69

1 Funding gap caused by impaired rollover of liabilities and other projected outflows.
2 Based on liquidity generation through Liquidity Reserves and other countermeasures.
3 2017 scenario shows the minimum net liquidity position over the stress period, whereas 2016 shows the net liquidity position at the end of the stress period.
4 Combined impact of systemic market risk and severe downgrade.

Global GBP Daily Stress Testing Results

	Dec 31, 2017			Dec 31, 2016		
in € bn.	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]	Funding Gap[1]	Gap Closure[2]	Net Liquidity Position[3]
Combined[4]	14	18	4	10	20	10

1 Funding gap caused by impaired rollover of liabilities and other projected outflows.
2 Based on liquidity generation through Liquidity Reserves and other countermeasures.
3 2017 scenario shows the minimum net liquidity position over the stress period, whereas 2016 shows the net liquidity position at the end of the stress period.
4 Combined impact of systemic market risk and severe downgrade.

The following table presents the amount of additional collateral required in the event of a one- or two-notch downgrade by rating agencies for all currencies.

Additional Contractual Obligations

	Dec 31, 2017		Dec 31, 2016	
in € m.	One-notch downgrade	Two-notch downgrade	One-notch downgrade	Two-notch downgrade
Contractual derivatives funding or margin requirements	1,024	1,577	1,470	1,982
Other contractual funding or margin requirements	317	1,459	317	1,459

Asset Encumbrance

This section refers to asset encumbrance in the group of institutions consolidated for banking regulatory purposes pursuant to the German Banking Act. Thereunder not included are insurance companies or companies outside the finance sector. Assets pledged by our insurance subsidiaries are included in Note 22 “Assets Pledged and Received as Collateral” of the consolidated financial statements, and restricted assets held to satisfy obligations to insurance companies’ policy holders are included within Note 40 “Information on Subsidiaries” of the consolidated financial statements.

Encumbered assets primarily comprise those on- and off-balance sheet assets that are pledged as collateral against secured funding, collateral swaps, and other collateralized obligations. Additionally, in line with the EBA technical standards on regulatory asset encumbrance reporting, we consider as encumbered assets placed with settlement systems, including default funds and initial margins, as well as other assets pledged which cannot be freely withdrawn such as mandatory minimum reserves at central banks. We also include derivative margin receivable assets as encumbered under these EBA guidelines.

Readily available assets are those on- and off-balance sheet assets that are not otherwise encumbered, and which are in freely transferrable form. Unencumbered financial assets at fair value, other than securities borrowed or purchased under resale agreements and positive market value from derivatives, and available for sale investments are all assumed to be readily available.

The readily available value represents the current balance sheet carrying value rather than any form of stressed liquidity value (see the “Liquidity Reserves” for an analysis of unencumbered liquid assets available under a liquidity stress scenario). Other unencumbered on- and off-balance sheet assets are those assets that have not been pledged as collateral against secured funding or other collateralized obligations, or are otherwise not considered to be ready available. Included in this category are securities borrowed or purchased under resale agreements and positive market value from derivatives. Similarly, for loans and other advances to customers, these would only be viewed as readily available to the extent they are already in a pre-packaged transferrable format, and have not already been used to generate funding. This represents the most conservative view given that an element of such loans currently shown in Other assets could be packaged into a format that would be suitable for use to generate funding.

Encumbered and unencumbered assets

	Dec 31, 2017			
	Carrying value			
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Debt securities	148	65	84	0
Equity instruments	86	63	23	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	234	11	223	0
Securities borrowed or purchased under resale agreements[1]	27	0	0	27
Financial assets at fair value through profit and loss[2]				
Trading assets	11	0	11	0
Positive market value from derivative financial instruments	363	0	0	363
Securities borrowed or purchased under resale agreements[1]	78	0	0	78
Other financial assets at fair value through profit or loss	5	0	5	0
Financial assets available for sale[2]	3	0	3	0
Loans	417	70	15	332
Other assets	108	42	0	66
Total	1,480	251	363	866

[1] Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below.
[2] Excludes Debt securities and Equity instruments (separately disclosed above).

	Dec 31, 2017			
	Fair value of collateral received			
			Unencumbered assets	
in € bn. (unless stated otherwise)	Assets	Encumbered assets	Readily available	Other
Collateral received:	365	307	58	0
Debt securities	228	189	39	0
Equity instruments	137	118	18	0
Other collateral received	0	0	0	0

in € bn. (unless stated otherwise)	Dec 31, 2016[3] Carrying value Assets	Encumbered assets	Unencumbered assets Readily available	Other
Debt securities	151	77	74	0
Equity instruments	75	54	21	0
Other assets:				
Cash and due from banks & Interest earning deposits with Banks	191	12	179	0
Securities borrowed or purchased under resale agreements[1]	36	0	0	36
Financial assets at fair value through profit and loss[2]				
Trading assets	14	0	14	0
Positive market value from derivative financial instruments	488	0	0	488
Securities borrowed or purchased under resale agreements[1]	69	0	0	69
Other financial assets at fair value through profit or loss	7	0	7	0
Financial assets available for sale[2]	3	0	3	0
Loans	419	72	17	329
Other assets	139	55	0	84
Total	1,591	270	315	1,005

[1] Securities borrowed and securities purchased under resale agreements are all shown as other unencumbered. The use of the underlying collateral is separately captured in the off-balance sheet table below.
[2] Excludes Debt securities and Equity instruments (separately disclosed above).
[3] Prior period results have been restated due to a refined approach to determine assets pledged.

in € bn. (unless stated otherwise)	Dec 31, 2016[1] Fair value of collateral received Assets	Encumbered assets	Unencumbered assets Readily available	Other
Collateral received:	322	260	62	0
Debt securities	218	168	50	0
Equity instruments	104	92	12	0
Other collateral received	0	0	0	0

[1] Prior period results have been restated due to a refined approach to determine collateral received and collateral re-pledged.

The above tables set out a breakdown of on- and off-balance sheet items, broken down between encumbered, readily available and other. Any securities borrowed or purchased under resale agreements are shown based on the fair value of collateral received.

The above tables of encumbered assets include assets that are not encumbered at an individual entity level, but which may be subject to restrictions in terms of their transferability within the group. Such restrictions may be due to local connected lending requirements or similar regulatory restrictions. In this situation it is not feasible to identify individual balance sheet items that cannot be transferred.

Maturity Analysis of Assets and Financial Liabilities

Treasury manages the maturity analysis of assets and liabilities. Modeling of assets and liabilities is necessary in cases where the contractual maturity does not adequately reflect the liquidity risk position. The most significant example in this context would be immediately repayable deposits from retail and transaction banking customers which have consistently displayed high stability throughout even the most severe financial crises.

The modeling profiles are part of the overall liquidity risk management framework (see section “Liquidity Stress Testing and Scenario Analysis” for short-term liquidity positions ≤ 1 year and section “Structural Funding” for long-term liquidity positions > 1 year) which is defined and approved by the Management Board.

The following tables present a maturity analysis of our total assets based on carrying value and upon earliest legally exercisable maturity as of December 31, 2017 and 2016, respectively.

Analysis of the earliest contractual maturity of assets

Dec 31, 2017

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances	222,082	1,173	106	94	29	2,053	118	0	0	225,655
Interbank balances (w/o central banks)	4,737	2,613	305	215	116	696	122	0	463	9,265
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	29	4,625	1,220	1,277	1,448	617	561	89	105	9,971
With banks	21	3,758	585	735	1,400	443	468	0	0	7,409
With customers	8	867	635	542	48	175	94	89	105	2,562
Securities borrowed	15,786	553	49	0	323	0	22	0	0	16,732
With banks	1,889	283	0	0	0	0	0	0	0	2,172
With customers	13,896	270	49	0	323	0	22	0	0	14,560
Financial assets at fair value through profit or loss – trading	565,632	40,074	14,269	1,914	731	455	1,805	3,047	9,043	636,970
Trading assets	184,661	0	0	0	0	0	0	0	0	184,661
Fixed-income securities and loans	98,140	0	0	0	0	0	0	0	0	98,140
Equities and other variable-income securities	85,932	0	0	0	0	0	0	0	0	85,932
Other trading assets	590	0	0	0	0	0	0	0	0	590
Positive market values from derivative financial instruments	361,032	0	0	0	0	0	0	0	0	361,032
Financial assets designated at fair value through profit or loss	19,938	40,074	14,269	1,914	731	455	1,805	3,047	9,043	91,276
Securities purchased under resale agreements	5,364	36,195	12,160	1,115	662	125	1,066	903	253	57,843
Securities borrowed	14,540	3,786	1,928	0	0	0	0	0	0	20,254
Fixed-income securities and loans	34	93	182	799	68	17	720	2,144	8,216	12,273
Equities and other variable-income securities	0	0	0	0	0	132	20	0	573	725
Other financial assets designated at fair value through profit or loss	0	0	0	0	0	181	0	0	1	182
Positive market values from derivative financial instruments qualifying for hedge accounting	0	40	191	26	139	9	119	1,029	1,601	3,153
Financial assets available for sale	47	1,175	1,257	2,934	1,728	2,742	5,469	15,438	18,608	49,397
Fixed-income securities and loans	24	969	1,253	2,934	1,728	2,021	5,404	15,418	18,016	47,766
Equities and other variable-income securities	23	206	4	0	0	721	64	20	592	1,630
Loans	17,334	27,284	27,229	17,442	9,273	14,628	27,053	62,232	199,225	401,699
To banks	787	2,163	2,832	1,979	1,253	821	1,103	670	1,230	12,838
To customers	16,546	25,121	24,397	15,463	8,021	13,807	25,950	61,562	197,995	388,862
Retail	4,291	4,725	4,645	1,632	1,721	1,313	4,720	15,216	151,449	189,712
Corporates and other customers	12,256	20,395	19,752	13,831	6,300	12,493	21,230	46,346	46,546	199,149
Securities held to maturity	0	0	0	0	0	0	0	1,652	1,518	3,170
Other financial assets	85,083	352	179	135	92	143	21	433	74	86,513
Total financial assets	910,728	77,889	44,804	24,037	13,878	21,343	35,290	83,920	230,636	1,442,525
Other assets	20,451	0	0	0	0	0	0	0	11,756	32,207
Total assets	931,178	77,889	44,804	24,037	13,878	21,343	35,290	83,920	242,392	1,474,732

Analysis of the earliest contractual maturity of assets

Dec 31, 2016

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Cash and central bank balances	177,648	539	131	121	334	2,591	0	0	0	181,364
Interbank balances (w/o central banks)	5,841	3,578	596	83	65	834	115	26	469	11,606
Central bank funds sold	0	0	0	0	0	0	0	0	0	0
Securities purchased under resale agreements	631	4,204	5,852	3,170	1,368	532	449	15	67	16,287
With banks	604	2,534	5,026	2,077	1,217	461	0	0	0	11,918
With customers	27	1,670	826	1,093	152	71	449	15	67	4,370
Securities borrowed	19,548	532	0	0	0	0	0	0	0	20,081
With banks	2,459	52	0	0	0	0	0	0	0	2,511
With customers	17,089	480	0	0	0	0	0	0	0	17,570
Financial assets at fair value through profit or loss – trading	677,696	33,314	9,577	1,752	776	1,983	2,995	2,803	12,884	743,781
Trading assets	171,044	0	0	0	0	0	0	0	0	171,044
Fixed-income securities and loans	94,486	0	0	0	0	0	0	0	0	94,486
Equities and other variable-income securities	75,633	0	0	0	0	0	0	0	0	75,633
Other trading assets	924	0	0	0	0	0	0	0	0	924
Positive market values from derivative financial instruments	485,150	0	0	0	0	0	0	0	0	485,150
Financial assets designated at fair value through profit or loss	21,502	33,314	9,577	1,752	776	1,983	2,995	2,803	12,884	87,587
Securities purchased under resale agreements	7,154	28,691	6,810	914	110	1,256	995	608	866	47,404
Securities borrowed	14,227	4,561	2,348	0	0	0	0	0	0	21,136
Fixed-income securities and loans	120	62	419	838	666	232	1,992	2,195	11,399	17,923
Equities and other variable-income securities	0	0	0	0	0	146	0	0	590	736
Other financial assets designated at fair value through profit or loss	1	0	0	0	0	350	7	0	29	387
Positive market values from derivative financial instruments qualifying for hedge accounting	0	61	201	39	52	30	257	1,030	1,846	3,516
Financial assets available for sale	471	1,154	2,344	1,031	1,915	2,298	9,210	18,778	19,028	56,228
Fixed-income securities and loans	251	1,008	2,341	1,031	1,915	1,334	9,210	18,733	18,452	54,275
Equities and other variable-income securities	219	146	3	0	0	964	0	45	575	1,953
Loans	18,364	23,666	26,185	29,223	9,128	9,107	28,787	66,383	198,067	408,909
To banks	937	1,978	3,043	2,425	650	641	1,529	1,298	775	13,276
To customers	17,427	21,688	23,142	26,798	8,477	8,467	27,258	65,085	197,292	395,633
Retail	6,446	3,872	5,436	2,397	1,630	2,055	5,634	17,450	157,616	202,536
Corporates and other customers	10,980	17,816	17,706	24,401	6,847	6,412	21,624	47,635	39,676	193,097
Securities held to maturity	0	0	0	0	0	0	0	1,515	1,691	3,206
Other financial assets	104,400	475	1,052	221	240	135	58	671	2,878	110,131
Total financial assets	1,004,599	67,523	45,937	35,640	13,878	17,510	41,870	91,221	236,931	1,555,109
Other assets	23,492	0	0	0	0	0	0	0	11,944	35,437
Total assets	1,028,091	67,523	45,937	35,640	13,878	17,510	41,870	91,221	248,875	1,590,546

The following tables present a maturity analysis of our total liabilities based on carrying value and upon earliest legally exercisable maturity as of December 31, 2017 and 2016, respectively.

Analysis of the earliest contractual maturity of liabilities

										Dec 31, 2017
in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	359,619	34,022	111,695	23,800	12,196	9,416	9,133	9,175	11,757	580,812
Due to banks	58,070	5,618	10,520	4,464	1,081	1,345	2,744	5,277	8,921	98,041
Due to customers	301,549	28,404	101,174	19,336	11,115	8,071	6,389	3,898	2,836	482,771
Retail	120,110	10,308	73,883	3,014	2,011	1,264	948	859	271	212,669
Corporates and other customers	181,439	18,095	27,291	16,323	9,103	6,806	5,441	3,038	2,565	270,102
Trading liabilities	414,189	0	0	0	0	0	0	0	0	414,189
Trading securities	71,148	0	0	0	0	0	0	0	0	71,148
Other trading liabilities	314	0	0	0	0	0	0	0	0	314
Negative market values from derivative financial instruments	342,726	0	0	0	0	0	0	0	0	342,726
Financial liabilities designed at fair value through profit or loss (without loan commitments and financial guarantees)	16,018	29,236	6,080	1,574	548	5,520	665	1,091	3,134	63,866
Securities sold under repurchase agreements	14,722	28,857	4,167	1,089	5	4,897	62	24	18	53,840
Long-term debt	256	33	582	323	345	427	603	889	2,980	6,439
Other financial liabilities designated at fair value through profit or loss	1,040	346	1,332	161	199	196	1	178	136	3,587
Investment contract liabilities	0	0	0	0	0	574	0	0	0	574
Negative market values from derivative financial instruments qualifying for hedge accounting	0	11	58	230	65	41	423	249	218	1,294
Central bank funds purchased	174	83	0	0	0	0	0	0	0	257
Securities sold under repurchase agreements	14,143	353	1,497	409	94	837	476	16	23	17,849
Due to banks	11,459	266	1,453	327	43	736	476	11	0	14,772
Due to customers	2,684	87	44	82	52	102	0	5	23	3,077
Securities loaned	6,684	3	1	0	0	0	0	0	1	6,688
Due to banks	2,253	3	0	0	0	0	0	0	1	2,256
Due to customers	4,432	0	1	0	0	0	0	0	0	4,433
Other short term borrowings	11,831	848	1,542	1,227	738	2,226	0	0	0	18,411
Long-term debt	0	886	5,029	16,419	9,931	14,137	21,218	49,923	42,172	159,715
Debt securities - senior	0	626	4,266	3,481	5,873	3,334	19,392	45,546	26,978	109,496
Debt securities - subordinated	0	0	189	267	67	11	48	1,096	5,554	7,232
Other long-term debt - senior	0	210	529	12,496	3,886	10,722	1,685	3,230	9,362	42,120
Other long-term debt - subordinated	0	50	45	176	105	70	93	50	278	868
Trust Preferred Securities	0	0	1,644	2,723	274	183	666	0	0	5,491
Other financial liabilities	112,960	1,254	2,228	180	197	177	204	163	4	117,367
Total financial liabilities	935,618	66,696	129,775	46,562	24,044	33,110	32,785	60,616	57,308	1,386,513
Other liabilities	20,112	0	0	0	0	0	0	0	0	20,112
Total equity	0	0	0	0	0	0	0	0	68,099	68,099
Total liabilities and equity	955,730	66,696	129,775	46,562	24,044	33,110	32,785	60,616	125,407	1,474,724
Off-balance sheet commitments given	6,290	8,484	10,418	16,261	8,234	15,928	27,732	84,121	28,996	206,464
Banks	238	406	1,398	1,591	557	733	952	346	216	6,437
Retail	352	253	389	247	108	205	223	445	8,483	10,706
Corporates and other customers	5,700	7,825	8,630	14,423	7,569	14,990	26,557	83,330	20,297	189,320

Analysis of the earliest contractual maturity of liabilities

Dec 31, 2016

in € m.	On demand (incl. Overnight and one day notice)	Up to one month	Over 1 month to no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
Deposits	329,776	36,590	110,606	17,562	15,756	12,595	8,532	8,041	10,746	550,204
Due to banks	64,438	9,602	13,129	2,279	6,175	4,220	1,885	5,372	8,993	116,094
Due to customers	265,337	26,988	97,477	15,283	9,581	8,375	6,647	2,669	1,752	434,110
Retail	109,943	10,761	75,517	3,191	1,744	902	785	911	279	204,033
Corporates and other customers	155,395	16,227	21,960	12,093	7,837	7,472	5,862	1,758	1,473	230,077
Trading liabilities	520,887	0	0	0	0	0	0	0	0	520,887
Trading securities	56,592	0	0	0	0	0	0	0	0	56,592
Other trading liabilities	437	0	0	0	0	0	0	0	0	437
Negative market values from derivative financial instruments	463,858	0	0	0	0	0	0	0	0	463,858
Financial liabilities designed at fair value through profit or loss (without loan commitments and financial guarantees)	1,992	38,633	8,123	2,212	744	3,745	1,031	1,004	2,969	60,452
Securities sold under repurchase agreements	1,587	36,128	7,584	1,791	2	2,739	566	0	0	50,397
Long-term debt	201	73	329	384	640	859	398	949	2,640	6,473
Other financial liabilities designated at fair value through profit or loss	203	2,432	210	37	102	147	68	55	329	3,582
Investment contract liabilities	0	0	0	0	0	592	0	0	0	592
Negative market values from derivative financial instruments qualifying for hedge accounting	0	249	324	194	312	231	943	1,484	856	4,593
Central bank funds purchased	353	0	0	0	0	0	0	0	0	353
Securities sold under repurchase agreements	19,957	1,510	844	1,191	0	1,178	434	271	0	25,387
Due to banks	14,934	1,510	844	1,191	0	1,178	292	271	0	20,222
Due to customers	5,023	0	0	0	0	0	142	0	0	5,165
Securities loaned	3,587	10	1	0	0	0	0	0	0	3,598
Due to banks	1,488	4	0	0	0	0	0	0	0	1,492
Due to customers	2,099	6	1	0	0	0	0	0	0	2,106
Other short term borrowings	13,216	921	1,073	265	1,292	529	0	0	0	17,295
Long-term debt	0	1,037	5,275	8,143	10,113	4,190	43,315	56,444	43,799	172,316
Debt securities - senior	0	989	5,085	7,476	9,772	3,534	13,284	51,704	30,162	122,006
Debt securities - subordinated	0	0	0	0	0	231	140	1,124	5,293	6,788
Other long-term debt - senior	0	43	190	582	284	384	29,507	3,496	8,063	42,549
Other long-term debt - subordinated	0	5	0	85	56	42	384	120	281	974
Trust Preferred Securities	0	0	0	730	1,054	413	4,176	0	0	6,373
Other financial liabilities	128,398	976	1,665	221	201	161	295	112	3,246	135,274
Total financial liabilities	1,018,165	79,926	127,911	30,518	29,473	23,635	58,726	67,356	61,616	1,497,325
Other liabilities	28,362	0	0	0	0	0	0	0	0	28,362
Total equity	0	0	0	0	0	0	0	0	64,819	64,819
Total liabilities and equity	1,046,527	79,926	127,911	30,518	29,473	23,635	58,726	67,356	126,435	1,590,506
Off-balance sheet commitments given	6,061	9,569	8,896	13,765	8,708	14,794	30,609	98,024	27,978	218,404
Banks	305	688	1,501	1,671	602	587	1,185	958	192	7,688
Retail	253	124	95	226	283	387	757	538	8,875	11,540
Corporates and other customers	5,503	8,757	7,300	11,868	7,823	13,820	28,667	96,528	18,911	199,176

Compensation Report

Introduction

The 2017 Compensation Report provides detailed compensation information with regard to the overall Deutsche Bank Group.

The Compensation Report comprises the following three sections:

Management Board Compensation Report

The first section of the Report sets out the structure and design of the compensation system for the members of the Management Board of Deutsche Bank AG. It presents the compensation system for the 2017 financial year, for which the variable compensation structure was amended compared to the compensation system for the 2016 financial year and which was approved by the General Meeting in May 2017. In addition, the report contains information on the compensation and other benefits granted by the Supervisory Board to the members of the Management Board of Deutsche Bank AG.

Employee Compensation Report

The second section of the Compensation Report discloses information with regard to the compensation system and structure that applies to the employees in Deutsche Bank Group (except for Deutsche Postbank AG, which publishes a separate Compensation Report). The report provides details on the new Compensation Framework that was introduced in 2016 and it outlines the decisions on Variable Compensation for 2016. Furthermore, this part contains quantitative disclosures specific to employees identified as Material Risk Takers (MRTs) in accordance with the German Remuneration Ordinance for Institutions (Institutsvergütungsverordnung, “InstVV”).

Supervisory Board Report and Disclosure

The third section provides information on the structure and level of compensation for Supervisory Board members of Deutsche Bank AG.

The report complies with the requirements of Section 314 (1) No. 6 of the German Commercial Code (Handelsgesetzbuch, “HGB”), the German Accounting Standard No. 17 (“DRS 17”) “Reporting on Executive Body Remuneration”, CRR, InstVV, and the recommendations of the German Corporate Governance Code.

Letter of the Chairman of the Supervisory Board

Dear Shareholders,

In the following report on the remuneration of the members of the Management Board you will find comprehensive information on the compensation system and the compensation for the members of the Management Board – possibly in even greater detail than some of you might wish to study. Let me therefore summarize in brief the main points:

At last year's General Meeting, you, our shareholders, resolved with a majority of 97 % a compensation system for the Group Management Board which forms the basis for our compensation decisions. Pursuant to this compensation system, each of the Management Board members, alongside a fixed salary and a contribution to the company pension plan, is entitled to a variable compensation which is subject to annually defined objectives and their achievement. The largest part (60 %) of the variable compensation is long-term and Group-oriented, the remaining part (a maximum of 40 %) takes into account short-term Group targets and individual or divisional objectives. In the year under review, the achievement level for the Long-Term-Award was 38 % and for the short-term Group targets 45 %. For details please refer to the following pages.

However, the Management Board and the Supervisory Board are well aware that the result of the 2017 financial year is not satisfactory with a net loss. To underline this, the members of the Management Board have declared to the Supervisory Board that they are waiving the determination and granting of variable compensation for the 2017 financial year. The Supervisory Board respects this decision and for this reason refrained from determining any variable remuneration for the 2017 financial year for the members of the Management Board. Thus, the Management Board receives no variable compensation for the third consecutive year. On behalf of the Supervisory Board, I would like to pay tribute to the readiness of the Management Board to waive the contractual compensation components in the interest of our bank.

Despite the waiver, the subsequent report is intended to illustrate the objectives on which the individual assessments of the Supervisory Board are based with regard to the Group targets and thus meet the expectations of our investors regarding the transparency of the remuneration system.

The Supervisory Board welcomes constructive feedback and criticism on this important topic and looks forward to the discussions with you at the General Meeting.

Yours sincerely,

Dr. Paul Achleitner

Management Board Compensation Report

Management Board Compensation Governance

Compensation Control Committee	Supervisory Board	Annual General Meeting
Prepares the resolutions about the compensation system and the compensation level and presents these to the Supervisory Board.	Takes decisions about the compensation system and the compensation level. The concluded compensation system is presented to the Annual General Meeting.	Takes decision about the approval of the compensation system.

The Supervisory Board, as a plenary body, is responsible for the structuring of the compensation system for the members of the Management Board as well as for determining their individual compensation. The Supervisory Board is supported by the Compensation Control Committee. The Compensation Control Committee controls and supports the appropriate structuring of the compensation system and prepares the resolutions of the Supervisory Board regarding the individual compensation of the Management Board members. In addition, the Compensation Control Committee and/or the Supervisory Board will consult independent external consultants where this is considered necessary.

The Compensation Control Committee currently comprises four members. In accordance with regulatory requirements, at least one must have sufficient expertise and professional experience in the area of risk management and risk controlling and at least one other must be an employee representative.

The Supervisory Board regularly reviews the compensation system for the members of the Management Board. In the case of a change or restructuring of the compensation framework, the Supervisory Board also uses the possibility provided in § 120 (4) of the German Stock Corporation Act (Aktiengesetz – AktG) for the General Meeting to approve the system of compensation for Management Board members.

The Supervisory Board resolved new compensation structures for the 2017 financial year which it presented to the General Meeting for approval in May 2017. The General Meeting granted its approval with a large majority of 97 %.

Principles of the Management Board Compensation and the Compensation System

Numerous factors are to be considered when structuring the compensation system and determining individual compensation. These factors can be summarized as specific remuneration principles. The following overview shows the core remuneration principles which have an impact on both the compensation system and the individual remuneration and must therefore be taken into consideration by the Supervisory Board when passing a resolution on questions of remuneration.

When passing a resolution on the structure and determination of compensation, the Supervisory Board considers in particular:

Governance	The structuring of the compensation system and determination of individual remuneration takes place within the framework of the statutory and regulatory requirements. The Supervisory Board's objective is to offer, within the regulatory requirements, a compensation package that continues to be in line with customary market practices and is therefore competitive.
Group Strategy	Through the structure of the compensation system the members of the Management Board are to be motivated to achieve the objectives set out in the Bank's strategies, to work continuously towards the positive development of the Group and to avoid unreasonably high risks.
Collective and Individual Performance of the Management Board Members	The variable, performance-related compensation is determined on the basis of the level of achievement of previously agreed objectives. For this purpose, collective and Deutsche Bank Group-related objectives applying equally to all Management Board members are set. In addition, the Supervisory Board sets individual objectives for each member of the Management Board separately, which particularly take into account the development of the business, infrastructure or regional areas of responsibility as the case may be. Such objectives may be financial or non-financial.
Regulatory or other compensation caps	Pursuant to the regulatory approaches under CRD 4, the ratio of fixed to variable compensation is generally limited to 1:1 (cap regulation), i.e. the amount of variable compensation must not exceed that of fixed compensation. However, lawmakers have also stipulated that shareholders can resolve to relax the requirement by setting the ratio of fixed to variable compensation to 1:2. In May 2014, the General Meeting approved the aforementioned setting to 1:2 with a large majority of 91 %. The compensation system resolved by the Supervisory Board also provides fixed caps for the individual variable compensation components. In addition, the Supervisory Board is entitled to set an additional cap for the total compensation of the individual members of the Management Board. In the 2017 financial year, the additional cap is € 9.85 million.
Sustainability Aspects	The total variable compensation for Management Board members is currently only to be granted on a deferred basis. Since 2017, a portion of at least 75 % of the deferred variable compensation is to be granted in the form of equity-based compensation components, which only vest no less than five years after the grant in one tranche (cliff vesting) and are subject to an additional retention period of one year. The remaining portion is to be granted as non-equity based compensation component and to vest in identical tranches over a period of four years. During the deferral and retention period, deferred compensation is subject to specific forfeiture provisions.
Interests of the Shareholders	When designing the specific structure of the compensation system, determining individual compensation amounts, and structuring its delivery and allocation, the focus is on ensuring a close link between the interests of both the Management Board members and shareholders. While defining the variable compensation, this is achieved through the utilization of clearly defined key financial figures which are directly linked to the performance of Deutsche Bank.

The compensation system and the compensation structures it encompasses are reflected in the individual Management Board members' contracts.

Compensation Structure since January 2017

– Transparent Compensation Structures
– Clear link between compensation and previously agreed objectives
– Strong emphasis on the interests of the shareholders

Structure and compensation elements of the compensation system

Fixed compensation

Base salary
+
Contribution to the company pension plan

Variable compensation

Short-Term Award
- Group component
- Individual component

+
Long-Term Award

The compensation system applicable since January 2017 consists of non-performance-related (fixed) and performance-related (variable) components.

Non-Performance-Related Components (Fixed Compensation)

The fixed compensation is not linked to performance and consists of the base salary, contributions to the company pension plan and “other benefits”.

The annual base salary amounts to € 3.4 million for the Chairman of the Management Board. The Deputy Chairmen receive an annual base salary of € 3 million. The annual base salary for the ordinary board members with responsibility for CIB is € 3 million and for all other ordinary board members € 2.4 million.

In addition, the Supervisory Board decided in 2017 to introduce an optional functional allowance. It may be paid to Management Board members who are assigned additional tasks and a particular responsibility extending beyond the assigned regular area of responsibility within the Management Board. The allowance can be a maximum of 100 % of the fixed base salary and is paid for as long as the additional tasks and the particular responsibility are assigned to the Management Board member.

Various factors were considered when determining the appropriate level of the base salary. First, the base salary rewards general assumption of the office of Management Board member and the related overall responsibility of the individual Management Board members. In addition, the compensation paid in the comparable market is taken into account when determining the amount of the base salary. However, a market comparison must take into consideration that the regulatory requirements pursuant to the German Remuneration Ordinance for Institutions (Institutsvergütungsverordnung – InstVV) in connection with Section 25a (5) of the German Banking Act (Kreditwesengesetz) set a cap for variable compensation at 200 % of the fixed compensation. Accordingly, the fixed compensation must be determined in a way that ensures competitive compensation in line with market practice while taking into account the aforementioned requirements. The regulatory cap was implemented in 2014.

The InstVV provides for the possibility to define contributions to the company pension plan as fixed compensation and thus to include these in the basis for calculating the ratio between fixed and variable compensation components. The annual contribution to the company pension plan amounts to € 650,000 for the Chairman of the Management Board, € 1,000,000 for the ordinary board members with responsibility for AM and CIB and € 650,000 for all other ordinary board members.

Additional non-performance-related components include "other benefits". The "other benefits" comprise the monetary value of non-cash benefits such as company cars and driver services, insurance premiums, expenses for company-related social functions and security measures including payments, if applicable, of taxes on these benefits as well as taxable reimbursements of expenses.

Performance-Related Components (Variable Compensation)

For 2016, the compensation system set forth three components (the Annual Performance Award (APA), the Long-Term Performance Award (LTPA) and the Division Performance Award (DPA)) that together made up the variable compensation. The APA rewarded the achievement of the Bank's short and medium-term business policy and corporate objectives. Not only was financial success taken into account in the process, but also the conduct towards staff members and clients as part of carrying out business activities. The level of the LTPA was determined on the basis of the relative performance of the Deutsche Bank share in comparison to selected peer institutions on the basis of a three-year assessment and also considered non-financial parameters (so-called Culture & Clients factor). The Division Performance Award sought to reflect the specific characteristics of only the front offices.

For 2017, the compensation system was adjusted in order to substantially simplify the structures of the variable compensation and link compensation to transparent performance criteria. However, the structure still allows for the agreement of individual and divisional objectives alongside collective objectives and makes it possible to achieve competitive pay levels in line with market practice on the basis of the respective member's area of responsibility and, at the same time, also meets in this respect the regulatory requirements.

The entire variable compensation is performance-related. As of the 2017 financial year, variable compensation will consist of a short-term component and a long term component:

– the Short-Term Award and
– the Long-Term Award.

Short-Term Award (STA)

The STA is linked to the achievement of short-term and medium-term objectives. Objectives include collective objectives to be achieved by the Management Board as a whole and individual objectives whose achievement level is determined separately for each member of the Management Board.

In order to clearly distinguish collective objectives from individual objectives, the STA is divided into two components:

– the Group Component and
– the Individual Component.

Group Component

The objectives to be achieved form the basis for the calculation of the Group component as part of the STA. The key objective of the Group component is to link the variable compensation for the Management Board to the overall performance of the Bank.

In 2016, the Management Board decided to align part of the variable compensation for non-tariff employees of the Bank more closely with Group performance. This seeks to reward the contribution of all employees to the financial results of the Bank and the achievements in the implementation of its strategy. Management Board compensation is also closely linked to the performance of the Bank using selected key financial figures. The Supervisory Board decided to align the compensation system for the Management Board members more closely with the compensation system for employees. This is achieved by using the performance metrics underlying the Group component in the compensation system for employees as the reference value for the Group component of the STA since 2017.

In accordance with the strategy, four performance metrics constituting important indicators for the capital, risk, cost and return profile of the Bank form the reference value for the Group Component of the STA:

Common Equity Tier 1 (CET1) capital ratio (fully loaded)	The Common Equity Tier 1 Ratio of the Bank in relation to risk-weighted assets.
Leverage Ratio	The Bank´s Tier 1 capital as a percentage of its total leverage exposure pursuant in line with CRR/CRD 4.
Adjusted costs	Total noninterest expenses, excluding restructuring and severance, litigation and impairment of goodwill and other intangibles.
Post-tax return on tangible equity (RoTE)	Net income (or loss) attributable to Deutsche Bank shareholders as a percentage of average tangible shareholders' equity. The latter is the shareholders' equity on the bank´s balance sheet, excluding goodwill and other intangible assets.

The Supervisory Board regularly reviews the selection of the performance metrics. The above four objectives are equally weighted at up to 25 % in the determination of the Group Component of the STA, depending on the achievement level. If, overall, the performance metric-based objectives are not achieved during the period being evaluated, the Supervisory Board may determine that a Group component will not be granted.

Individual Component

The individual component of the STA rewards the achievement of short- and medium-term individual and front office-related objectives. These objectives are established by the Supervisory Board as part of the objective-setting agreement for the respective financial year's performance evaluation. The key objectives are designed to contribute to the applicable business policy and strategic objectives of the Bank, in line with each Management Board member's area of responsibility. Not only is financial success taken into account in the process, but also the conduct towards staff members and clients as part of carrying out business activities. Objectives for the individual component may for example include revenue developments in the course of the year, project-related targets, diversity objectives or other developments in employee or client satisfaction.

As part of the annual objective setting agreement, corresponding key financial figures and/or factors are set for all objectives that will be used to determine the objective achievement level. A maximum of three objectives per financial year is set for each Management Board member. The sum of individually agreed and divisional objectives amounts to a maximum of 90 % of the individual component of the STA, depending on the achievement level of the aforementioned objectives. The Supervisory Board decides on the remaining portion of 10 % of the individual component to reward outstanding contributions over the course of the financial year as an exercise of its discretionary authority. If, overall, the objectives are not achieved during the period being evaluated, the Supervisory Board may determine that an individual component will not be granted.

Minimum, Target and Maximum Values

The sum of Group-wide and individually agreed objectives amounts to a maximum of 40 % of the total variable compensation, depending on the achievement level of the aforementioned objectives. This is designed to ensure that the individual objectives do not primarily determine the value of the variable compensation. If, overall, the objectives are not achieved during the period being evaluated, the Supervisory Board may determine that an STA will not be granted.

			2017
in €	Minimum	Target	Maximum
Chairman			
Group component	0	500,000	1,000,000
Individual component	0	1,400,000	2,800,000
STA total[1]	0	1,900,000	3,800,000
Ordinary Board member			
Group component	0	500,000	1,000,000
Individual component (from - up to)	0	800,000	1,600,000
	0	up to 1,400,000	up to 2,800,000
STA total (from - up to)	**0**	1,300,000	2,600,000
	0	up to 1,900,000	up to 3,800,000

[1] STA: Short-Term Award.

Long-Term Award (LTA)

The Supervisory Board decided to clearly focus on the achievement of long-term objectives when determining the variable compensation. Therefore, the target figure of the LTA constitutes a portion of no less than 60 % of the total variable target compensation. As with the short-term component, the Supervisory Board determines the collective and/or individual long-term objectives for the Management Board members. The achievement level is determined on the basis of the definition of clear performance metrics and/or factors which are to be agreed for these objectives at the beginning of a financial year.

60 % of the variable compensation, as a minimum, relate to the long-term component

The Supervisory Board determines a total of three objectives for each Management Board member. Each objective is equally weighted at 1/3 in the assessment of the LTA. For 2017, the Supervisory Board determined the following three common objectives for all Management Board members.

The **relative performance of the Deutsche Bank** share in comparison to selected peer institutions is an objective within the framework of the LTA. This objective is intended to promote the sustainable performance of the Deutsche Bank share. The long-term nature of this objective is supported by the determination of the Relative Total Shareholder Return (RTSR) on the basis of a three-year assessment. The RTSR of Deutsche Bank is derived from the Total Shareholder Return of Deutsche Bank in relation to the average total shareholder returns of a selected peer group (calculated in Euro). This LTA portion is calculated from the average of the annual RTSR for the last three financial years (compensation year and the two preceding years). If the three-year average of the relative total shareholder return of Deutsche Bank is greater than 100 %, then the value of the RTSR portion increases proportionately to an upper limit of 150 % of the target figure, i.e., the value increases by 1 % for each percentage point above 100 %. If the three-year average of the relative total shareholder return is lower than 100 %, the value declines disproportionately. If the relative total shareholder return is calculated to be in the range of less than 100 % to 80 %, the value of the Award portion is reduced for each lower percentage point by 2 percentage points. In the range between 80 % and 60 %, the value of the Award portion is reduced for each lower percentage point by 3 percentage points. If the three-year average of the RTSR does not exceed 60 %, the value of the Award portion is set to zero.

The peer group used for the calculation of the relative total shareholder return is selected based on the criteria of generally comparable business activities, comparable size and international presence. The Supervisory Board reviews the composition of the peer group regularly.

In 2017, the peer group for the RTSR comprises the following banks:

Peer Group of Deutsche Bank

BNP Paribas	Société Générale	Barclays	Credit Suisse	UBS
Bank of America	Citigroup	JP Morgan Chase	HSBC	

The second objective is linked to the growth and strengthening of the Bank. Within the notion of **organic capital growth** on a net basis, the Supervisory Board sets an objective designed to promote this growth. In order to determine the level of capital growth, the factor "Organic Capital Growth" is calculated. Organic Capital Growth is defined as the balance of the following changes (which are also reported in the Consolidated Statement of Changes in Equity) occurring during the financial year, divided by the Deutsche Bank Shareholders Equity attributable as at December 31 of the previous financial year.

- Total comprehensive income, net of tax
- Coupons on additional equity components, net of tax
- Remeasurement gains (losses) related to defined benefit plans, net of tax
- Option premiums and other effects from options on common shares
- Net gains (losses) on treasury shares sold

Consequently, "non-organic" changes in equity, in particular payment of a dividend or capital increase, are of no relevance to the achievement of the objective.

As before, the third objective is taken from the category "**Culture & Clients**". In this context, the Supervisory sets an objective which is linked to corporate culture, client satisfaction and dealing with clients. This objective is linked to the sustainable development of the intrabank environment or designed to foster the development of the relationships to clients. As for the 2017 financial year, one objective set by the Supervisory Board for all Management Board members is again the evaluation of the control environment within the Deutsche Bank Group.

The Long Term Award can be a maximum of 150 % of the respective target figures.

Objectives

Objectives are established by the Supervisory Board as part of an objective setting agreement at the beginning of the respective financial year for purposes of performance evaluation. For all objectives, financial figures and/or factors are set from which the achievement level of the objectives is transparently derived. The leeway for the discretionary decision is strictly limited to 3 to 6 % with respect to the total variable compensation.

The allocation of the objectives to the individual compensation components is set out below.

	Relevant indicators	Relative weight
Short-Term Award (STA)	**Group component [1]**	
	CET1 ratio	25 %
	Leverage ratio	25 %
	Adjusted non-interest expenses	25 %
	Post-tax return on tangible equity (RoTE)	25 %
	Individual component (exemplary) [2]	
	Revenue Growth y-o-y versus plan	30 %
	Project-related objectives (realisation, management)	30 %
	Employee Commitment Indes (% y-o-y) / Diversity objectives	30 %
	Adjustment based on informed judgement	10 %
Long-Term Award (LTA) [3]	Relative total shareholder return	33,34 %
	Organic Capital Growth	33,33 %
	Control Environment	33,33 %

(1) Joint strategic key objectives which also form base for the assessment of the group component as part of the compensation system for the employees of DB Group.
(2) Short-term individual and divisional objectives of quantitative and qualitative nature.
(3) Long-term group-wide objections.

Maximum Compensation

Total Compensation/Target and Maximum Values

in €	2017					2016
	Base salary	STA[1]		LTA[2]	Total compensation	Total compensation
		Group component	Individual component			
Chairman						
Target	3,400,000	500,000	1,400,000	3,400,000	8,700,000	9,100,000
Maximum	3,400,000	1,000,000	2,800,000	5,100,000	12,300,000	12,500,000
Ordinary Board member (CIB)						
Target	3,000,000	500,000	1,400,000	2,800,000	7,700,000	8,500,000
Maximum	3,000,000	1,000,000	2,800,000	4,200,000	11,000,000	13,200,000
Ordinary Board member (PCB)						
Target	2,400,000	500,000	1,100,000	2,800,000	6,800,000	5,800,000
Maximum	2,400,000	1,000,000	2,200,000	4,200,000	9,800,000	8,300,000
Ordinary Board member (Deutsche AM)						
Target	2,400,000	500,000	1,300,000	2,800,000	7,000,000	7,000,000
Maximum	2,400,000	1,000,000	2,600,000	4,200,000	10,200,000	10,500,000
Ordinary Board member (Infrastructure/Region)						
Target	2,400,000	500,000	800,000	2,800,000	6,500,000	5,800,000
Maximum	2,400,000	1,000,000	1,600,000	4,200,000	9,200,000	8,000,000

[1] STA: Short-Term Award.
[2] LTA: Long-Term Award.

The total compensation of a Management Board member is subject to additional caps. Due to regulatory requirements, the variable compensation is capped at 200 % of the fixed compensation. In addition, the Supervisory Board again set a cap of € 9.85 million for the overall total compensation for the 2017 financial year. Consequently, compensation is capped at a maximum of € 9.85 million, even where the level of the target achievement would result in higher compensation. The functional allowance which may be granted for a fixed period does not count towards the cap.

Long-Term Incentive and Sustainability

According to the requirements of the InstVV at least 60 % of the total variable compensation must be granted on a deferred basis. Not less than half of this deferred portion may comprise equity-based compensation components, while the remaining portion must be granted as deferred cash compensation. Both compensation components must be deferred over a multi-year period which, for the equity-based compensation components, must be followed by a retention period. During the period until payment or delivery, the compensation portions awarded on a deferred basis may be forfeited. At least half of the maximum of 40 % of the Variable Compensation granted on a non-deferred basis must consist of equity-based compensation components and only the remaining portion may be paid out directly in cash. Of the total Variable Compensation, no more than a maximum of 20 % may be paid out in cash immediately, while at least 80 % are paid or delivered at a later date.

Since 2014, the total variable compensation for Management Board members is only granted on a deferred basis. The compensation system applicable up to and including 2016 provided that the short-term components (APA and DPA) were in principle granted in the form of non-equity-based compensation components (“Restricted Incentive Awards”). However, the long term component (LTPA) was exclusively granted in the form of equity-based compensation components (“Restricted Equity Award“).

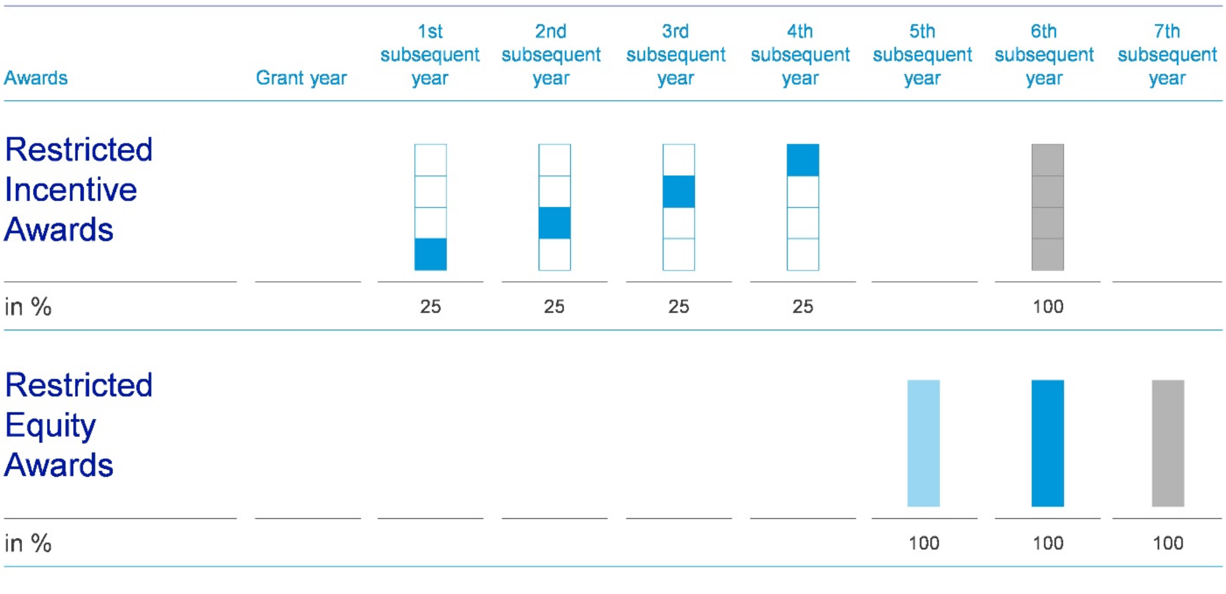
At least 75 % of the variable compensation is granted equity-based

In order to bind the Management Board members even closer to the performance of the Bank and the Deutsche Bank share price, the Supervisory Board decided that as of the 2017 financial year, the long-term component (LTA), and in fact no less than 75 % of the total variable compensation, will continue to be granted only in the form of Restricted Equity Awards. Only the short-term component (STA), however, a maximum of 25 % of the total variable compensation, is granted in the form of Restricted Incentive Awards.

The Restricted Incentive Awards vest over a period of four years. The Restricted Equity Awards vest after five years in one tranche (“cliff vesting”) and have an additional retention period of one year. Accordingly, Management Board members are first permitted to dispose of the equities after six years. During the deferral and retention period, the value of the Restricted Equity Awards is linked to the Bank’s share price and is therefore tied to the sustained performance of the Bank. Specific forfeiture provisions apply for Restricted Incentive Awards and Restricted Equity Awards during the deferral and retention period.

The following chart shows the time period for the payment or the delivery of the variable compensation components in the five consecutive years following the grant year as well as the period of a possible clawback.

Timeframe for payment or delivery and non-forfeiture for the Management Board



- Vesting and/or non fortfeiture, aligned with payment or delivery.
- Vesting followed by a retention period until delivery; subject to individual fortfeiture conditions during the retention period.
- End of possibility to demand the return ('Clawback') of already paid/delivered compensation components.

Forfeiture Conditions / Clawback

Because some of the compensation components are deferred or spread out over several years (Restricted Incentive Awards and Restricted Equity Awards) certain forfeiture conditions are applicable until vesting or the end of the retention periods, in order to create a long-term incentive. Awards may be fully or partially forfeited, for example, due to individual misconduct (including a breach of regulations) or termination for cause, and also due to a negative Group result or individual negative contributions to results. In addition, the Restricted Equity Award will be forfeited completely if the statutory or regulatory minimum requirements for the core capital ratio are not met during this period.

The revision of the InstVV adopted in August 2017 provides inter alia that so-called “clawback provisions” are to be agreed with the members of the management body (Geschäftsleiter) of significant institutions. Contrary to the forfeiture conditions, this clause allows the Supervisory Board to reclaim already paid out or delivered compensation components in response to specific individual negative contributions to results made by the Management Board member. The Supervisory Board had already agreed on such a clause with the Management Board members on the basis of the InstVV draft, which is also in line with the insofar unmodified final version of the InstVV. Thereby, the Supervisory Board successfully fulfilled the obligation set forth in the InstVV to bring the service contracts concluded with the Management Board members in line with the new provisions of the InstVV. The clawback provision is applicable as of the 2018 performance year.

Limitations in the Event of Exceptional Developments

In the event of exceptional developments, the total compensation for each Management Board member is limited to a maximum amount. In addition, the Supervisory Board and the members of the Management Board agreed on a possible limitation of the variable compensation which is included in the service agreements of the Management Board members and according to which the variable compensation may be limited to amounts below the provided maximum amounts or may not be granted altogether. Furthermore, statutory regulations provide that the Supervisory Board may reduce the compensation of the Management Board members to an appropriate level, if the situation of the company deteriorates in such a way following the determination of the compensation that the continuous granting of the compensation would be unreasonable for the company. A payment of variable compensation elements will also not take place if the payment of Variable Compensation components is prohibited or restricted by the competent regulator in accordance with existing statutory requirements.

Shareholding Guidelines

– Long-term commitment of Management Board members to the Bank
– Identification with Deutsche Bank and its shareholders
– Link to performance of the Bank through deferred compensation

All members of the Management Board are required to hold a specified value of Deutsche Bank shares. This requirement fosters the identification of the Management Board members with Deutsche Bank and its shareholders and aims to ensure a sustainable link to the performance of the Bank.

For the Chairman, the number of shares to be held amounts to two times the annual base salary for the Chairman, i.e., the equivalent of € 6,800,000, and for other Management Board members one time the annual base salary for other Management Board members, i.e., the equivalent of € 2,400,000 or € 3,000,000 respectively.

With effect from the 2017 financial year, the former waiting period by which these requirements were to be fulfilled has been replaced by a provision which is linked to the amount of the equity-based variable compensation granted. The share retention obligations must first be fulfilled on the date on which the Management Board member was granted an overall equity based variable compensation corresponding to 1 ⅓ times the retention obligations since his or her appointment to the Management Board. Deferred equity-based compensation may be taken into account at 75 % of its value towards fulfillment of the obligation.

Observance of the requirement is reviewed semi-annually as of June 30 and December 31. If the required number of shares is not met, the Management Board members must correct any deficiencies by the next review. In 2017, all Management Board members fulfilled the retention obligations for shares or are still within the waiting period.

As compensation components are deferred or spread out over several years, another link to the performance of the Deutsche Bank share is established that should generally continue to exist even for the period after leaving the Management Board.

Pension benefits

The Supervisory Board allocates an entitlement to pension plan benefits to the Management Board members. These entitlements involve a defined contribution pension plan. Under this pension plan, a personal pension account has been set up for each participating member of the Management Board after appointment to the Management Board. A contribution is made annually into this pension account.

Management Board members receive a contribution in the form of a contractually agreed fixed annual amount in Euro. The contribution accrues interest credited in advance, determined by means of an age-related factor, at an average rate of 4 % per year up to the age of 60. From the age of 61 onwards, the contribution made is credited with an annual interest payment of 4 % up to the date of retirement.

The annual contributions, taken together, form the pension amount available to pay the future pension benefit in case of a pension event (age limit, disability or death). The pension right is vested from the start.

The following table shows the annual contributions, the interest credits, the account balances and the annual service costs for the years 2017 and 2016 as well as the corresponding defined benefit obligations for each member of the Management Board in office in 2017 as of December 31, 2017 and December 31, 2016. The different balances are attributable to the different lengths of service on the Management Board, the respective age-related factors, and the different contribution rates, as well as the individual pensionable compensation amounts and the previously mentioned additional individual entitlements.

Members of the Management Board	Annual contribution, in the year		Interest credit, in the year		Account balance, end of year		Service cost (IFRS), in the year		Present value of the defined benefit obligation (IFRS), end of year	
in €	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
John Cryan	728,000	754,000	0	0	1,875,250	1,147,250	748,829	821,114	1,916,940	1,221,303
Kimberly Hammonds[1]	936,000	250,001	0	0	1,186,001	250,001	842,110	270,466	1,091,041	275,563
Stuart Lewis	871,000	556,000	0	0	3,213,938	2,342,938	807,465	546,402	3,377,866	2,555,844
Sylvie Matherat	786,500	500,000	0	0	1,373,168	586,668	774,917	517,352	1,354,995	613,025
James von Moltke[2]	503,750	-	0	-	503,750	-	451,453	-	463,619	-
Nicolas Moreau[3]	1,340,000	347,500	0	0	1,687,500	347,500	1,232,878	442,672	1,591,229	450,380
Garth Ritchie	1,500,000	1,550,000	0	0	3,050,000	1,550,000	1,306,915	1,443,171	2,704,127	1,475,820
Karl von Rohr	871,000	556,000	0	0	1,523,001	652,001	807,465	546,402	1,434,564	647,482
Dr. Marcus Schenck	1,105,500	556,000	0	0	2,189,501	1,084,001	1,018,267	546,402	2,051,090	1,041,150
Christian Sewing	1,046,500	1,085,500	0	0	2,824,000	1,777,500	899,307	984,198	2,450,830	1,592,460
Werner Steinmüller[4]	650,000	166,667	6,667	0	823,334	166,667	701,617	164,232	907,793	169,445
Frank Strauß[5]	348,834	-	0	-	348,834	-	313,391	-	321,839	-
Jeffrey Urwin[6]	500,000	2,000,000	20,000	0	0[7]	2,000,000	557,370	2,036,367	0	2,090,722

1 Member since August 1, 2016.
2 Member since July 1, 2017.
3 Member since October 1, 2016.
4 Member since August 1, 2016.
5 Member since September 1, 2017.
6 Member until March 31, 2017.
7 The pension entitlement was not vested at the time of the termination of the Management Board membership and was paid in form of a cash compensation in the amount of € 2,520,000.

Other Benefits upon Early Termination

The Management Board members are in principle entitled to receive a severance payment upon early termination of their appointment at the Bank's initiative, provided the Bank is not entitled to revoke the appointment or give notice under the contractual agreement for cause. The circumstances of the early termination of the appointment and the length of service on the Management Board are to be taken into account when determining the amount of the severance payment. The severance payment, as a rule, is two annual compensation amounts and is limited to the claims to compensation for the remaining term of the contract. The calculation of the severance payment is based on the annual compensation for the previous financial year and on the expected annual compensation for the current financial year, if applicable. The severance payment is determined in accordance with the statutory and regulatory requirements, in particular with the provisions of the InstVV.

If a Management Board member leaves office in connection with a change of control, he/she is also, under certain conditions, entitled in principle to a severance payment. The exact amount of the severance payment is determined by the Supervisory Board within its sole discretion. According to the German Corporate Governance Codex, the severance payment will not exceed three annual compensation amounts and is limited to the claims to compensation for the remaining term of the contract. The calculation of the compensation is again based on the annual compensation for the previous financial year.

Jeffrey Urwin left the Management Board with effect from the end of March 31, 2017. Then Management Board service contract was terminated by mutual agreement. There were no further entitlements resulting from the termination agreement.

Expense for Long-Term Incentive Components

The following table presents the compensation expense recognized in the respective years for long-term incentive components of compensation granted for service on the Management Board.

Members of the Management Board	Amount expensed for			
	Share-based compensation components		Cash-based compensation components	
in €	2017	2016	2017	2016
James von Moltke[1]	0	0	671,148	0
Stuart Lewis	955,633	(136,084)[2]	230,974	466,922

[1] Member since July 1, 2017.
[2] Share-based compensation of Management Board members is generally valued based on the share price at each respective reporting date and leads to a negative result in this instance.

Management Board compensation for the 2017 financial year

Base Salary

In the 2017 financial year, the annual base salary was € 3,400,000 for the Chairman of the Management Board and € 2,400,000 or € 3,000,000 respectively for the other Management Board members. In 2017, Management Board member Stuart Lewis received a functional allowance in the amount of € 300,000; the Supervisory Board conferred on him the additional responsibility of further improving the relationship with U.S. regulators. Garth Ritchie received a functional allowance in the amount of € 250,000; Mr. Ritchie was entrusted with an additional responsibility in connection with the implications of Brexit.

Variable Compensation

Having taken into consideration the stated loss of the Bank for the 2017 financial year, the Management Board – as they already had done for the 2016 financial year – unanimously took the decision to irrevocably waive any entitlement to the determination and grant of variable compensation to the members of the Management Board for the 2017 financial year. The Management Board declared its waiver to the Supervisory Board. Therefore, the Supervisory Board refrained from determining and granting any variable compensation for the Management Board members for the 2017 financial year.

Level of Objective Achievement

The Supervisory Board has taken account of the shareholder criticism expressed at last year's General Meeting with respect to the transparency of the compensation decisions and decided to make available a review of the level of objective achievement. Given the aforementioned waiver by the Management Board, the Supervisory Board refrained from the determination and grant of variable compensation resulting from the objective achievement.

In the financial year 2017, the development of the four performance metrics for the **Group Component of the STA** was as follows: With respect to the Common Equity Tier 1 (CET1) capital ratio, significant progress was made in achieving the target level in accordance with the strategy plan. The 2017 target level was even exceeded. With respect to the leverage ratio, progress was made in achieving the target level in accordance with the strategy plan, even though the interim target level was not fully reached (please refer to section "Leverage Ratio" in the Risk Report for further detail). The desired 2017 interim target level for the adjusted noninterest expenses was reached. The 2017 post-tax-return target was not met.

In sum, the Supervisory Board determined an achievement level of 45 % for the Group Component.

45 % was the objective achievement level of the STA Group component

The **individual component of the STA** is linked to the achievement of short-term and medium-term individual and divisional objectives determined for the Management Board members in 2017.

John Cryan

In 2017, individual objectives for Mr. Cryan included achieving a defined Group performance (Plan-IBIT). Further objectives included the management of the processes for the implementation of the strategy and enhancing cooperation with regulators as well as dealing with regulatory findings and requirements. In addition, diversity targets and specific scores with respect to employee engagement were agreed.

Kimberly Hammonds

Objectives for Ms. Hammonds included the unhampered provision of significant regulatory programs to support business activities and securing availability of the Bank's key IT applications. Further objectives alongside complying with a defined cost budget for 2017 were the remedy of and compliance with supervisory findings and meeting diversity targets and specific scores with respect to employee engagement.

Stuart Lewis

In 2017, objectives for Mr. Lewis included the implementation of defined cost reductions. Another objective was the implementation of important regulatory programs with a risk focus. Finally, Mr. Lewis pursued the objective of immediately remediating supervisory findings and meeting diversity targets and specific scores with respect to employee engagement.

Sylvie Matherat

Completing the establishment of the Compliance and Anti-Financial Crime divisions was one of the objectives agreed with Ms. Matherat. Another objective was to support the divisions in implementing MiFID 2 requirements alongside the immediate remediation of supervisory findings, enhancing internal cooperation and meeting diversity targets and specific scores with respect to employee engagement were further objectives.

James von Moltke

Objectives for Mr. von Moltke included roll out of bank-wide performance management initiatives aimed at establishing an improved culture of accountability and greater transparency and alignment.

Nicolas Moreau

Objectives for Mr. Moreau included generating net inflows in Asset Management. Another objective was to establish Asset Management as an operatively independent unit and to prepare the IPO. Dealing with supervisory findings and meeting diversity targets and specific scores with respect to employee engagement were further objectives.

Garth Ritchie

Objectives for Mr. Ritchie included in particular CIB-related revenue and IBIT-targets. The immediate remediation of supervisory findings as well as meeting diversity targets and specific scores with respect to employee engagement were further objectives.

Karl von Rohr

One of the objectives for Mr. von Rohr was to reduce the number of pending legal disputes. Another objective was related to improving staff planning. The immediate remediation of supervisory findings was equally an objective as was meeting diversity targets and specific scores with respect to employee engagement.

Dr Marcus Schenck

In his role as CFO (up to and including June 2017), individual objectives for Dr Schenck were the successful completion of the capital increase and Finance-related cost targets. As of July 2017, one of the objectives for Dr Schenck as a co-responsible Management Board member for CIB was to meet CIB-related revenue and IBIT targets. In both of his areas of responsibility, his objectives included the remediation of supervisory findings and meeting diversity targets and specific scores with respect to employee engagement.

Christian Sewing

Objectives for Mr. Sewing included a division-related IBIT target for the 2017 financial year. Another objective related to activities to further integrate Postbank. The immediate remediation of supervisory findings was equally an objective as was meeting diversity targets and specific scores with respect to employee engagement.

Werner Steinmüller

For the financial year 2017, a revenue target and a management objective relating to Asia Pacific were individually agreed with Mr. Steinmüller. The remediation of supervisory findings and meeting diversity targets and specific scores with respect to employee engagement were further objectives.

Frank Strauß

The individual objectives agreed with Mr. Strauß for the period as of September 1, 2017 related to managing Deutsche Postbank AG for which he continues to act as CEO. Another objective was to integrate Postbank into Deutsche Bank Group.

Due to the waiver, the level of achievement of the individual performance of the members of the Management Board was not assessed by the Supervisory Board.

Although the RTSR underlying the **LTA** improved year-on-year in 2017, the average performance in the relevant three-year-period (2015 to 2017) was 82.1 % and lay thus below the performance of the peer group. Organic Capital Growth as defined developed negatively in 2017. The strengthening of the control environment was evaluated based on feedback from internal audit and supervisory authorities.

The Supervisory Board determined an overall achievement level of 38 % for the LTA.

38 % was the LTA objective achievement level

Total Compensation

The members of the Management Board collectively received in/for the 2017 financial year compensation (without fringe benefits and pension service costs) totaling € 29,200,000 (2016: € 25,883,333). This amount was for fixed compensation only. € 0 (2016: € 0) was received for performance-related components with long-term incentives.

The Supervisory Board determined the aforementioned compensation on an individual basis for 2017 and 2016 as follows:

in €	2017 Base salary	2017 STA[1] Group component	2017 STA[1] Individual component	2017 LTA[2]	2017 Total compensation	2017 Functional allowance	2016 Total compensation
John Cryan	3,400,000	0	0	0	3,400,000	0	3,800,000
Kimberly Hammonds[3]	2,400,000	0	0	0	2,400,000	0	1,000,000
Stuart Lewis	2,400,000	0	0	0	2,400,000	300,000	2,400,000
Sylvie Matherat	2,400,000	0	0	0	2,400,000	0	2,400,000
James von Moltke[4]	1,200,000	0	0	0	1,200,000	0	–
Nicolas Moreau[5]	2,400,000	0	0	0	2,400,000	0	600,000
Garth Ritchie	3,000,000	0	0	0	3,000,000	250,000	2,400,000
Karl von Rohr	2,400,000	0	0	0	2,400,000	0	2,400,000
Dr. Marcus Schenck	2,900,000	0	0	0	2,900,000	0	2,400,000
Christian Sewing	2,900,000	0	0	0	2,900,000	0	2,400,000
Werner Steinmüller[6]	2,400,000	0	0	0	2,400,000	0	1,000,000
Frank Strauß[7]	800,000	0	0	0	800,000	0	–
Jeffrey Urwin[8]	600,000	0	0	0	600,000	0	2,400,000
Jürgen Fitschen[9]	–	–	–	–	–	–	1,583,333
Quintin Price[10]	–	–	–	–	–	–	1,100,000
Total	**29,200,000**	**0**	**0**	**0**	**29,200,000**	**550,000**	25,883,333

[1] STA: Short-Term Award.
[2] LTA: Long-Term Award.
[3] Member since August 1, 2016.
[4] Member since July 1, 2017.
[5] Member since October 1, 2016.
[6] Member since August 1, 2016.
[7] Member since September 1, 2017.
[8] Member until March 31, 2017.
[9] Member until May 19, 2016 / contract termination on May 31, 2016.
[10] Member from January 1 until June 15, 2016.

The table above does not include any compensation elements granted to a member of the Management Board as a replacement for components of compensation that have been forfeited at the previous employer. These are shown in the chapters on share awards and the tables in accordance with the German Corporate Governance Code and DRS 17.

Share awards

The Management Board members declared to the Supervisory Board that they waive the determination and grant of any variable compensation for the 2017 financial year. Therefore, no share awards were to grant with respect to the determination of variable compensation. The same applied for the 2016 financial year.

Management Board members do not receive any compensation for mandates on boards of Deutsche Bank subsidiaries.

Due to his taking up office as Management Board member, James von Moltke forfeited deferred compensation components granted to him by his former employer. Furthermore, he did not receive any pro-rated variable compensation from his previous employer for his employment in 2017, due to him joining Deutsche Bank during the year. The forfeited compensation components and those not granted were substituted at the same value by granting a cash payment, by granting 194,142 Deutsche Bank share awards based on the 2017 DB Equity Plan (Equity Upfront Awards and Restricted Equity Awards) and by deferred cash compensation (Restricted Incentive Awards). The Equity Upfront Awards are subject to a retention period until February 28, 2019; the Restricted Equity Awards will vest between September 1, 2017 and March 1, 2023 and are subsequently subject to a retention period of six and twelve months respectively. Until their allocation, the awards are subject to specific forfeiture provisions.

Management Board Share Ownership

As of February 16, 2018 and February 17, 2017, respectively, the current members of the Management Board held Deutsche Bank shares as presented below:

Members of the Management Board		Number of shares
John Cryan	2018	13,740
	2017	9,160
Kimberly Hammonds[1]	2018	34,200
	2017	22,800
Stuart Lewis	2018	88,292
	2017	51,347
Sylvie Matherat	2018	0
	2017	0
James von Moltke[2]	2018	0
Nicolas Moreau[3]	2018	0
	2017	0
Garth Ritchie	2018	43,227
	2017	28,778
Karl von Rohr	2018	5,601
	2017	3,737
Dr. Marcus Schenck	2018	78,168
	2017	26,445
Christian Sewing	2018	54,356
	2017	36,249
Werner Steinmüller[4]	2018	119,688
	2017	79,792
Frank Strauß[5]	2018	7,172
Total	**2018**	**444,444**
	2017	258,308

[1] Member since August 1, 2016.
[2] Member since July 1, 2017.
[3] Member since October 1, 2016.
[4] Member since August 1, 2016.
[5] Member since September 1, 2017.

The current members of the Management Board held an aggregate of 444,444 Deutsche Bank shares on February 16, 2018, amounting to approximately 0.02 % of Deutsche Bank shares issued on that date.

The following table shows the number of share awards held by the Management Board members as of February 17, 2017 and February 16, 2018 as well as the number of share awards newly granted, delivered or forfeited in this period.

Members of the Management Board	Balance as of Feb 17, 2017	Granted	Delivered	Forfeited	Balance as of Feb 16, 2018
John Cryan	0	0	0	0	0
Kimberly Hammonds[1]	88,072	14,760	0	0	102,832
Stuart Lewis	166,539	21,889	19,748	8,182	160,498
Sylvie Matherat	10,758	1,423	0	0	12,181
James von Moltke[2]	–	194,142	0	0	194,142
Nicolas Moreau[3]	0	0	0	0	0
Garth Ritchie	549,651	69,085	0	0	618,736
Karl von Rohr	43,456	5,749	0	0	49,206
Dr. Marcus Schenck	216,979	22,241	48,868	0	190,353
Christian Sewing	85,508	11,313	0	0	96,821
Werner Steinmüller[4]	191,879	28,941	0	0	220,821
Frank Strauß[5]	30,732	23,523	7,272	0	46,983

[1] Member since August 1, 2016.
[2] Member since July 1, 2017.
[3] Member since October 1, 2016.
[4] Member since August 1, 2016.
[5] Member since September 1, 2017.

Compensation in accordance with the German Corporate Governance Code (GCGC)

The compensation for the members of the Management Board in accordance with the requirements of section 4.2.5 paragraph 3 of the GCGC is provided below. This comprises the benefits granted for the year under review including the fringe benefits, and including the maximum and minimum achievable compensation for variable compensation components. In addition, the disbursals of fixed compensation and variable compensation (broken down by Restricted Incentive Awards and Restricted Equity Awards) in/for the year under review, broken down into the relevant reference years are reported.

The following table provides the compensation granted for the 2017 and 2016 financial years according to GCGC:

	John Cryan					
	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	3,400,000	3,400,000	3,400,000	3,400,000	3,800,000	3,800,000
Fringe benefits	220,982	220,982	220,982	220,982	41,795	41,795
Total	3,620,982	3,620,982	3,620,982	3,620,982	3,841,795	3,841,795
Variable compensation	0	5,300,000	0	8,900,000	0	5,300,000
thereof:						
Restricted Incentive Awards	0	1,900,000	0	3,800,000	0	1,500,000
Restricted Equity Awards	0	3,400,000	0	5,100,000	0	3,800,000
Total	0	5,300,000	0	8,900,000	0	5,300,000
Pension service costs	748,829	748,829	748,829	748,829	821,114	821,114
Total compensation (GCGC)	4,369,811	9,669,811	4,369,811	13,269,811	4,662,909	9,962,909
Total compensation[1]	3,400,000	8,700,000	3,400,000	12,300,000	3,800,000	9,100,000

[1] Without fringe benefits and pension service costs.

	Kimberly Hammonds[1]					
	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	1,000,000	1,000,000
Fringe benefits	260,489	260,489	260,489	260,489	6,035	6,035
Total	2,660,489	2,660,489	2,660,489	2,660,489	1,006,035	1,006,035
Variable compensation	0	4,100,000	0	6,800,000	0	1,416,667
thereof:						
Restricted Incentive Awards	0	1,300,000	0	2,600,000	0	416,667
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	1,000,000
Total	0	4,100,000	0	6,800,000	0	1,416,667
Pension service costs	842,110	842,110	842,110	842,110	270,466	270,466
Total compensation (GCGC)	3,502,599	7,602,599	3,502,599	10,302,599	1,276,501	2,693,168
Total compensation[2]	2,400,000	6,500,000	2,400,000	9,200,000	1,000,000	2,416,667

[1] Member since August 1, 2016.
[2] Without fringe benefits and pension service costs.

	Stuart Lewis					
	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Functional allowance	300,000	300,000	300,000	300,000	0	0
Fringe benefits	206,628	206,628	206,628	206,628	77,938	77,938
Total	2,906,628	2,906,628	2,906,628	2,906,628	2,477,938	2,477,938
Variable compensation	0	4,100,000	0	6,800,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,300,000	0	2,600,000	0	1,000,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	2,400,000
Total	0	4,100,000	0	6,800,000	0	3,400,000
Pension service costs	807,465	807,465	807,465	807,465	546,402	546,402
Total compensation (GCGC)	3,714,093	7,814,093	3,714,093	10,514,093	3,024,340	6,424,340
Total compensation[1]	2,400,000	6,500,000	2,400,000	9,200,000	2,400,000	5,800,000

[1] Without functional allowance, fringe benefits and pension service costs.

Sylvie Matherat

	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Fringe benefits	16,338	16,338	16,338	16,338	12,905	12,905
Total	**2,416,338**	**2,416,338**	**2,416,338**	**2,416,338**	2,412,905	2,412,905
Variable compensation	0	4,100,000	0	6,800,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,300,000	0	2,600,000	0	1,000,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	2,400,000
Total	**0**	**4,100,000**	**0**	**6,800,000**	0	3,400,000
Pension service costs	774,917	774,917	774,917	774,917	517,352	517,352
Total compensation (GCGC)	**3,191,255**	**7,291,255**	**3,191,255**	**9,991,255**	2,930,257	6,330,257
Total compensation[1]	**2,400,000**	**6,500,000**	**2,400,000**	**9,200,000**	2,400,000	5,800,000

[1] Without fringe benefits and pension service costs.

James von Moltke[1]

	2017				2016	
in €	Determined[2]	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	1,200,000	1,200,000	1,200,000	1,200,000	-	-
Fringe benefits	473,299	473,299	473,299	473,299	-	-
Total	**1,673,299**	**1,673,299**	**1,673,299**	**1,673,299**	-	-
Variable compensation	4,858,442	2,050,000	0	3,400,000	-	-
thereof:						
Cash	355,404	0	0	0	-	-
Restricted Incentive Awards	1,600,227	650,000	0	1,300,000	-	-
Equity Upfront Awards	355,404	0	0	0	-	-
Restricted Equity Awards	2,547,407	1,400,000	0	2,100,000	-	-
Total	**4,858,442**	**2,050,000**	**0**	**3,400,000**	-	-
Pension service costs	451,453	451,453	451,453	451,453	-	-
Total compensation (GCGC)	**6,983,194**	**4,174,752**	**2,124,752**	**5,524,752**	-	-
Total compensation[3]	**6,058,442**	**3,250,000**	**1,200,000**	**4,600,000**	-	-

[1] Member since July 1, 2017.
[2] The benefits granted to Mr. von Moltke as a substitute for forfeited awards and not granted variable compensation from his previous employer are displayed under “Variable Compensation”.
[3] Without fringe benefits and pension service costs.

Nicolas Moreau[1]

	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	600,000	600,000
Fringe benefits	59,383	59,383	59,383	59,383	5,239	5,239
Total	**2,459,383**	**2,459,383**	**2,459,383**	**2,459,383**	605,239	605,239
Variable compensation	0	4,600,000	0	7,800,000	0	1,150,000
thereof:						
Restricted Incentive Awards	0	1,800,000	0	3,600,000	0	600,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	550,000
Total	**0**	**4,600,000**	**0**	**7,800,000**	0	1,150,000
Pension service costs	1,232,878	1,232,878	1,232,878	1,232,878	442,672	442,672
Total compensation (GCGC)	**3,692,261**	**8,292,261**	**3,692,261**	**11,492,261**	1,047,911	2,197,911
Total compensation[2]	**2,400,000**	**7,000,000**	**2,400,000**	**10,200,000**	600,000	1,750,000

[1] Member since October 1, 2016.
[2] Without fringe benefits and pension service costs.

Garth Ritchie

	2017				2016	
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	3,000,000	3,000,000	3,000,000	3,000,000	2,400,000	2,400,000
Functional allowance	250,000	250,000	250,000	250,000	0	0
Fringe benefits	269,457	269,457	269,457	269,457	110,241	110,241
Total	**3,519,457**	**3,519,457**	**3,519,457**	**3,519,457**	2,510,241	2,510,241
Variable compensation	0	4,700,000	0	8,000,000	0	4,600,000
thereof:						
Restricted Incentive Awards	0	1,900,000	0	3,800,000	0	2,400,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	2,200,000
Total	**0**	**4,700,000**	**0**	**8,000,000**	0	4,600,000
Pension service costs	1,306,915	1,306,915	1,306,915	1,306,915	1,443,171	1,443,171
Total compensation (GCGC)	**4,826,372**	**9,526,372**	**4,826,372**	**12,826,372**	3,953,412	8,553,412
Total compensation[1]	**3,000,000**	**7,700,000**	**3,000,000**	**11,000,000**	2,400,000	7,000,000

[1] Without functional allowance, fringe benefits and pension service costs.

						Karl von Rohr
				2017		2016
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Fringe benefits	23,642	23,642	23,642	23,642	47,730	47,730
Total	**2,423,642**	**2,423,642**	**2,423,642**	**2,423,642**	2,447,730	2,447,730
Variable compensation	0	4,100,000	0	6,800,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,300,000	0	2,600,000	0	1,000,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	2,400,000
Total	**0**	**4,100,000**	**0**	**6,800,000**	0	3,400,000
Pension service costs	807,465	807,465	807,465	807,465	546,402	546,402
Total compensation (GCGC)	**3,231,107**	**7,331,107**	**3,231,107**	**10,031,107**	2,994,132	6,394,132
Total compensation[1]	**2,400,000**	**6,500,000**	**2,400,000**	**9,200,000**	2,400,000	5,800,000

[1] Without fringe benefits and pension service costs.

						Dr. Marcus Schenck
				2017		2016
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,900,000	2,900,000	2,900,000	2,900,000	2,400,000	2,400,000
Fringe benefits	16,148	16,148	16,148	16,148	23,720	23,720
Total	**2,916,148**	**2,916,148**	**2,916,148**	**2,916,148**	2,423,720	2,423,720
Variable compensation	0	4,400,000	0	7,400,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,600,000	0	3,200,000	0	1,000,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	2,400,000
Total	**0**	**4,400,000**	**0**	**7,400,000**	0	3,400,000
Pension service costs	1,018,267	1,018,267	1,018,267	1,018,267	546,402	546,402
Total compensation (GCGC)	**3,934,415**	**8,334,415**	**3,934,415**	**11,334,415**	2,970,122	6,370,122
Total compensation[1]	**2,900,000**	**7,300,000**	**2,900,000**	**10,300,000**	2,400,000	5,800,000

[1] Without fringe benefits and pension service costs.

						Christian Sewing
				2017		2016
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,900,000	2,900,000	2,900,000	2,900,000	2,400,000	2,400,000
Fringe benefits	80,307	80,307	80,307	80,307	204,758	204,758
Total	**2,980,307**	**2,980,307**	**2,980,307**	**2,980,307**	2,604,758	2,604,758
Variable compensation	0	4,400,000	0	7,400,000	0	3,400,000
thereof:						
Restricted Incentive Awards	0	1,600,000	0	3,200,000	0	1,600,000
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	1,800,000
Total	**0**	**4,400,000**	**0**	**7,400,000**	0	3,400,000
Pension service costs	899,307	899,307	899,307	899,307	984,198	984,198
Total compensation (GCGC)	**3,879,614**	**8,279,614**	**3,879,614**	**11,279,614**	3,588,956	6,988,956
Total compensation[1]	**2,900,000**	**7,300,000**	**2,900,000**	**10,300,000**	2,400,000	5,800,000

[1] Without fringe benefits and pension service costs.

						Werner Steinmüller[1]
				2017		2016
in €	Determined	Target	Min	Max	Determined	Target
Fixed compensation (base salary)	2,400,000	2,400,000	2,400,000	2,400,000	1,000,000	1,000,000
Fringe benefits	399,424	399,424	399,424	399,424	165,001	165,001
Total	**2,799,424**	**2,799,424**	**2,799,424**	**2,799,424**	1,165,001	1,165,001
Variable compensation	0	4,100,000	0	6,800,000	0	1,416,667
thereof:						
Restricted Incentive Awards	0	1,300,000	0	2,600,000	0	416,667
Restricted Equity Awards	0	2,800,000	0	4,200,000	0	1,000,000
Total	**0**	**4,100,000**	**0**	**6,800,000**	0	1,416,667
Pension service costs	701,617	701,617	701,617	701,617	164,232	164,232
Total compensation (GCGC)	**3,501,041**	**7,601,041**	**3,501,041**	**10,301,041**	1,329,233	2,745,900
Total compensation[2]	**2,400,000**	**6,500,000**	**2,400,000**	**9,200,000**	1,000,000	2,416,667

[1] Member since August 1, 2016.
[2] Without fringe benefits and pension service costs.

Frank Strauß[1]

in €	2017 Determined	2017 Target	2017 Min	2017 Max	2016 Determined	2016 Target
Fixed compensation (base salary)	800,000	800,000	800,000	800,000	-	-
Fringe benefits	26,893	26,893	26,893	26,893	-	-
Total	**826,893**	**826,893**	**826,893**	**826,893**	-	-
Variable compensation	0	1,466,667	0	2,466,667	-	-
thereof:						
Restricted Incentive Awards	0	533,333	0	1,066,667	-	-
Restricted Equity Awards	0	933,333	0	1,400,000	-	-
Total	**0**	**1,466,667**	**0**	**2,466,667**	-	-
Pension service costs	313,391	313,391	313,391	313,391	-	-
Total compensation (GCGC)	**1,140,284**	**2,606,951**	**1,140,284**	**3,606,951**	-	-
Total compensation[2]	**800,000**	**2,266,667**	**800,000**	**3,266,667**	-	-

[1] Member since September 1, 2017.
[2] Without fringe benefits and pension service costs.

Jeffrey Urwin[1]

in €	2017 Determined	2017 Target	2017 Min	2017 Max	2016 Determined	2016 Target
Fixed compensation (base salary)	600,000	600,000	600,000	600,000	2,400,000	2,400,000
Fringe benefits	530	530	530	530	59,763	59,763
Total	**600,530**	**600,530**	**600,530**	**600,530**	2,459,763	2,459,763
Variable compensation	0	0	0	0	0	6,100,000
thereof:						
Restricted Incentive Awards	0	0	0	0	0	3,300,000
Restricted Equity Awards	0	0	0	0	0	2,800,000
Total	**0**	**0**	**0**	**0**	0	6,100,000
Pension service costs	557,370	557,370	557,370	557,370	2,036,367	2,036,367
Total compensation (GCGC)	**1,157,900**	**1,157,900**	**1,157,900**	**1,157,900**	4,496,130	10,596,130
Total compensation[2]	**600,000**	**600,000**	**600,000**	**600,000**	2,400,000	8,500,000

[1] Member until March 31, 2017.
[2] Without fringe benefits and pension service costs.

Jürgen Fitschen[1]

in €	2017 Determined	2017 Target	2017 Min	2017 Max	2016 Determined	2016 Target
Fixed compensation (base salary)	-	-	-	-	1,583,333	1,583,333
Fringe benefits	-	-	-	-	38,937	38,937
Total	-	-	-	-	1,622,270	1,622,270
Variable compensation	-	-	-	-	0	2,208,333
thereof:						
Restricted Incentive Awards	-	-	-	-	0	625,000
Restricted Equity Awards	-	-	-	-	0	1,583,333
Total	-	-	-	-	0	2,208,333
Pension service costs	-	-	-	-	232,666	232,666
Total compensation (GCGC)	-	-	-	-	1,854,936	4,063,269
Total compensation[2]	-	-	-	-	1,583,333	3,791,667

[1] Member until May 19, 2016 / contract termination on May 31, 2016.
[2] Without fringe benefits and pension service costs.

Quintin Price[1]

in €	2017 Determined	2017 Target	2017 Min	2017 Max	2016 Determined	2016 Target
Fixed compensation (base salary)	-	-	-	-	1,100,000	1,100,000
Fringe benefits	-	-	-	-	13,783	13,783
Total	-	-	-	-	1,113,783	1,113,783
Variable compensation	-	-	-	-	0	2,108,333
thereof:						
Restricted Incentive Awards	-	-	-	-	0	1,100,000
Restricted Equity Awards	-	-	-	-	0	1,008,333
Total	-	-	-	-	0	2,108,333
Pension service costs	-	-	-	-	525,143	525,143
Total compensation (GCGC)	-	-	-	-	1,638,926	3,747,259
Total compensation[2]	-	-	-	-	1,100,000	3,208,333

[1] Member from January 1 until June 15, 2016.
[2] Without fringe benefits and pension service costs.

The following table provides the compensation disbursals in/for the 2017 and 2016 financial years according to GCGC

	John Cryan		Kimberly Hammonds[1]		Stuart Lewis		Sylvie Matherat	
in €	2017	2016	2017	2016	2017	2016	2017	2016
Fixed compensation	3,400,000	3,800,000	2,400,000	1,000,000	2,400,000	2,400,000	2,400,000	2,400,000
Functional allowance	0	0	0	0	300,000	0	0	0
Fringe benefits	220,982	41,795	260,489	6,035	206,628	77,938	16,338	12,905
Total	3,620,982	3,841,795	2,660,489	1,006,035	2,906,628	2,477,938	2,416,338	2,412,905
Variable compensation	0	0	0	0	999,285	0	0	0
thereof Cash:	0	0	0	0	0	0	0	0
thereof Equity Awards:								
2013 Equity Upfront Award for 2012	0	0	0	0	27,560	0	0	0
2014 Equity Upfront Award for 2013	0	0	0	0	35,498	0	0	0
thereof Restricted Incentive Awards:								
2013 Restricted Incentive Award for 2012	0	0	0	0	377,871	0	0	0
2014 Restricted Incentive Award for 2013	0	0	0	0	357,391	0	0	0
2015 Restricted Incentive Award for 2014	0	0	0	0	200,965	0	0	0
Total	0	0	0	0	999,285	0	0	0
Pension service costs	748,829	821,114	842,110	270,466	807,465	546,402	774,917	517,352
Total compensation (GCGC)	4,369,811	4,662,909	3,502,599	1,276,501	4,713,378	3,024,340	3,191,255	2,930,257

[1] Member since August 1, 2016.

	James von Moltke[1]		Nicolas Moreau[2]		Garth Ritchie		Karl von Rohr	
in €	2017	2016	2017	2016	2017	2016	2017	2016
Fixed compensation	1,200,000	-	2,400,000	600,000	3,000,000	2,400,000	2,400,000	2,400,000
Functional allowance	0	-	0	0	250,000	0	0	0
Fringe benefits	473,299	-	59,383	5,239	269,457	110,241	23,642	47,730
Total	1,673,299	-	2,459,383	605,239	3,519,457	2,510,241	2,423,642	2,447,730
Variable compensation	355,404	-	0	0	0	0	0	0
thereof Cash:	355,404	-	0	0	0	0	0	0
thereof Equity Awards:								
2013 Equity Upfront Award for 2012	0	-	0	0	0	0	0	0
2014 Equity Upfront Award for 2013	0	-	0	0	0	0	0	0
thereof Restricted Incentive Awards:								
2013 Restricted Incentive Award for 2012	0	-	0	0	0	0	0	0
2014 Restricted Incentive Award for 2013	0	-	0	0	0	0	0	0
2015 Restricted Incentive Award for 2014	0	-	0	0	0	0	0	0
Total	355,404	-	0	0	0	0	0	0
Pension service costs	451,453	-	1,232,878	442,672	1,306,915	1,443,171	807,465	546,402
Total compensation (GCGC)	2,480,156	-	3,692,261	1,047,911	4,826,372	3,953,412	3,231,107	2,994,132

[1] Member since July 1, 2017. The benefits granted to Mr. von Moltke as a substitute for forfeited awards and not granted variable compensation from his previous employer are displayed under “Variable Compensation”.
[2] Member since October 1, 2016.

	Dr. Marcus Schenck		Christian Sewing		Werner Steinmüller[1]		Frank Strauß[2]	
in €	2017	2016	2017	2016	2017	2016	2017	2016
Fixed compensation	2,900,000	2,400,000	2,900,000	2,400,000	2,400,000	1,000,000	800,000	-
Functional allowance	0	0	0	0	0	0	0	-
Fringe benefits	16,148	23,720	80,307	204,758	399,424	165,001	26,893	-
Total	2,916,148	2,423,720	2,980,307	2,604,758	2,799,424	1,165,001	826,893	-
Variable compensation	0	0	0	0	0	0	0	-
thereof Cash:	0	0	0	0	0	0	0	-
thereof Equity Awards:								
2013 Equity Upfront Award for 2012	0	0	0	0	0	0	0	-
2014 Equity Upfront Award for 2013	0	0	0	0	0	0	0	-
thereof Restricted Incentive Awards:								
2013 Restricted Incentive Award for 2012	0	0	0	0	0	0	0	-
2014 Restricted Incentive Award for 2013	0	0	0	0	0	0	0	-
2015 Restricted Incentive Award for 2014	0	0	0	0	0	0	0	-
Total	0	0	0	0	0	0	0	-
Pension service costs	1,018,267	546,402	899,307	984,198	701,617	164,232	313,391	-
Total compensation (GCGC)	3,934,415	2,970,122	3,879,614	3,588,956	3,501,041	1,329,233	1,140,284	-

[1] Member since August 1, 2016.
[2] Member since September 1, 2017.

	Jeffrey Urwin[1]		Jürgen Fitschen[2]		Quintin Price[3]	
in €	2017	2016	2017	2016	2017	2016
Fixed compensation	600,000	2,400,000	-	1,583,333	-	1,100,000
Functional allowance	0	0	-	0	-	0
Fringe benefits	530	59,763	-	38,937	-	13,783
Total	**600,530**	2,459,763	**-**	1,622,270	**-**	1,113,783
Variable compensation	0	0	2,079,429	0	-	0
thereof Cash:	0	0	-	0	-	0
thereof Equity Awards:						
2012 Equity Upfront Award for 2011	0	0	24,334	0	-	0
2013 Equity Upfront Award for 2012	0	0	33,348	0	-	0
2014 Equity Upfront Award for 2013	0	0	35,491	0	-	0
2011 Restricted Equity Award for 2010	0	0	71,018	0	-	0
2012 Restricted Equity Award for 2011	0	0	247,666	0	-	0
thereof Restricted Incentive Awards:						
2011 Restricted Incentive Award for 2010	0	0	196,008	0	-	0
2012 Restricted Incentive Award for 2011	0	0	523,818	0	-	0
2013 Restricted Incentive Award for 2012	0	0	511,933	0	-	0
2014 Restricted Incentive Award for 2013	0	0	330,352	0	-	0
2015 Restricted Incentive Award for 2014	0	0	105,461	0	-	0
Total	**0**	0	**2,079,429**	0	**-**	0
Pension service costs	557,370	2,036,367	-	232,666	-	525,143
Total compensation (GCGC)	**1,157,900**	4,496,130	**2,079,429**	1,854,936	**-**	1,638,926

[1] Member until March 31, 2017.
[2] Member until May 19, 2016.
[3] Member since January 1, 2016 / contract termination on May 31, 2016.

In 2015 and 2016, the Supervisory Board had suspended the tranches of deferred compensation elements for the Management Board member Stuart Lewis (who was an active member during the reporting period), Jürgen Fitschen and nine other former Management Board members. In 2017, these Management Board members voluntarily waived their entitlement to a large part of their yet unpaid compensation and, in an agreement with the Supervisory Board, agreed that only € 31.4 Million of the € 69.8 Million of outstanding variable compensation will be disbursed. The compensation elements paid out (or delivered, in the case of equity-based elements) under this agreement in 2017 are included in the above table.

With respect to deferred awards scheduled to be delivered in the first quarter of 2018, the Supervisory Board has confirmed that the performance conditions relating to Group-wide IBIT for the financial year 2017 have been met.

Compensation in accordance with the German Accounting Standard No. 17 (GAS 17)

In accordance with the requirements of the GAS 17, the members of the Management Board collectively received in the 2017 financial year compensation totaling € 37,665,535 (2016: € 26,691,178). Of that, € 29,200,000 (2016: € 25,883,333) was for base salaries, € 2,053,520 (2016: € 807,845) for fringe benefits and € 5,862,015 (2016: € 0) for performance-related components.

In accordance with German Accounting Standard No. 17, the Restricted Incentive Awards, as a deferred, non-equity-based compensation component subject to certain (forfeiture) conditions, must be recognized in the total compensation for the year of their payment (i.e., in the financial year in which the unconditional payment takes place) and not in the year they are originally granted. Based on this the Management Board members individually received the following compensation components for their service on the Management Board for or in the years 2017 and 2016, including the non-performance-related fringe benefits.

Compensation according to GAS 17

in €	John Cryan 2017	John Cryan 2016	Kimberly Hammonds[1] 2017	Kimberly Hammonds[1] 2016	Stuart Lewis 2017	Stuart Lewis 2016	Sylvie Matherat 2017	Sylvie Matherat 2016
Compensation								
Performance-related components								
With short-term incentives								
Cash	0	0	0	0	0	0	0	0
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	936,228	0	0	0
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	0
Restricted Equity Award(s)	0	0	0	0	0	0	0	0
Non-performance-related components								
Base salary	3,400,000	3,800,000	2,400,000	1,000,000	2,400,000	2,400,000	2,400,000	2,400,000
Functional allowance	0	0	0	0	300,000	0	0	0
Fringe benefits	220,982	41,795	260,489	6,035	206,628	77,938	16,338	12,905
Total	**3,620,982**	3,841,795	**2,660,489**	1,006,035	**3,842,856**	2,477,938	**2,416,338**	2,412,905

[1] Member since August 1, 2016.

in €	James von Moltke[1] 2017	James von Moltke[1] 2016	Nicolas Moreau[2] 2017	Nicolas Moreau[2] 2016	Garth Ritchie 2017	Garth Ritchie 2016	Karl von Rohr 2017	Karl von Rohr 2016
Compensation								
Performance-related components								
With short-term incentives								
Cash	355,404	-	0	0	0	0	0	0
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	-	0	0	0	0	0	0
Share-based								
Equity Upfront Award(s)	355,404	-	0	0	0	0	0	0
Restricted Equity Award(s)	2,547,407	-	0	0	0	0	0	0
Non-performance-related components								
Base salary	1,200,000	-	2,400,000	600,000	3,000,000	2,400,000	2,400,000	2,400,000
Functional allowance	0	-	0	0	250,000	0	0	0
Fringe benefits	473,299	-	59,383	5,239	269,457	110,241	23,642	47,730
Total	**4,931,514**	-	**2,459,383**	605,239	**3,519,457**	2,510,241	**2,423,642**	2,447,730

[1] Member since July 1, 2017.
[2] Member since October 1, 2016.

in €	Dr. Marcus Schenck 2017	Dr. Marcus Schenck 2016	Christian Sewing 2017	Christian Sewing 2016	Werner Steinmüller[1] 2017	Werner Steinmüller[1] 2016	Frank Strauß[2] 2017	Frank Strauß[2] 2016
Compensation								
Performance-related components								
With short-term incentives								
Cash	0	0	0	0	0	0	0	-
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	0	0	0	0	0	-
Share-based								
Equity Upfront Award(s)	0	0	0	0	0	0	0	-
Restricted Equity Award(s)	0	0	0	0	0	0	0	-
Non-performance-related components								
Base salary	2,900,000	2,400,000	2,900,000	2,400,000	2,400,000	1,000,000	800,000	-
Functional allowance	0	0	0	0	0	0	0	-
Fringe benefits	16,148	23,720	80,307	204,758	399,424	165,001	26,893	-
Total	**2,916,148**	2,423,720	**2,980,307**	2,604,758	**2,799,424**	1,165,001	**826,893**	-

[1] Member since August 1, 2016.
[2] Member since September 1, 2017.

	Jeffrey Urwin[1]		Jürgen Fitschen[2]		Quintin Price[3]		Total	
in €	2017	2016	2017	2016	2017	2016	2017	2016
Compensation								
Performance-related components								
With short-term incentives								
Cash	0	0	-	0	-	0	355,404	0
With long-term incentives								
Cash-based								
Restricted Incentive Award(s) paid	0	0	1,667,572	0	-	0	2,603,800	0
Share-based								
Equity Upfront Award(s)	0	0	-	0	-	0	355,404	0
Restricted Equity Award(s)	0	0	-	0	-	0	2,547,407	0
Non-performance-related components								
Base salary	600,000	2,400,000	-	1,583,333	-	1,100,000	29,200,000	25,883,333
Functional allowance	0	0	-	0	-	0	550,000	0
Fringe benefits	530	59,763	-	38,937	-	13,783	2,053,520	807,845
Total	**600,530**	2,459,763	**1,667,572**	1,622,270	-	1,113,783	**37,665,535**	26,691,178

[1] Member until March 31, 2017.
[2] Member until May 19, 2016 / contract termination on May 31, 2016.
[3] Member from January 1 until June 15, 2016.

In 2015 and 2016, the Supervisory Board had suspended the tranches of deferred compensation elements for the Management Board member Stuart Lewis (who was an active member during the reporting period), Jürgen Fitschen and nine other former Management Board members. In 2017, these Management Board members voluntarily waived their entitlement to a large part of their yet unpaid compensation and, in an agreement with the Supervisory Board, agreed that only € 31.4 million of the € 69.8 million of outstanding Variable Compensation will be disbursed. The compensation elements paid out (or delivered, in the case of equity-based elements) under this agreement in 2017 are included in the above table.

With respect to deferred awards scheduled to be delivered in the first quarter of 2018, the Supervisory Board has confirmed that the performance conditions relating to Group-wide IBIT for the 2017 financial year have been met.

Employee Compensation Report

The content of the 2017 Employee Compensation Report is based on the qualitative and quantitative remuneration disclosure requirements outlined in Article 450 No. 1 (a) to (i) Capital Requirements Regulation ("CRR") in conjunction with Section 16 of the Remuneration Ordinance for Institutions ("Institutsvergütungsverordnung" – "InstVV").

Regulatory Environment

Ensuring compliance with regulatory requirements is an overarching consideration in our Group Compensation Strategy. We strive to be at the forefront of regulatory changes with respect to compensation and will continue to work closely with our prudential supervisor, the European Central Bank ("ECB"), to be in compliance with all existing and new requirements.

As an EU-headquartered institution, Deutsche Bank is subject to the CRR and Capital Requirements Directive 4 ("CRD 4") requirements globally, as translated into German national law in the German Banking Act and InstVV. As of August 4, 2017, the revised version of the InstVV became effective. The principal objective of the amendment was to reflect the guidance on sound remuneration policies published by the European Banking Authority ("EBA") on December 21, 2015. According to the InstVV, all compensation elements must be categorized as either fixed or variable. If a compensation element cannot clearly be categorized as fixed, it is deemed to be variable. We adopted the rules for all of Deutsche Bank's subsidiaries and branches worldwide to the extent required in accordance with Section 27 InstVV.

Pursuant to CRD 4 and the requirements subsequently adopted in the German Banking Act, Deutsche Bank is subject to a ratio of 1:1 with regard to fixed-to-variable remuneration components, which was increased to 1:2 with shareholder approval on May 22, 2014 with an approval rate of 95.27 %. However, we have determined that individuals within the corporate control functions remain subject to a 1:1 ratio.

As a "significant Institution" within the meaning of the InstVV, Deutsche Bank identifies all employees whose work is deemed to have a material impact on the overall risk profile ("Material Risk Takers" or "MRTs") as referenced in the InstVV and in accordance with criteria stipulated under the Commission Delegated Regulation (EU) No. 604/2014. MRTs are identified at a Group level and at the level of Group entities which are significant institutions within the meaning of Section 17 InstVV. The compensation framework for MRTs must comply with specific requirements. Among other things, a significant part (at least 40 %) of the variable compensation has to be deferred over a period of at least three years (for senior management at least 60 % over five years). As a new ex-post risk adjustment instrument from performance year 2018 onwards, significant institutions must have the ability to reduce retained variable compensation components and in cases of severe misconduct, demand repayment of variable compensation already paid out ("claw-back"). Stricter rules also apply to severance payments, such as the requirement to determine general rules for severance payments including maximum amounts or specific criteria for the calculation of the payments. Moreover, the InstVV establishes more stringent compensation-related documentation and disclosure requirements. Based on thorough analysis, we have determined that our compensation system was already aligned with the revised version of the InstVV to a large extent. Where required, we have been adjusting our relevant policies, processes, and practices.

As a result of sector specific legislation and in accordance with the InstVV, some of Deutsche Bank's subsidiaries fall under the "Alternative Investments Fund Managers Directive" ("AIFMD") or the "Undertakings for Collective Investments in Transferable Securities V" Directive ("UCITS V") and are subject to their respective remuneration provisions. We also identify Material Risk Takers in AIFMD/UCITS V regulated subsidiaries in accordance with the applicable rules and apply the remuneration provisions for MRTs identified according to InstVV also to this group, except for the 1:2 ratio with regard to fixed-to-variable components which does not apply as long as these employees are not identified as MRTs according to InstVV at the same time.

Deutsche Bank also takes into account the guidelines under the "Markets in Financial Instruments Directive II" ("MiFID II") targeted at employees who engage directly or indirectly with the bank's clients. Together with the "Minimum Requirements for the Compliance Function" ("MaComp") circular, these provisions require the implementation of a specific compensation policy, a review of compensation plans and the identification of populations of employees deemed to be "Relevant Persons" to ensure that they act in the best interest of clients.

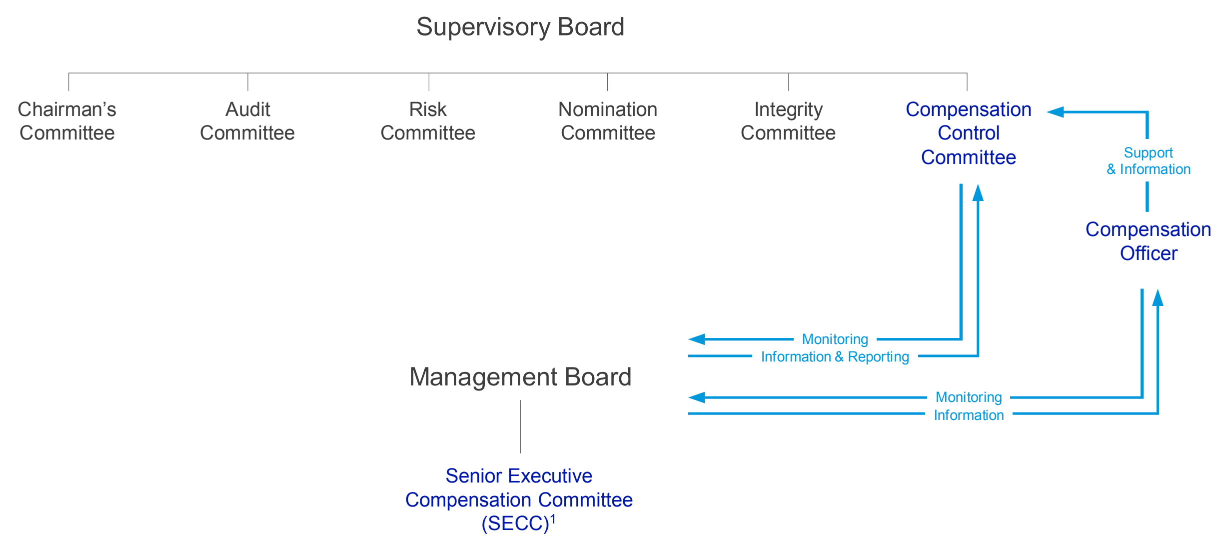
We also adhere to the requirements regarding compensation arrangements contained in the final rule implementing Section 619 of the "Dodd-Frank Wall Street Reform and Consumer Protection Act" globally (the "Volcker Rule").

Where applicable, Deutsche Bank is also subject to specific rules and regulations implemented by local regulators. Many of these requirements are aligned with the InstVV, however, where variations are apparent, pro-active and open discussions with regulators have enabled us to follow the local regulations whilst ensuring any impacted employees or locations remain within the bank's overall global compensation framework. This includes, for example, the identification of "Covered Employees" in the United States under the requirements of the Federal Reserve Board. In any case, we apply the InstVV requirements as minimum standards globally.

Compensation Governance

Deutsche Bank has a robust governance structure enabling it to operate within the clear parameters of the Compensation Strategy and the Compensation Policies. In accordance with the German two-tier board structure, the Supervisory Board governs the compensation of the Management Board members while the Management Board oversees compensation matters for all other employees in the Group. Both the Supervisory Board and the Management Board are supported by specific committees and functions, in particular the Compensation Control Committee ("CCC") and the Senior Executive Compensation Committee ("SECC"), respectively.

Reward Governance structure



[1] The relevant tasks are performed by the SECC on behalf of the Management Board.

Compensation Control Committee ("CCC")

The Supervisory Board has established the CCC to support in establishing and monitoring the structure of the compensation system for the Management Board Members of Deutsche Bank AG, considering, in particular, the effects on the risks and risk management in accordance with the InstVV. Furthermore, the CCC monitors the appropriateness of the compensation system for the employees, as established by the Management Board and the Senior Executive Compensation Committee. The CCC checks regularly whether the total amount of variable compensation is affordable and set in accordance with the InstVV. The CCC also assesses the impact of the compensation systems on the management of risk, capital and liquidity and seeks to ensure that the compensation systems are aligned to the business and risk strategies. Furthermore, the CCC supports the Supervisory Board in monitoring the MRT identification process and whether the internal control functions and the other relevant areas are properly involved in the structuring of the compensation systems.

The CCC consists of the Chairperson of the Supervisory Board and three further Supervisory Board Members, two from among the employee representatives. It had ten meetings in the calendar year 2017, one of them being a joint meeting with the Risk Committee.

Compensation Officer

The Management Board, in cooperation with the CCC, has appointed a Compensation Officer to support the Supervisory Board and the CCC in performing their compensation related duties. The Compensation Officer is involved in the conceptual review, development, monitoring and the application of the employees' compensation systems on an ongoing basis. The Compensation Officer performs his monitoring obligations independently and provides an assessment on the appropriateness of design and practices of the compensation systems for employees at least annually.

Senior Executive Compensation Committee ("SECC")

The SECC is a delegated committee established by the Management Board which has the mandate to develop sustainable compensation principles, to prepare recommendations on Total Compensation levels and to ensure appropriate compensation governance and oversight. The SECC establishes the Group Compensation Strategy and Compensation Policy. The SECC also utilizes quantitative and qualitative factors to assess performance as a basis for compensation decisions and makes recommendations to the Management Board regarding the total amount of annual variable compensation and its allocation across business divisions and infrastructure functions.

In order to maintain its independence, only representatives from infrastructure functions who are not aligned to any of the business divisions are members of the SECC. In 2017, the SECC's membership comprised of the Chief Administration Officer and the Chief Financial Officer as Co-Chairpersons, as well as the Chief Risk Officer (all of whom are Management Board Members), the Global Head of Human Resources as well as an additional representative from both Finance and Risk as Voting Members. The Compensation Officer, the Deputy Compensation Officer and one of the Global Co-Heads of HR Performance & Reward were Non-Voting Members. The SECC generally meets on a monthly basis and it had 16 meetings with regard to the performance year 2017 compensation process.

Compensation Strategy

Deutsche Bank recognizes that its compensation system plays a vital role in supporting its strategic objectives. It enables us to attract and retain the individuals required to achieve our bank's objectives. The Group Compensation Strategy is aligned to Deutsche Bank's strategic objectives and to its corporate values and beliefs.

Five key objectives of our compensation practices

- To support the delivery of the bank's client-focused, global bank strategy by attracting and retaining talent across its full range of diverse business models and country locations
- To support the long-term, sustainable performance and development of the bank and a corresponding risk strategy
- To promote and support long-term performance based on cost discipline and efficiency
- To ensure that the bank's compensation practices are safe, by way of risk-adjusting performance outcomes, preventing inappropriate risk taking, ensuring sustained compatibility with capital and liquidity planning, and complying with regulation
- To apply and promote the bank's corporate values of integrity, sustainable performance, client centricity, innovation, discipline and partnership

Core remuneration principles

- Align compensation to shareholder interests and sustained bank-wide profitability, taking account of risk
- Maximize sustainable performance, both at the employee and the bank-wide level
- Attract and retain the best talent
- Calibrate compensation to reflect different divisions and levels of responsibility
- Apply a simple and transparent compensation design
- Ensure compliance with regulatory requirements

The Group Compensation Policy informs our employees with regard to our Compensation Strategy, governance processes as well as compensation practices and structures. Together, the Group Compensation Strategy and the Group Compensation Policy provide a clear link between compensation practices and the wider Group strategy. Both documents have been published on our intranet site and are available to all employees.

Total Compensation Framework

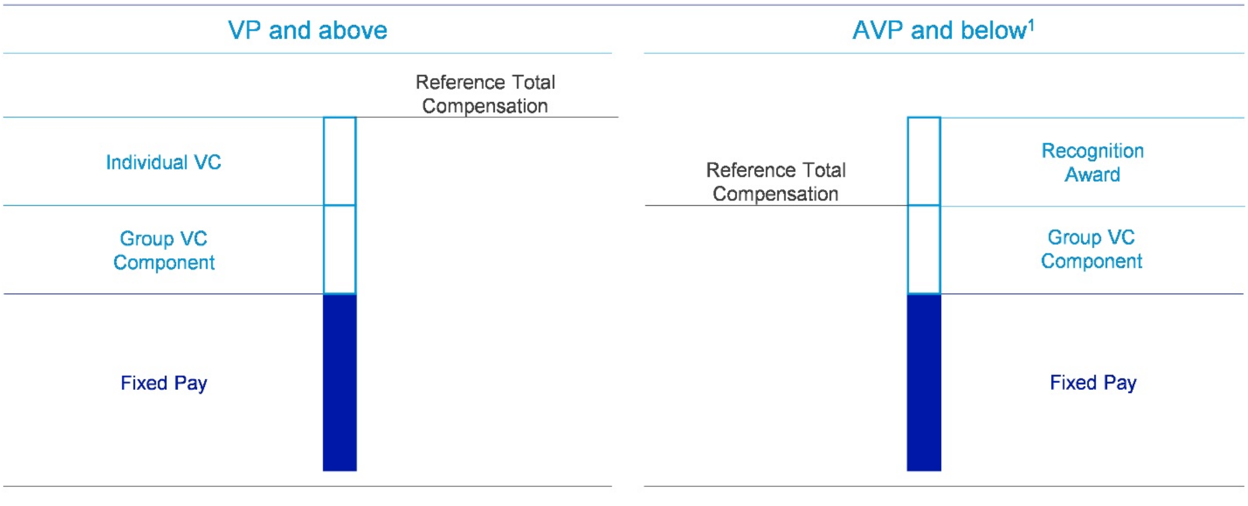
Our compensation framework aligns incentives for sustainable performance at all levels of Deutsche Bank whilst enhancing the transparency of compensation decisions and their impact on shareholders and employees. The framework puts an appropriate balance on Fixed Pay over Variable Compensation (VC) – together the “Total Compensation”.

In 2016, we introduced a new concept of “Reference Total Compensation” for each employee, that describes a reference value for their role. This reference provides our employees orientation on their Fixed Pay and VC. Actual individual Total Compensation can be at, above or below the Reference Total Compensation, based on Group affordability, and performance expectations having been satisfied at Group, divisional and individual levels, as determined by Deutsche Bank at its sole discretion.

Fixed Pay is used to compensate employees for their skills, experience and competencies, commensurate with the requirements, size and scope of their role. The appropriate level of Fixed Pay is determined with reference to the prevailing market rates for each role, internal comparisons and applicable regulatory requirements. It plays a key role in permitting us to meet our strategic objectives by attracting and retaining the right talent. For the majority of our employees, Fixed Pay is the primary compensation component, and the share of fixed compensation within Total Compensation is greater than 50 %. This is appropriate to many businesses and will continue to be a significant feature of Total Compensation going forward.

Variable Compensation allows to differentiate individual performance and to drive behavior through appropriate incentive systems that can positively influence culture. It also allows for flexibility in the cost base. VC generally consists of two elements – the “Group VC Component” and the “Individual VC Component”. The “Individual VC Component” is delivered either in the form of “Individual VC” (generally starting at the senior level of Vice President (VP) and above) or as “Recognition Award” (generally starting at the senior level of Assistant Vice President (AVP) and below). Under our compensation framework, there continues to be no guarantee of VC in an existing employment relationship.

Key components of the compensation framework



[1] Some Assistant Vice Presidents and below in select entities and divisions are eligible for Individual VC in lieu of the Recognition Award.

The Group VC Component is based on one of the overarching goals of the compensation framework – to strengthen the link between VC and the performance of the Group. The Management Board decided to align the “Group VC Component” directly and in a manner comprehensible for the employees to Deutsche Bank’s achievements in reaching strategic targets. To assess progress towards the strategic aspirations, four Key Performance Indicators (KPIs) are utilized: Common Equity Tier 1 (CET 1) Capital Ratio (fully loaded), Leverage Ratio, Adjusted Costs, and Post-Tax Return on Tangible Equity (RoTE). These four KPIs represent important metrics for the capital, risk, cost and the revenue profile of our bank and provide an indication of the sustainable performance of Deutsche Bank.

Individual VC takes into consideration a number of financial and non-financial factors, including the applicable divisional performance, the employee’s individual performance and conduct, the comparison with the employee’s peer group and retention considerations.

Recognition Awards provide the opportunity to acknowledge and reward outstanding contributions made by the employees of lower seniority levels in a transparent and timely manner. Generally, the size of the Recognition Award Program is directly linked to a set percentage of Fixed Pay for the eligible population and it is paid out twice a year, based on a review of nominations and contributions at divisional level.

Total Compensation is complemented by employee benefits which may be linked to employment or seniority, but have no direct link to performance. They are granted in accordance with applicable local market practice and requirements. Recognition Awards and benefits (including company pension schemes) are not part of an employee's Reference Total Compensation.

Determination of Variable Compensation

Deutsche Bank applies a robust methodology when determining Variable Compensation, that reflects the risk-adjusted performance (which includes ex-ante and ex-post risk adjustments) and is primarily driven by (i) Group affordability, i.e. what "can" Deutsche Bank award in alignment with regulatory requirements, and (ii) performance, i.e. what "should" we award in order to provide an appropriate compensation for performance, while protecting the long-term health of the franchise. These aspects apply to both the Group VC Component and the Individual VC Component (whether granted as Individual VC or Recognition Award).

Group affordability is assessed to determine that key parameters are within the projected fulfilment of future regulatory and strategic goals. The affordability parameters used are fully aligned with our "Risk Appetite Framework" and include: CET 1 Capital Ratio, Economic Capital Adequacy Ratio, Leverage Ratio, Stressed Net Liquidity Position and Liquidity Coverage Ratio.

When assessing performance, we reference a range of considerations, including divisional performance. The performance is assessed in context of divisional financial and non-financial targets. The financial targets are subject to appropriate risk-adjustment, in particular by referencing the degree of future potential risks to which Deutsche Bank may be exposed, and the amount of capital required to absorb severe unexpected losses arising from these risks. For the infrastructure functions, the performance assessment is based on the achievement of cost and control targets. While the allocation of VC to infrastructure functions depends on the overall performance of Deutsche Bank, it is not dependent on the performance of the division(s) these functions, particularly independent control functions, oversee.

At the level of the individual employee, we have established "Variable Compensation Guiding Principles", which detail the factors and metrics that must be taken into account when making Individual VC decisions. Our managers must fully appreciate both the absolute and relative risk-taking activities of individuals to ensure that VC allocations are balanced and risk-taking is not inappropriately incentivized. The factors and metrics to be considered include, but are not limited to, divisional risk-adjusted financial and non-financial performance, culture and behavioral considerations, disciplinary sanctions, and individual performance. Managers of Material Risk Takers must document the factors and risk metrics considered when making Individual VC decisions, and demonstrate how these factors influenced the Individual VC decision.

Variable Compensation Structure

Our compensation structures are designed to provide a mechanism that promotes and supports long-term performance of our employees and our bank. Whilst a portion of VC is paid "upfront", these structures ensure that an appropriate portion is deferred with the aim to ensure alignment to sustainable performance of the Group.

In our bank we continue to believe that the use of shares or share-based instruments for deferred VC is an effective way to align compensation with Deutsche Bank's sustainable performance and the interests of shareholders. By using Deutsche Bank shares, the value of the individual's VC is linked to Deutsche Bank's share price over the deferral and retention period.

As detailed below, we continue to go beyond certain regulatory requirements with the amount of VC that is deferred and Deutsche Bank's minimum deferral periods. Whilst ensuring lower compensated employees are not unnecessarily subject to deferrals, we ensure an appropriate amount of deferred VC for higher earners, which generally means that where VC is set at or above € 150,000 and in the case of Material Risk Takers employees at or above € 50,000, the portion of deferred VC increases for VC above these levels. Material Risk Takers are on average subject to deferral rates in excess of the minimum 40 % (60 % for Senior Management) as required by InstVV.

Overview on 2017 Award Types

Award Type	Description	Beneficiaries	Deferral Period	Retention Period	Proportion
Cash VC	Upfront cash proportion	All eligible employees	N/A	N/A	MRTs: 50 % of upfront VC Non-MRTs: 100 % of upfront VC
Equity Upfront Award ("EUA")	Upfront equity proportion: The value of the EUA is linked to Deutsche Bank's share price	All MRTs with VC >= € 50,000	N/A	12 months	50 % of upfront VC
Restricted Incentive Award ("RIA")[1]	Non-equity based portion (deferred cash compensation)	All employees with deferred VC	Pro rata vesting over four years	N/A	50 % of deferred VC
Restricted Equity Award ("REA")[1]	Deferred equity portion: The value of the REA is linked to Deutsche Bank's share price over the vesting and retention period	All employees with deferred VC	Pro rata vesting over four years Senior Management: 4.5 year cliff-vesting[2]	6 months for MRTs	50 % of deferred VC

N/A – Not applicable
[1] For certain AIFMD/UCITS V employees: Employee Investment Plan ("EIP"). These are cash settled awards based on the value of funds managed by the business.
[2] For the purposes of performance-year 2017 annual awards, "Senior Management" is defined as the Deutsche Bank's "Senior Leadership Cadre", which includes direct reports of Deutsche Bank AG Management Board Members (excluding non-strategic roles), Management Board Members of the bank's significant institutions (excluding Deutsche Bank AG and Postbank AG for whom other remuneration systems apply) and other senior employees who are significant influencers and stewards of the Deutsche Bank's long-term health and performance. All Senior Management employees are also considered MRTs.

In addition to the standard Group approach detailed above, we have decided to apply a stricter approach with regard to VC awards granted to Directors and Managing Directors in the Corporate & Investment Bank: The effective deferral threshold for this population is set at € 130,000 (for MRTs at € 50,000) and the proportion of VC that is deferred generally increases faster with increasing levels of the overall amount of compensation awarded than for employees in other areas of the bank, to align their VC even more closely with the sustainable performance of the Group. Furthermore, those Directors and Managing Directors with either Fixed Pay or VC in excess of € 500,000 are subject to a VC deferral of 100 %.

Our employees are not allowed to sell, pledge, transfer or assign a deferred award or any rights in respect to the award. They may not enter into any transaction having an economic effect of hedging any variable compensation, for example offsetting the risk of price movement with respect to the equity-based award. Our Human Resources and Compliance functions work together to monitor employee trading activity and to ensure that all our employees comply with this requirement.

Ex-post Risk Adjustment of Variable Compensation

We believe that the future conduct and performance of our employees are a key element of deferred VC. As a result, all deferred awards are subject to performance conditions and forfeiture provisions as detailed below.

Overview on performance conditions and forfeiture provisions of Variable Compensation

Provision	Description	Forfeiture
Group CET 1 Ratio	If at the quarter end prior to vesting and delivery the Group CET 1 Ratio is below a certain threshold	Next tranche of equity based deferred award due for delivery (100 % of all undelivered Equity Upfront Awards)[1]
Negative Group IBIT	If the Management Board determines that prior to delivery Group IBIT is negative	Next tranche of equity based deferred award due for delivery (applies also to cash based deferred award of MRTs)[2]
Negative Divisional IBIT	If the Management Board determines that prior to delivery Divisional IBIT is negative	Next tranche of deferred award due for delivery (applies only to MRTs in Business Divisions excluding Postbank MRTs)[2]
Forfeiture Provisions[3]	– In the event of an internal policy or procedure breach, breach of any applicable laws or regulations, or a Control Failure – If any award was based on performance measures or assumptions that are later deemed to be materially inaccurate – Where a Significant Adverse Event occurs, and the Participant is considered sufficiently proximate – If forfeiture is required to comply with prevailing regulatory requirements	Up to 100 % of undelivered awards

[1] For award types subject to cliff-vesting, the whole award will be forfeited if at quarter end prior to vesting or settlement the Group CET 1 ratio is below the threshold. For Equity Upfront Awards, the Group CET 1 Ratio is only assessed at the quarter end prior to delivery.
[2] For annual equity-based awards subject to cliff-vesting granted to Senior Management (defined as Deutsche Bank's "Senior Leadership Cadre"), a certain award proportion (20 %) will be forfeited in respect of a year, if the IBIT is negative for that year.
[3] Forfeiture provisions here are not a complete list, other provisions apply as outlined in the respective plan rules.

Compensation Decisions for 2017

Retention Award Program (granted in January 2017)

As already outlined in last year's Employee Compensation Report, in the context of strategic considerations during the 2016 year-end process, a limited number of employees were granted a special long-term incentive ("Retention Award") in early 2017. In order to mitigate retention risks and to protect the franchise, the Management Board had decided to grant these Retention Awards irrespective of individual performance in the previous year to a targeted population of key employees who had been identified as critical to the bank's future success, who are in high demand in the market and who would be very difficult to re-place.

Overall, Retention Awards were awarded to 5,522 employees or approximately 5 % of Deutsche Bank's global workforce. € 554 million were granted in deferred cash, and € 554 million were granted in deferred equity. The Retention Awards are fully de-ferred over a period of three to five years and are subject to the same measures of ex-post risk-adjustment as de-scribed in the chapter "Ex-post Risk Adjustment of Variable Compensation". The earliest pay-out date for parts of these awards is therefore early 2018 for non-Material Risk Takers, as a pro rata vesting over three years, and 2021 for MRTs, respectively. The equity awards for MRTs are subject to an additional retention period of 12 months, meaning that those awards are only fully delivered after six years.

To further align the awards with the long-term health of our bank and the interests of our shareholders, this equity portion will not vest if Deutsche Bank's share price does not reach a certain share price target. If the share price target is met, the equity portion is delivered after three and a half years for non-MRTs, and after five to six years for MRTs taking into ac-count the additional retention period. In line with any other outstanding equity awards, the share price target and number of outstanding shares for unsettled Retention Awards have been adjusted with respect to our rights issue in April 2017.

Although not performance-based, Retention Awards are considered variable compensation pursuant to Section 5 InstVV. For the ratio of 1:1 or 1:2 with regard to fixed-to-variable remuneration components, Deutsche Bank considers Retention Awards on a pro-rated basis over the deferral period in line with the InstVV. To benefit from these awards, Retention Award recipients need to stay with our bank. If they leave for a competitor, any undelivered portion of an award will be forfeited. At the end of 2017, the attrition rate for employees who have been granted a Retention Award has been lower than the attrition rate for employees who received other deferred awards.

Overview of the structure of the Retention Award Program

Population	Weighting	Proportion	Deferral Period
Material Risk Takers	100 % deferred	50 % cash (RIA)	50 % vest on March 1, 2021, 50 % vest on March 1, 2022
		50 % equity (REA)	50 % vest on March 1, 2021 (plus 12 months retention period), 50 % vest on March 1, 2022 (plus 12 months retention period)
Non-Material Risk Takers	100 % deferred	50 % cash (RIA)	3 year pro rata vesting (March 1, 2018, March 1, 2019, March 1, 2020)
		50 % equity (REA)	Cliff vesting after 3.5 years (due to vest on August 1, 2020)

Year-end considerations and decisions for 2017

For the determination of the total amount of VC for the performance-year 2017, the Management Board had to consider many factors such as the performance at Group and divisional level. However, the assessment of performance has to be complemented by other key factors such as the ongoing focus on achieving the bank's strategic objectives, the impact of competitive positioning on retaining and motivating employees, and a sustainable balance between shareholder and employee interests as required by the bank's "Compensation Strategy".

For the financial year 2017, Deutsche Bank's pre-tax earnings amounted to approximately € 1.2 billion, with solid revenues in many parts of our bank. However, after taxes the bank incurred a loss of € (0.7) billion. The main reason for this loss was the U.S. tax reform which resulted in a one-time tax charge of € 1.4 billion in the fourth quarter of 2017. This tax charge only had a limited impact on the fully-loaded Common Equity Tier 1.

The financial year 2017, as expected, has been strongly influenced by the pursuit of our strategic objectives. As such, restructuring and severance costs as well as litigation charges have continued to affect the full year results. Overall, noticeable progress has been made: We have concluded negotiations on significant litigation items, have continued with our efforts to build a more efficient infrastructure, have invested in digitalization, and advanced both the integration of Postbank and the partial initial public offering (IPO) of Deutsche Asset Management.

Against this backdrop, the SECC has monitored the affordability of Variable Compensation throughout 2017. It has concluded that, despite Deutsche Bank's overall negative result, the bank's capital and liquidity positions remain comfortably above regulatory minimum requirements, and that therefore affordability parameters are met. In addition, the bank's 2017 financial statements and targets for the financial years 2018 and 2019 exceed both internal risk appetite metrics and expected regulatory minimum requirements.

The determination of the total amount of VC for the performance-year does not only look at the impact on the current year but also on future years. In considering the overall shareholder return, we therefore carefully balance the short-term and long-term return, acknowledging the fact that we are still in the midst of laying the foundations for growth and future success. This includes the required investments in our staff in order to sustain the momentum that has been built over the past years.

After the decision to severely restrict total VC for 2016, another year with drastically reduced variable compensation or no specific recognition of individual performance would have led to attrition risk with respect to both key employees that are critical to our future success as well as many other employees who all worked hard to help our bank navigate through times of continuous change. We have clearly stated multiple times throughout the year that we wanted to return to a normal system of variable remuneration for 2017, including both a "Group VC Component" and "Individual VC Component" of Variable Compensation.

In the context of the above considerations, in line with regulatory requirements, and taking into account the risk-adjusted financial performance, the Management Board has determined a total amount of year-end performance-based VC for 2017 of € 2.2 billion (including the Individual VC Component, the Group VC Component, and Recognition Awards). The Variable Compensation for the Management Board of Deutsche Bank AG is not included in this amount, as it is determined by our Supervisory Board in a separate process. The remuneration of the Management Board for 2017 is detailed in the "Management Board Compensation Report". However, it is also included in the tables and charts below.

As part of the overall 2017 VC awards to be granted in March 2018, the "Group VC Component" was awarded to all eligible employees in line with the assessment of the defined four KPIs, as outlined in the chapter "Total Compensation Frame-work". The Management Board recognizing the considerable contribution of employees and at its discretion determined a target achievement rate of 55 % for 2017.

Compared to 2016, the Total Fixed Pay for 2017 decreased by approximately 4 % from € 8.3 billion to € 8.0 billion, mainly due to headcount reductions. As established by our compensation framework, Fixed Pay continues to remain the primary compensation component for the majority of our employees, especially those at the lower seniority levels.

Disclosure of Total Compensation for 2017

Deutsche Bank decided in 2017 to move infrastructure employees to the divisions they service in order to increase the overall efficiency and collaboration within the Group. This helped to increase our business divisions' responsibility and autonomy with respect to their organizational decisions and processes and led to a significant increase of the number of employees associated with the business divisions compared to 2016 – in particular in the Corporate & Investment Bank as well as in Deutsche Asset Management. Independent Control Functions generally remained in central areas.

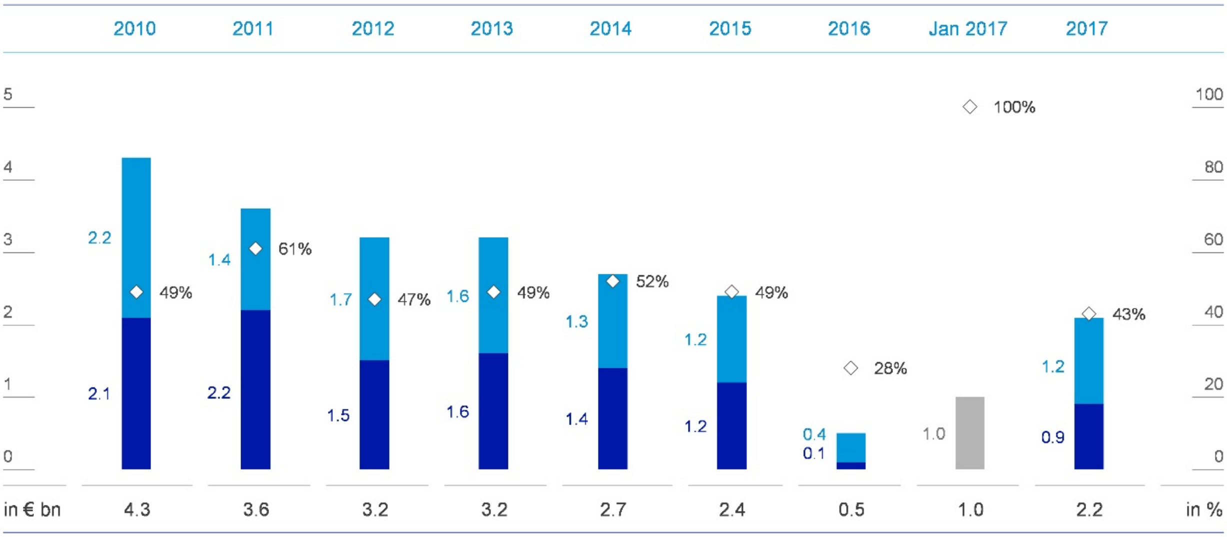
As outlined earlier, the Retention Awards granted in January 2017 are not part of the Variable Compensation granted to employees for their performance in 2017.

Compensation awards for 2017 – all employees

in € m. (unless stated otherwise)[1]	CIB	PCB[2]	Deutsche AM	Independent Control Functions[3]	Corporate Functions[4]	Group Total 2017	Group Total 2016
Number of employees (full-time equivalent) at period end	17,251	43,460	3,803	13,478	19,542	97,535	99,744
Total Compensation	3,881	3,121	635	1,320	1,313	10,270	8,887
Fixed Compensation	2,463	2,834	417	1,131	1,150	7,995	8,341
Year-end performance-based VC	**1,341**	**279**	**195**	**186**	**160**	**2,161**	
Other VC[5]	77	8	23	3	2	113	
Variable Compensation[6]	1,418	287	218	189	163	2,275	546
Retention Award Program (Jan 2017)[7]						961	N/A

N/A – Not applicable
[1] The table may contain marginal rounding differences.
[2] For this table only, PCB figures also include employees of Postbank Group (17,441 employees) as well as Postbank Fixed Pay figures (€ 971 million). Variable Compensation granted by Postbank Group is not included in the above variable amount. For Postbank Group, a total amount of variable remuneration of € 95 million is envisaged.
[3] In accordance with regulatory guidance, "Independent Control Functions" for the purposes of this table include the areas of the Chief Risk Officer, Group Audit, Compliance, Anti-Financial Crime, and Human Resources (Central and Regional). Additionally, the bank considers the following infrastructure functions as "Independent Control Functions": Legal, Global Governance, Group Incident & Investigation Management, Chief Information Security Office, Group Finance, Group Tax, and Regulatory Affairs. All of these functions are subject to a fixed to variable remuneration ratio of 1:1.
[4] "Corporate Functions" comprise any infrastructure function that is neither captured as an Independent Control Function nor part of any division for the purposes of this table. This includes, for instance, the areas of the Chief Operating Officer and Corporate Social Responsibility. "Corporate Functions" also includes the remuneration of the Management Board of Deutsche Bank AG.
[5] "Other VC" includes other contractual VC commitments in the period such as sign-on awards.
[6] "Variable Compensation" includes Deutsche Bank's year-end performance-based VC awards for the period and the other VC commitments in the relevant period. € 60 million buyouts for new hires (replacement awards for lost entitlements from previous employers) are not included.
[7] "Retention Award Program (Jan 2017)" amount includes forfeitures and is FX-adjusted for 2017 (grant value in January 2017 based on 2016 FX: € 1,108 million).

Year-end performance-based Variable Compensation and deferral rates year over year



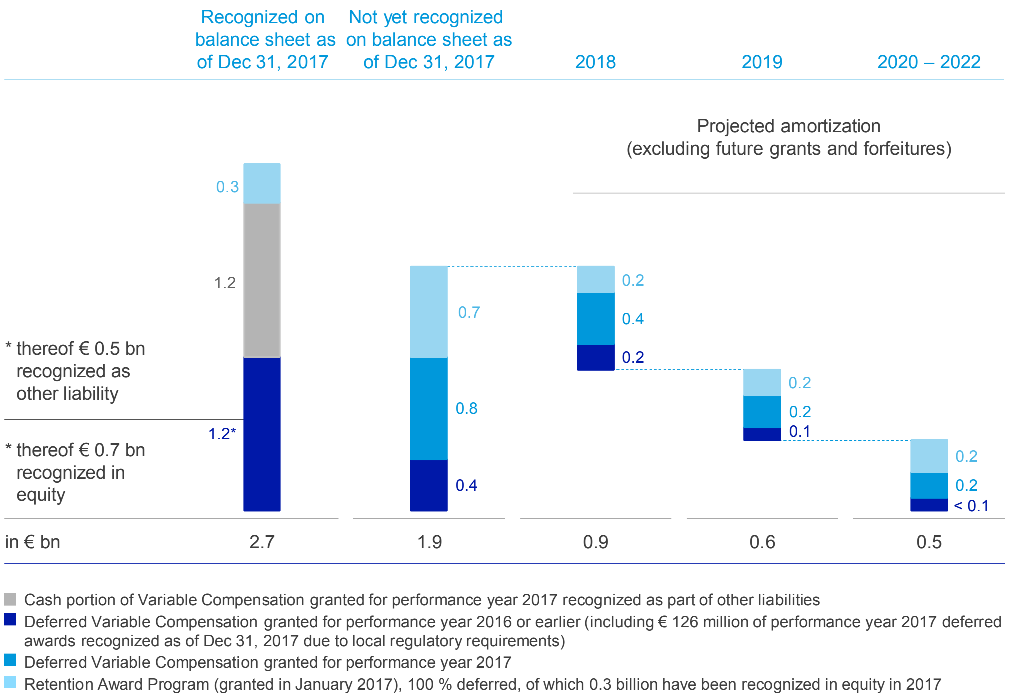
Cash
Deferred
Retention Award Program granted in January 2017 (€ 1.0 billion) including forfeitures (original grant value: € 1.1 billion), 100 % deferred. Retention Awards are not based on performance
Deferral rate in % (i.e. the proportion of the total Variable Compensation that is delivered in deferred awards)
Due to rounding, numbers presented may not add up precisely to the totals provided

Recognition and Amortization of Variable Compensation

As of December 31, 2017, including both awards for financial year 2017 granted in early March 2018 and the Retention Award Program granted in January 2017, unamortized deferred VC expenses amount to approximately € 1.9 billion. The following graph visualizes the amount of VC recognized on the balance sheet for 2017 and the projected future amortization of outstanding VC over the next financial years (future grants and forfeitures excluded).

Year-end performance-based Variable Compensation and Retention Award Program

Recognition as of December 31, 2017 and projected amortization of deferred compensation granted



Due to rounding, numbers presented may not add up precisely to the totals provided

Of the year-end performance-based VC for 2017, and taking into account the Retention Award Program granted in January 2017, € 1.6 billion is charged to the income statement for 2017 and € 1.5 billion will be charged to future years. In addition, the income statement for 2017 was charged with a VC of € 0.7 billion stemming from prior years' deferrals.

Material Risk Taker Compensation Disclosure

On a global basis, 1,795 employees were identified as Material Risk Takers according to InstVV for financial year 2017, compared to 3,056 employees for 2016. The decline can mainly be attributed to the limited total amount of VC granted for 2016, affecting the quantitative criteria as stipulated under the Commission Delegated Regulation (EU) No. 604/2014.

The remuneration elements for all MRTs identified according to InstVV are detailed in the table below in accordance with Section 16 InstVV and Article 450 CRR. Material Risk Takers and high earners (employees receiving a Total Pay of € 1 million or more) from Postbank are not part of this disclosure and instead included in the compensation report of Postbank. The quantitative disclosure for Material Risk Takers also reflects the employee transfers from infrastructure to business divisions as outlined in the chapter “Compensation Decisions for 2017”, and includes the full value of the Retention Award Program granted to MRTs.

Aggregate remuneration for Material Risk Takers according to InstVV

	2017							2016
		Business Units						
in € m. (unless stated otherwise)[1]	Senior Management[2]	CIB	PCB	Deutsche AM	Independent Control Functions[3]	Corporate Functions[4]	Group Total	Group Total
Number of MRTs (headcount)	231	990	188	82	239	65	1,795	3,056
Number of MRTs (FTE)	226	984	183	82	232	65	1,772	3,047
Total Pay	**477**	**1,468**	**136**	**101**	**130**	**47**	**2,359**	1,648
Total Fixed Pay	**208**	**583**	**58**	**35**	**75**	**23**	**981**	1,438
Total Variable Pay for period	**269**	**886**	**78**	**67**	**56**	**23**	**1,379**	210
thereof:								
Retention Award Program (Jan 2017)[5]							540	0
thereof:								
in cash	133	444	40	27	29	12	683	134
in shares	136	442	39	33	27	11	689	71
in other types of instruments	0	0	0	6	0	0	6	5
Total Variable Pay for period, deferred	**217**	**733**	**47**	**45**	**31**	**14**	**1,087**	106
thereof:								
in cash	106	367	24	16	15	7	535	51
in shares	110	367	24	23	15	7	545	51
in other types of instruments	0	0	0	6	0	0	6	5
Article 450 (1) h(iii) of the CRR in conjunction with article 450 (1) h(iv) of the CRR on deferred variable remuneration from previous years and on explicit risk adjustments								
Total amount of variable pay still outstanding at the beginning of the year that was deferred in previous years	**476**	**997**	**108**	**130**	**45**	**26**	**1,783**	2,318
thereof:								
vested	171	424	39	34	23	13	704	1,009
unvested	306	573	69	96	22	13	1,079	1,309
Deferred Variable Pay awarded, paid out or reduced during period								
awarded during period	158	497	33	38	24	12	762	1,160
paid out during period	118	415	39	33	22	12	639	725
reduced through explicit risk adjustments[6]	0	3	0	0	0	0	3	13
Article 450 (1) h(v) of the CRR on hiring bonuses								
Number of beneficiaries of guaranteed variable remuneration (hiring bonuses)	3	18	0	1	4	1	27	42
Total amount of guaranteed variable pay (hiring bonuses)	1	18	0	1	1	1	21	61
Article 450 (1) h(v) and (vi) of the CRR on severance payments								
Total amount of severance payments granted[7]	2	12	3	0	0	2	21	42
Number of beneficiaries of severance payments granted by headcount	2	35	6	2	4	4	53	114
Highest severance payment granted to an individual	2	5	2	0	0	1	5	4

1 Figures may include rounding differences. Buyouts not included; Postbank employees and remuneration not included.
2 Refers to Management Board members (including Deutsche Bank AG) and Executive Directors of significant institutions within the meaning of Section 17 InstVV and any other members of the “Senior Leadership Cadre”. Supervisory Board Members / Non-Executive Directors of significant institutions are also included in “Senior Management” headcount (thereof 60) and FTE (thereof 58). In case they have only been identified as MRTs due to their Supervisory Board role, they are not included in any other lines as they receive no variable remuneration elements for these activities and as their fixed compensation elements for this role are not meaningful. However, Deutsche Bank AG Supervisory Board members are included in “Senior Management” Total Fixed Pay.
3 In accordance with regulatory guidance, “Independent Control Functions” for the purposes of this table include the areas of the Chief Risk Officer, Group Audit, Compliance, Anti-Financial Crime, and Human Resources (Central and Regional). Additionally, Deutsche Bank considers the following infrastructure functions as “Independent Control Functions”: Legal, Global Governance, Group Incident & Investigation Management, Chief Information Security Office, Group Finance, Group Tax, and Regulatory Affairs. All of these functions are subject to a fixed to variable remuneration ratio of 1:1.
4 “Corporate Functions” comprise any infrastructure function that is neither captured as an Independent Control Function nor part of any division for the purposes of this table. This includes, for instance, the areas of the Chief Operating Officer and Corporate Social Responsibility.
5 The Retention Award Program is included in the Variable Pay figures in this table.
6 Taking into account risk adjustments and resignations, outstanding Variable Pay for MRTs amounting to € 122 million was forfeited in 2017.
7 Severance payments are generally paid out in the year in which they have been granted.

Remuneration of high earners

in €	2017 Number of employees (excluding Retention Award Program)[1]
Total Pay	
1,000,000 to 1,499,999	330
1,500,000 to 1,999,999	155
2,000,000 to 2,499,999	85
2,500,000 to 2,999,999	56
3,000,000 to 3,499,999	29
3,500,000 to 3,999,999	21
4.000,000 to 4,499,999	10
4,500,000 to 4,999,999	8
5,000,000 to 5,999,999	4
6,000,000 to 6,999,999	4
7,000,000 to 7,999,999	3
8,000,000 to 8,999,999	0
9,000,000 to 9,999,999	0
10,000,000 to 10,999,999	0
Total	705

[1] Postbank employees not included. Buyouts not included. When considering the Retention Award Program with the full amount granted in January 2017, the total of high earners for 2017 would amount to 1,098 employees.

In total, 705 employees received a Total Pay of € 1 million or more for 2017, compared to 316 employees in 2016 and 756 employees in 2015.

Compensation System for Supervisory Board Members

The compensation principles for Supervisory Board members are set forth in our Articles of Association, which our shareholders amend from time to time at the Annual General Meeting. Such compensation provisions, which were newly conceived in 2013, were last amended by resolution of the Annual General Meeting on May 18, 2017 and became effective on October 5, 2017. Accordingly, the following provisions apply:

The members of the Supervisory Board receive fixed annual compensation ("Supervisory Board Compensation"). The annual base compensation amounts to € 100,000 for each Supervisory Board member. The Supervisory Board Chairman receives twice that amount and the Deputy Chairperson one and a half times that amount.

Members and chairs of the committees of the Supervisory Board are paid additional fixed annual compensation as follows:

	Dec 31, 2017	
Committee in €	Chairperson	Member
Audit Committee	200,000	100,000
Risk Committee	200,000	100,000
Nomination Committee	100,000	50,000
Mediation Committee	0	0
Integrity Committee	200,000	100,000
Chairman's Committee	100,000	50,000
Compensation Control Committee	100,000	50,000

75 % of the compensation determined is disbursed to each Supervisory Board member after submitting invoices within the first three month of the following year. The other 25 % is converted by the company at the same time into company shares based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, calculated to three digits after the decimal point. The share value of this number of shares is paid to the respective Supervisory Board member in February of the year following his departure from the Supervisory Board or the expiration of his term of office, based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of the preceding January, provided that the member does not leave the Supervisory Board due to important cause which would have justified dismissal.

In case of a change in Supervisory Board membership during the year, compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months. For the year of departure, the entire compensation is paid in cash; a forfeiture regulation applies to 25 % of the compensation for that financial year.

The company reimburses the Supervisory Board members for the cash expenses they incur in the performance of their office, including any value added tax (VAT) on their compensation and reimbursements of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their Supervisory Board work shall be paid for each Supervisory Board member affected. Finally, the Chairman of the Supervisory Board will be appropriately reimbursed for travel expenses incurred in performing representative tasks that his function requires and for the costs of security measures required on account of his function.

In the interest of the company, the members of the Supervisory Board will be included in an appropriate amount, with a deductible, in any financial liability insurance policy held by the company. The premiums for this are paid by the company.

Supervisory Board Compensation for the 2017 Financial Year

Individual members of the Supervisory Board received the following compensation for the 2017 financial year (excluding value added tax).

Members of the Supervisory Board in €	Compensation for fiscal year 2017 Fixed	Compensation for fiscal year 2017 Thereof payable in 1st quarter 2018	Compensation for fiscal year 2016 Fixed	Compensation for fiscal year 2016 Thereof payable in February 2017
Dr. Paul Achleitner[1]	800,000	683,333	800,000	600,000
Stefan Rudschäfski[2]	300,000	225,000	0	0
Alfred Herling[3]	0	0	300,000	300,000
Wolfgang Böhr	200,000	150,000	141,667	106,250
Frank Bsirske	250,000	187,500	250,000	187,500
Dina Dublon	300,000	225,000	300,000	225,000
Jan Duscheck[4]	100,000	75,000	41,667	31,250
Gerhard Eschelbeck[5]	58,333	43,750	0	0
Katherine Garrett-Cox[6]	200,000	150,000	125,000	104,167
Timo Heider	200,000	150,000	200,000	150,000
Sabine Irrgang	200,000	150,000	200,000	150,000
Prof. Dr. Henning Kagermann	250,000	187,500	250,000	187,500
Martina Klee	200,000	150,000	200,000	150,000
Peter Löscher[7]	83,333	83,333	200,000	150,000
Henriette Mark	200,000	150,000	200,000	150,000
Richard Meddings	400,000	300,000	400,000	300,000
Louise Parent	400,000	300,000	333,333	250,000
Gabriele Platscher	200,000	150,000	200,000	150,000
Bernd Rose	200,000	150,000	200,000	150,000
Gerd Alexander Schütz[8]	58,333	43,750	0	0
Prof. Dr. Stefan Simon[9]	216,667	162,500	33,333	25,000
Rudolf Stockem[10]	0	0	116,667	116,667
Dr. Johannes Teyssen	250,000	187,500	216,667	162,500
Georg Thoma[11]	0	0	108,333	108,333
Prof. Dr. Klaus Rüdiger Trützschler[12]	83,333	83,333	200,000	150,000
Total	**5,150,000**	**3,987,500**	5,016,667	3,904,167

[1] Member was re-elected on May 18, 2017.
[2] Member since January 1, 2017.
[3] Member until December 31, 2016.
[4] Member since August 2, 2016.
[5] Member since May 18, 2017.
[6] Member was re-elected on May 19, 2016.
[7] Member until May 18, 2017.
[8] Member since May 18, 2017.
[9] Member since August 23, 2016.
[10] Member until July 31, 2016.
[11] Member until May 28, 2016.
[12] Member until May 18, 2017.

Following the submission of invoices in February 2018, 25 % of the compensation determined for each Supervisory Board member for the 2017 financial year was converted into notional shares of the company on the basis of a share price of € 15.458 (average closing price on the Frankfurt Stock Exchange (Xetra) during the last ten trading days of January 2018, calculated to three digits after the decimal point). Members who left the Supervisory Board in 2017 were paid the entire amount of compensation in cash. For members whose term of office ended in 2017, the total compensation for the period until then, was paid fully in cash.

The following table shows the number of notional shares of the Supervisory Board members, to three digits after the decimal point, that were awarded in the first three month 2018 as part of their 2017 compensation as well as the number of notional shares accrued from previous years 2013 to 2016 accumulated during the respective membership in the Supervisory Board and the total amounts paid out in February 2018 for departed or re-elected members.

	Number of notional shares			
Members of the Supervisory Board	Converted in February 2018 as part of the compensation 2017	Total prior-year amounts from 2013 to 2016	Total (cumulative)	In February 2018 payable in €[1]
Dr. Paul Achleitner[2]	7,547.235	34,842.354	42,389.589	538,593
Stefan Rudschäfski[3]	4,851.794	0	4,851.794	0
Wolfgang Böhr	3,234.529	2,039.332	5,273.861	0
Frank Bsirske	4,043.162	9,812.535	13,855.697	0
Dina Dublon	4,851.794	10,445.634	15,297.428	0
Jan Duscheck[4]	1,617.265	564.436	2,181.701	0
Gerhard Eschelbeck[5]	943.404	0	943.404	0
Katherine Garrett-Cox[6]	3,234.529	1,128.872	4,363.401	0
Timo Heider	3,234.529	7,870.476	11,105.005	0
Sabine Irrgang	3,234.529	7,870.476	11,105.005	0
Prof. Dr. Henning Kagermann	4,043.162	10,517.526	14,560.688	0
Martina Klee	3,234.529	8,152.472	11,387.001	0
Peter Löscher[7]	0	8,152.472	8,152.472	126,021
Henriette Mark	3,234.529	8,896.223	12,130.752	0
Richard Meddings	6,469.058	6,861.587	13,330.645	0
Louise Parent	6,469.058	8,294.024	14,763.082	0
Gabriele Platscher	3,234.529	8,614.226	11,848.755	0
Bernd Rose	3,234.529	8,332.230	11,566.759	0
Gerd Alexander Schütz[8]	943.404	0	943.404	0
Prof. Dr. Stefan Simon[9]	3,504.073	451.549	3,955.622	0
Dr. Johannes Teyssen	4,043.162	6,972.511	11,015.673	0
Prof. Dr. Klaus Rüdiger Trützschler[10]	0	8,896.223	8,896.223	137,518
Total	**75,202.803**	158,715.158	**233,917.961**	**802,132**

[1] At a value of € 15.458 based on the average closing price on the Frankfurt Stock Exchange (Xetra or successor system) during the last ten trading days of January 2018.
[2] Member was re-elected on May 18, 2017.
[3] Member since January 1, 2017.
[4] Member since August 2, 2016.
[5] Member since May 18, 2017.
[6] Member was re-elected on May 19, 2016.
[7] Member until May 18, 2017.
[8] Member since May 18, 2017.
[9] Member since August 23, 2016.
[10] Member until May 18, 2017.

All employee representatives on the Supervisory Board, with the exception of Frank Bsirske and Jan Duscheck, are employed by us. In the 2017 financial year, we paid such members a total amount of € 1.13 million in the form of salary, retirement and pension compensation in addition to their Supervisory Board compensation.

We do not provide members of the Supervisory Board with any benefits after they have left the Supervisory Board, though members who are or were employed by us are entitled to the benefits associated with the termination of such employment. During 2017, we set aside € 0.12 million for pension, retirement or similar benefits for the members of the Supervisory Board who are or were employed by us.

With the agreement of the Bank's Management Board, Dr. Paul Achleitner performs representative functions in various ways on an unpaid basis for the Bank and participates in opportunities for referrals of business for the Bank. These tasks are related to the functional responsibilities of the Chairman of the Supervisory Board of Deutsche Bank AG. In this respect, the reimbursement of costs is provided for in the Articles of Association. On the basis of a separate contractual agreement, the Bank provides Dr. Paul Achleitner with infrastructure and support services free of charge for his services in the interest of the Bank. He is therefore entitled to avail himself of internal resources for preparing and carrying out these activities. The Bank's security and car services are available for Dr. Paul Achleitner for use free of charge for these tasks. The Bank also reimburses travel expenses and attendance fees and covers the taxes for any non-cash benefits provided. On September 24, 2012, the Chairman's Committee approved the conclusion of this agreement. The provisions apply for the duration of Dr. Paul Achleitner's tenure as Chairman of the Supervisory Board and are reviewed on an annual basis for appropriateness. Under this agreement between Deutsche Bank and Dr. Achleitner, support services equivalent to € 248,000 (2016: € 225,000) were provided and reimbursements for expenses amounting to € 197,679 (2016: € 234,488) were paid during the 2017 financial year.

Corporate Responsibility

Our approach to sustainability is grounded on the “triple bottom line” concept that encompasses the dimensions of people, planet and profit. For us, this means sustainable business performance, that balances economic success with environmental and social responsibility. It aims to foster business that enables sustainable economic growth and societal progress, by creating positive impact for our clients, our people, our investors and our communities.

We monitor global developments and evaluate their impact on our business. We value open dialogue with our stakeholders and respect their diverse expectations. Together, this helps us make informed decisions while continually shaping our sustainability approach.

The values and beliefs within Deutsche Bank’s Code of Business Conduct and Ethics reflect our understanding of sustainability, which is also anchored in respective policies and processes. It is further informed by internationally recognized standards and principles and the formal commitments we have made in the area of sustainability. Examples include:

- Ten Principles of the UN Global Compact
- UN Principles for Responsible Investment
- UN Guiding Principles on Business and Human Rights
- G20/OECD principles of Corporate Governance
- OECD Guidelines for Multinational Enterprises

To take forward its expired Millennium Development Goals the UN set the new 2030 Agenda for Sustainable Development, which also provides guidance in how we think and act.

Deutsche Bank’s Management Board is responsible for the integration of sustainability across the bank. A centrally organized sustainability team within our Communications & CSR function acts as an interface between internal and external stakeholders.

In November 2017, our Management Board took the decision to strengthen governance by establishing a group-wide Sustainability Council, composed of senior managers from across the business and infrastructure functions. The Council will act as advisory body to the Management Board and will further develop and enforce the bank’s sustainability approach.

For more information on sustainability please visit the consolidated Non-Financial Report 2017 (NFRep 2017) for Deutsche Bank Group. The NFRep 2017 includes Deutsche Bank’s Non-financial Statement (which legally is referred to as separate non-financial group report). The content of the Non-Financial Statement is marked separately. The NFRep 2017 PDF, including the Non-Financial Statement, is published on our Investor Relations website db.com/annual-reports. Please visit our online NFRep 2017 on db.com/non-financial-report.

Employees

Group Headcount

As of December 31, 2017, we employed a total of 97,535 staff members compared to 99,744 as of December 31, 2016. We calculate our employee figures on a full-time equivalent basis, meaning we include proportionate numbers of part-time employees.

The following table shows our numbers of full-time equivalent employees as of December 31, 2017, 2016 and 2015.

Employees[1]	Dec 31, 2017	Dec 31, 2016	Dec 31, 2015
Germany	42,526	44,600	45,757
Europe (outside Germany), Middle East and Africa	23,543	24,062	23,767
Asia/Pacific	20,861	20,099	20,144
North America[2]	10,358	10,611	10,842
Latin America	247	373	595
Total employees	97,535	99,744	101,104

[1] Full-time equivalent employees.
[2] Primarily the United States.

The number of our employees decreased in 2017 by 2,209 or 2.2% driven by implementation of our targets originally announced in October 2015:

– Germany (-2,073; -4.6%) driven by the implementation of restructuring measures, primarily in Private & Commercial Bank and in infrastructure functions;
– North America (-254; -2.4%) driven by reductions mostly in COO/GTO and in Finance;
– Latin America (-126; -33.7%) as a result of the implementation of our footprint strategy;
– EMEA ex Germany (-518; -2.2%) driven by reductions mainly in Italy, Poland, Luxembourg, the Netherlands and Spain;
– Asia/Pacific primarily (+762; +3.8%) due to insourcing of business critical external roles, primarily in COO, and due to strengthening CIB related infrastructure functions.

Employees	Dec 31, 2017	Dec 31, 2016	Dec 31, 2015
Corporate & Investment Bank	17.7 %	17.2 %	17.0 %
Private & Commercial Bank	44.5 %	45.2 %	46.1 %
Deutsche Asset Management	3.9 %	3.9 %	3.9 %
Non-Core Operations Unit	0.0 %	0.1 %	0.1 %
Infrastructure / Regional Management	33.9 %	33.6 %	32.9 %

– Corporate & Investment Bank (+122; +0.7%) driven by CIB related infrastructure functions partly related to insourcing of business critical external roles;
– Private & Commercial Bank (-1,584; -3.5%) driven by reductions primarily in Germany and in western European countries;
– Deutsche Asset Management (-86; -2.2%) particularly a result of the divestment of Sal Oppenheim in Luxembourg;
– Non-Core Operations Unit (-116; -100.0%) has been closed;
– Infrastructure functions (-545; -1.6%) mainly driven by reductions in most functions partly offset by insourcing of business critical external roles (primarily in COO) and due to strengthening of regulatory functions, predominantly Anti-Financial Crime and Audit.

Labor Relations

In Germany, labor unions and employers' associations generally negotiate collective bargaining agreements on salaries and benefits for employees below the management level. Many companies in Germany, including ourselves and our material German subsidiaries, are members of employers' associations and are bound by collective bargaining agreements.

Each year, our employers' association, the Arbeitgeberverband des privaten Bankgewerbes e.V., ordinarily renegotiates the collective bargaining agreements that cover many of our employees. The current agreement reached in July 2016 includes the period from May 2016 onwards. After five months without any pay raise, a first pay raise of 1.5% takes place from October 2016 on, a second pay rise of 1.1% from January 2018 on, and a third pay raise of 1.1% from November 2018 on. The existing collective bargaining agreement will last until January 31, 2019.

Our employers' association negotiates with the following unions:

- ver.di (Vereinigte Dienstleistungsgewerkschaft), a union formed in July 2001 resulting from the merger of five unions, including the former bank unions Deutsche Angestellten Gewerkschaft and Gewerkschaft Handel, Banken und Versicherungen;
- Deutscher Bankangestellten Verband (DBV – Gewerkschaft der Finanzdienstleister);
- Deutscher Handels- und Industrieangestellten Verband (DHV – Die Berufsgewerkschaft);
- Komba Gewerkschaft (public service union, only relevant for Postbank);
- DPVKom – Die Kommunikationsgewerkschaft (only relevant for Postbank).

German law prohibits us from asking our employees whether they are members of labor unions. Therefore, we do not know how many of our employees are union members. Approximately 15% of the employees in the German banking industry are unionized. We estimate that less than 15% of our employees in Germany are unionized (excluding Postbank, which itself traditionally has a significantly higher unionization rate of approximately 60%). On a worldwide basis, we estimate that approximately 15% of our employees are members of labor unions (including Postbank, less than 25%).

As of December 31, 2017, 32% of Postbank staff members in Germany are civil servants (full-time equivalent basis), compared to 32% as of December 31, 2016.

Post-Employment Benefit Plans

We sponsor a number of post-employment benefit plans on behalf of our employees, both defined contribution plans and defined benefit plans.

In our globally coordinated accounting process covering defined benefit plans with a defined benefit obligation exceeding € 2 million our global actuary reviews the valuations provided by locally appointed actuaries in each country.

By applying our global principles for determining the financial and demographic assumptions we ensure that the assumptions are best-estimate, unbiased and mutually compatible, and that they are globally consistent.

For a further discussion on our employee benefit plans see Note 35 "Employee Benefits" to our consolidated financial statements.

Restructuring

The bank's regions were impacted by different measures. Germany saw the largest decline in employee numbers (2,073 FTE), largely driven by the restructuring of its Private, Wealth & Commercial Clients business division. In Asia-Pacific, the number of employees increased due to the insourcing of business-critical external roles, especially in IT.

Talent acquisition

The voluntary staff turnover rate was at 7.8% in 2017 (2016: 7.2%). The slight increase of 0.6 percentage points is due to a higher fluctuation in the operations centers in the US and Romania. However, this fluctuation remains at a normal level.

As a result, filling open positions in front-office roles and operations centers was a main priority in 2017, along with hiring in line with the growing demand in regulatory roles (e.g. Anti-Financial Crime, Audit and Compliance). In addition, talent acquisition was focused on insourcing external roles (1,446 employees), particularly in IT, and hiring 1,235 young talents, therein 619 graduates (2016: 813) and 616 apprentices in Germany (2016: 741).

Promoting internal career mobility

Internal mobility plays a vital role for Deutsche Bank to retain qualified and talented employees and to keep their expertise and experience within the organization. Therefore, the bank continued to develop and embed its internal mobility strategy. Deutsche Bank is committed to filling vacant positions – at all levels of seniority – with suitable internal candidates whenever possible. In accordance with its Hiring Policy, all open positions are advertised to internal staff first and exclusively for at least two weeks. Once this process is completed, external candidates may be sought.

Prioritizing internal candidates for vacant positions is designed to help employees affected by restructuring measures to find new roles within the organization. The bank also seeks to promote cross-divisional moves to enable employees to expand their skills and experience in order to have more rounded careers. Furthermore, internal mobility contributes to savings on redundancy and recruitment costs.

In 2017, 10,479 employees (excluding Postbank), or 13.1% of the workforce, changed roles within the bank. As part of this, 4,731 officers (Managing Directors, Directors, Vice Presidents, Assistant Vice Presidents, Associates) and 3,042 non-officers (employees without corporate title) changed roles within their respective division, while 1,762 officers and 944 non-officers moved to another division. The number of cross-divisional job moves increased by 21% compared to prior year.

Performance Management

Deutsche Bank's approach to performance management comprises three main steps: (1) defining expectations and setting objectives at the beginning of the year, (2) holding regular feedback conversations throughout, and (3) reviewing performance at the end.

"Total Performance" represents a more holistic approach to developing and managing our people and their performance. In March 2017, the new approach was rolled out across all business divisions and infrastructure functions. The focus is on continuous and constructive conversations between employees and their managers. This comes as a response to the results of external studies and internal people surveys. Employees have expressed a demand for more frequent, less formal conversations to discuss the performance and development with their managers. Furthermore, employees feel more motivated if they have a better understanding of expectations and their personal contribution to the bank's strategy and business performance.

In 2017, 71.3% of the individual variable compensation (IVC) eligible employees set their objectives and 93% of all employees confirmed that they are aware of the expectations of their role. 99% of in-scope employees completed the IVC relevant considerations at the end of the cycle.

Diversity and Inclusion

Deutsche Bank continued its efforts to advance women in the workplace throughout 2017. The percentage of women on the Supervisory Board stood at 35% at the end of the year, above the statutory requirement of 30% for listed and co-determined German companies under gender quota legislation introduced in 2015.

The Supervisory Board's target for the Management Board was set in 2015 as at least one female member by June 30, 2017. This target has been met with the appointments of two female executives to the Management Board. As of year-end 2017, 18.0% of positions at the first management level below the Management Board of Deutsche Bank were held by female executives (2016: 15.7%). At the second level below the Management Board, this percentage stood at 19.6% (2016: 19.5%). The bank had set ambitious targets for 2017 of 17% and 21%, respectively, in accordance with legal requirements in Germany.

In 2011, Deutsche Bank signed a voluntary declaration to substantially raise the proportion of all female managers globally by the end of 2018. As of year-end 2017, the percentage of female Managing Directors and Directors stood at 21.9% (2016: 21.3%). Since 2011, the number of women at this level has increased by 15%. The share of female officers was 33.3% at the end of 2017 (2016: 32.8%).

Deutsche Bank has been included in the Bloomberg Financial Services Gender-Equality Index (BFGEI) since the benchmark's inception in May 2016. The benchmark includes firms that have made strong commitments to gender equality and provides investors and organizations with standardized aggregate data across company gender statistics, HR policies, gender-conscious product offerings, as well as their external community support and engagement. Deutsche Bank is one of only two DAX companies to be included in this global index.

Deutsche Bank actively supports LGBTI (Lesbian, Gay, Bisexual, Transgender, Trans- and Intersexual) causes. As one of the first companies, the bank is dedicated to the application of the UN Code of Conduct tackling discrimination of LGBTI people. In Germany, we also explicitly expressed our support of the law giving same-sex marriages the same rights as heterosexual couples, thus officially recognizing same-sex marriage.

Honoring its commitment, Deutsche Bank has been awarded a perfect score of 100 points in the annual Human Rights Campaign's Corporate Equality Index for the 15th year in a row.

Digitalization

As a key element of its strategy, Deutsche Bank is investing in digitalization. This is not only applicable to the bank's client-facing businesses – it also has a significant impact on how the organization operates and, more specifically, how its employees work. Accordingly, digitalization is an important element of Deutsche Bank's strategic HR agenda, resulting in people processes being automated increasingly and employees being encouraged and required to develop the necessary digital skills.

Reflecting the various aspects and opportunities of digital change, Deutsche Bank's HR function introduced a new series entitled "Enabling the Bank's Digital Transformation" in August 2017. A number of WebEx sessions helped create a common understanding of what digitalization means for HR and the bank overall. With an audio-visual library, which will continue to grow over time, the new series provides an overview of trends, technologies and digital challenges in HR policy.

Key employee figures

A few selected employee figures and KPIs are set forth below. For full details on Deutsche Bank's people metrics, as well as its strategic HR priorities and achievements, please refer to the bank's Human Resources Report 2017.

	Dec 31, 2017	Dec 31, 2016	Dec 31, 2015
Female staff (based upon global corporate titles, in FTE)[1]			
Female Managing Directors and Directors	21.9 %	21.3 %	20.5 %
Female officers	33.3 %	32.8 %	32.5 %
Female non-officers	55.8 %	55.6 %	55.5 %
Total female staff	**41.6 %**	41.5 %	41.7 %
Age (in %, headcount)			
up to 29 years	16.2 %	17.1 %	18.4 %
30 - 39 years	30.1 %	29.9 %	29.7 %
40 - 49 years	27.7 %	28.2 %	28.6 %
Over 49 years	26.0 %	24.8 %	23.3 %
Part-time employment (in % of total staff)			
Germany	24.4 %	23.7 %	23.9 %
Europe (outside Germany), Middle East and Africa	6.5 %	6.2 %	6.1 %
Americas	0.4 %	0.4 %	0.3 %
Asia/Pacific	0.2 %	0.2 %	0.2 %
Total part-time employment	**13.0 %**	12.9 %	13.1 %
Apprentices ratio in Germany	3.6 %	3.9 %	4.0 %

	2017	2016	2015
Commitment index[2]			
Germany	51 %	52 %	53 %
Europe (outside Germany), Middle East and Africa	55 %	59 %	63 %
Americas	54 %	61 %	67 %
Asia/Pacific	67 %	68 %	75 %
Total Commitment Index	**57 %**	58 %	63 %
Voluntary staff turnover rate			
Germany	2.0 %	1.8 %	1.6 %
Europe (outside Germany), Middle East and Africa	8.5 %	7.0 %	7.5 %
Americas	13.0 %	11.3 %	11.2 %
Asia/Pacific	16.8 %	17.1 %	18.3 %
Total voluntary staff turnover rate	**7.8 %**	7.2 %	7.3 %
Health rate (in %)[3]	94.2 %	94.3 %	94.8 %

[1] Excluding legal entities outside of DB Corporate Title system, primarily Postbank. DB Investment Services integrated in 2016.
[2] Excluding Postbank.
[3] Health rate: 100 - ((total sickness days x 100)/total regular working days); Germany excluding primarily Postbank; DB Investment Services integrated in 2016.

Internal Control over Financial Reporting

General

Management of Deutsche Bank and its consolidated subsidiaries is responsible for establishing and maintaining adequate internal control over financial reporting (ICOFR). Our internal control over financial reporting is a process designed under the supervision of our chairman and our Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the firm's consolidated financial statements for external reporting purposes in accordance with International Financial Reporting Standards (IFRS). ICOFR includes our disclosure controls and procedures designed to prevent misstatements.

Risks in Financial Reporting

The main risks in financial reporting are that either financial statements do not present a true and fair view due to inadvertent or intentional errors (fraud) or the publication of financial statements is not done on a timely basis. These risks may reduce investor confidence or cause reputational damage and may have legal consequences including banking regulatory interventions. A lack of fair presentation arises when one or more financial statement amounts or disclosures contain misstatements (or omissions) that are material. Misstatements are deemed material if they could, individually or collectively, influence economic decisions that users make on the basis of the financial statements.

To confine those risks of financial reporting, management of the Group has established ICOFR with the aim of providing reasonable but not absolute assurance against material misstatements and conducted an assessment of the effectiveness of the Group's internal control over financial reporting based on the framework established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). COSO recommends the establishment of specific objectives to facilitate the design and evaluate adequacy of a control system. As a result in establishing ICOFR, management has adopted the following financial statement objectives:

– Existence - assets and liabilities exist and transactions have occurred.
– Completeness - all transactions are recorded, account balances are included in the financial statements.
– Valuation - assets, liabilities and transactions are recorded in the financial reports at the appropriate amounts.
– Rights and Obligations and ownership - rights and obligations are appropriately recorded as assets and liabilities.
– Presentation and disclosures - classification, disclosure and presentation of financial reporting is appropriate.
– Safeguarding of assets - unauthorized acquisition, use or disposition of assets is prevented or detected in a timely manner.

However, any internal control system, including ICOFR, no matter how well conceived and operated, can provide only reasonable, but not absolute assurance that the objectives of that control system are met. As such, disclosure controls and procedures or systems for ICOFR may not prevent all errors and fraud. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs.

Organization of the Internal Control System

Functions Involved in the System of Internal Control over Financial Reporting

Controls within the system of ICOFR are performed by all business functions and infrastructure functions with an involvement in reviewing the reliability of the books and records that underlie the financial statements. As a result, the operation of ICOFR involves staff based mainly in the following functions: Finance, Chief Operating Office and Risk.

Finance is responsible for the periodic preparation of the financial statements and operates independently from the Group's businesses. Within Finance, different departments have control responsibilities which contribute to the overall preparation process:

- Group Finance is responsible for Group-wide activities which include the preparation of Group financial and management information and risk reporting. Group Finance sets the reporting timetables, performs the consolidation and aggregation processes, effects the elimination entries for inter and intra group activities, controls the period end and adjustment processes, compiles the Group financial statements, and considers and incorporates comments as to content and presentation made by senior and external advisors.
  - Transactions, Policy and Advisory is responsible for developing the Group's interpretation of International Financial Reporting Standards and Regulatory Standards and their consistent application within the Group. It provides accounting and regulatory advice and consulting services to Finance and the wider business, and is responsible for the timely resolution of corporate and transaction-specific accounting and regulatory issues.
  - Global Valuation Group and business aligned valuation specialists are responsible for developing policies and minimum standards for valuation, providing related implementation guidance when undertaking valuation control work, and challenging and validating valuation control results. They act as the single point of contact on valuation topics for external parties (such as regulators and external auditors).
  - Finance specialists for businesses or entities are responsible for reviewing the quality of financial data by performing validation and control. They are in close contact with business, infrastructure and legal entity management and employ their specific knowledge to address financial reporting issues arising on products and transactions, as well as validating reserving and other adjustments based on judgment.

- Group Tax is responsible for producing income tax related financial data in conjunction with Finance, covering the assessment and planning of current and deferred income taxes and the collection of tax related information. Group Tax monitors the income tax position and controls the provisioning for tax risks.

- Group Planning & Performance Management is responsible for the Group-wide forecasting and planning activities.

The operation of ICOFR is also importantly supported by the Chief Operating Office and Risk. Although these functions are not directly involved in the financial preparation process, they contribute significantly to the production of financial information:

- Chief Operating Office (COO) is responsible for confirming transactions with counterparties, and performing reconciliations both internally and externally of financial information between systems, depots and exchanges. COO also undertakes all transaction settlement activity on behalf of the Group and performs reconciliations of nostro account balances.
- Chief Risk Office (CRO) is responsible for developing policies and standards for managing credit, market, legal, liquidity operational and vendor risks. CRO identifies and assesses the adequacy of credit, legal and operational provisions.

Controls to Minimize the Risk of Financial Reporting Misstatement

The system of ICOFR consists of a large number of internal controls and procedures aimed at minimizing the risk of misstatement of the financial statements. Such controls are integrated into the operating process and include those which:

- are ongoing or permanent in nature such as supervision within written policies and procedures or segregation of duties,
- operate on a periodic basis such as those which are performed as part of the annual financial statement preparation process,
- are preventative or detective in nature,
- have a direct or indirect impact on the financial statements themselves. Controls which have an indirect effect on the financial statements include IT general controls such as system access and deployment controls whereas a control with a direct impact could be, for example, a reconciliation which directly supports a balance sheet line item,
- feature automated and/or manual components. Automated controls are control functions embedded within system processes such as application enforced segregation of duty controls and interface checks over the completeness and accuracy of inputs. Manual internal controls are those operated by an individual or group of individuals such as authorization of transactions.

The combination of individual controls encompasses each of the following aspects of the system of ICOFR:

- Accounting policy design and implementation. Controls to promote the consistent recording and reporting of the Group's business activities on a global basis in accordance with authorized accounting policies.
- Reference data. Controls over reference data in relation to the general ledger and on and off-balance sheet transactions including product reference data.
- New product and transaction approval, capture and confirmation. Controls are intended to ensure the completeness and accuracy of recorded transactions as well as appropriate authorization. Such controls include transaction confirmations which are sent to and received from counterparties to help ensure that trade details are corroborated.

- Reconciliation controls, both external and internal. Inter-system reconciliations are performed between relevant systems for all trades, transactions, positions or relevant parameters. External reconciliations include nostro account, depot and exchange reconciliations.
- Valuation including the independent price verification process (IPV). Finance performs IPV controls at least monthly in order to evaluate the reasonableness of the front office valuation. The results of the IPV processes are assessed on a monthly basis by the Valuation Control Oversight Committee.
- Business aligned valuation specialists focus on valuation approaches and methodologies for various asset classes and perform IPV for complex derivatives and structured products.
- Taxation. Controls are designed to ensure that tax calculations are performed properly and that tax balances are appropriately recorded in the financial statements.
- Reserving and adjustments based on judgment. Controls are designed to ensure reserving and other adjustments based on judgment are authorized and reported in accordance with the approved accounting policies.
- Balance Sheet substantiation. Controls relating to the substantiation of balance sheet accounts to promote the integrity of general ledger account balances based on supporting evidence.
- Consolidation and other period end reporting controls. At period end, all businesses and regions submit their financial data to the Group for consolidation. Controls over consolidation include the validation of accounting entries required to eliminate the effect of inter and intra company activities. Period end reporting controls include general ledger month end close processes and the review of late adjustments.
- Financial Statement disclosure and presentation. Controls over compilation of the financial statements themselves including preparation of disclosure checklists and compliance with the requirements thereof, and review and sign-off of the financial statements by senior Finance management. The financial statements are also subject to approval by the Management Board, and the Supervisory Board and its Audit Committee.

Measuring Effectiveness of Internal Control

Each year, management of the Group undertakes a formal evaluation of the adequacy and effectiveness of the system of ICOFR. This evaluation incorporates an assessment of the effectiveness of the control environment as well as individual controls which make up the system of ICOFR taking into account:

- The financial misstatement risk of the financial statement line items, considering such factors as materiality and the susceptibility of the particular financial statement item to misstatement.
- The susceptibility of identified controls to failure, considering such factors as the degree of automation, complexity, and risk of management override, competence of personnel and the level of judgment required.

These factors, in aggregate, determine the nature and extent of evidence that management requires in order to be able to assess whether or not the operation of the system of ICOFR is effective. The evidence itself is generated from procedures integrated within the daily responsibilities of staff or from procedures implemented specifically for purposes of the ICOFR evaluation. Information from other sources also form an important component of the evaluation since such evidence may either bring additional control issues to the attention of management or may corroborate findings. Such information sources include:

- Reports on audits carried out by or on behalf of regulatory authorities;
- External Auditor reports; and,
- Reports commissioned to evaluate the effectiveness of outsourced processes to third parties.

In addition, Group Audit evaluates the design and operating effectiveness of ICOFR by performing periodic and ad-hoc risk-based audits. Reports are produced summarizing the results from each audit performed which are distributed to the responsible managers for the activities concerned. These reports also provide evidence to support the annual evaluation by management of the overall operating effectiveness of the ICOFR.

As a result of the evaluation, management has concluded that ICOFR is appropriately designed and operating effectively as of December 31, 2017.

Information pursuant to Section 315 (4) of the German Commercial Code and Explanatory Report

Structure of the Share Capital including Authorized and Conditional Capital

For information regarding Deutsche Bank's share capital please refer to Note 34 "Common Shares" to the Consolidated Financial Statements.

Restrictions on Voting Rights or the Transfer of Shares

Under Section 136 of the German Stock Corporation Act the voting right of the affected shares is excluded by law. As far as the bank held own shares as of December 31, 2017 in its portfolio according to Section 71b of the German Stock Corporation Act no rights could be exercised. We are not aware of any other restrictions on voting rights or the transfer of shares.

Shareholdings which Exceed 10 % of the Voting Rights

The German Securities Trading Act (Wertpapierhandelsgesetz) requires that any investor whose share of voting rights reaches, exceeds or falls below certain thresholds as the result of purchases, disposals or otherwise, must notify us and the German Federal Financial Supervisory Authority (BaFin) thereof. The lowest threshold is 3 %. We are not aware of any shareholder holding directly or indirectly 10 % or more of the voting rights.

Shares with Special Control Rights

Shares which confer special control rights have not been issued.

System of Control of any Employee Share Scheme where the Control Rights are not Exercised Directly by the Employees

The employees, who hold Deutsche Bank shares, exercise their control rights as other shareholders in accordance with applicable law and the Articles of Association (Satzung).

Rules Governing the Appointment and Replacement of Members of the Management Board

Pursuant to the German Stock Corporation Act (Section 84) and the Articles of Association of Deutsche Bank (Section 6) the members of the Management Board are appointed by the Supervisory Board. The number of Management Board members is determined by the Supervisory Board. According to the Articles of Association, the Management Board has at least three members. The Supervisory Board may appoint one or two members of the Management Board as Chairpersons of the Management Board. Members of the Management Board may be appointed for a maximum term of up to five years. They may be reappointed or have their term extended for one or more terms of up to a maximum of five years each. The German Co-Determination Act (Mitbestimmungsgesetz; Section 31) requires a majority of at least two thirds of the members of the Supervisory Board to appoint members of the Management Board. If such majority is not achieved, the Mediation Committee shall give, within one month, a recommendation for the appointment to the Management Board. The Supervisory Board will then appoint the members of the Management Board with the majority of its members. If such appointment fails, the Chairperson of the Supervisory Board shall have two votes in a new vote. If a required member of the Management Board has not been appointed, the Local Court (Amtsgericht) in Frankfurt am Main shall, in urgent cases, make the necessary appointments upon motion by any party concerned (Section 85 of the Stock Corporation Act).

Pursuant to the German Banking Act (Kreditwesengesetz) and Regulation (EU) No 468/2014 of the European Central Bank (SSM Framework Regulation) evidence must be provided to the European Central Bank (ECB), the German Federal Financial Supervisory Authority (BaFin) and the Deutsche Bundesbank that the member of the Management Board has adequate theoretical and practical experience of the businesses of the Bank as well as managerial experience before the member is appointed (Sections 24 (1) No. 1 and 25c (1) of the Banking Act, Article 93 of the SSM Framework Regulation).

The Supervisory Board may revoke the appointment of an individual as member of the Management Board or as Chairperson of the Management Board for good cause. Such cause includes in particular a gross breach of duties, the inability to manage the Bank properly or a vote of no-confidence by the shareholders' meeting (Hauptversammlung, referred to as the General Meeting), unless such vote of no-confidence was made for obviously arbitrary reasons.

The ECB or the BaFin may appoint a special representative and transfer to such special representative the responsibility and powers of individual members of the Management Board if such members are not trustworthy or do not have the required competencies or if the credit institution does not have the required number of Management Board members. In any such case, the responsibility and powers of the Management Board members concerned are suspended (Section 45c (1) through (3) of the Banking Act, Article 93 (2) of the SSM Framework Regulation).

If the discharge of a bank's obligations to its creditors is endangered or if there are valid concerns that effective supervision of the bank is not possible, the BaFin may take temporary measures to avert that risk. It may also prohibit members of the Management Board from carrying out their activities or impose limitations on such activities (Section 46 (1) of the Banking Act). In such case, the Local Court Frankfurt am Main shall, at the request of the BaFin appoint the necessary members of the Management Board, if, as a result of such prohibition, the Management Board no longer has the necessary number of members in order to conduct the business (Section 46 (2) of the Banking Act).

Rules Governing the Amendment of the Articles of Association

Any amendment of the Articles of Association requires a resolution of the General Meeting (Section 179 of the Stock Corporation Act). The authority to amend the Articles of Association in so far as such amendments merely relate to the wording, such as changes of the share capital as a result of the issuance of authorized capital, has been assigned to the Supervisory Board by the Articles of Association of Deutsche Bank (Section 20 (3)). Pursuant to the Articles of Association, the resolutions of the General Meeting are taken by a simple majority of votes and, in so far as a majority of capital stock is required, by a simple majority of capital stock, except where law or the Articles of Association determine otherwise (Section 20 (1)). Amendments to the Articles of Association become effective upon their entry in the Commercial Register (Section 181 (3) of the Stock Corporation Act).

Powers of the Management Board to Issue or Buy Back Shares

The Annual General Meeting of May 18, 2017 authorized the Management Board pursuant to Section 71 (1) No. 7 of the Stock Corporation Act to buy and sell, for the purpose of securities trading, own shares of Deutsche Bank AG on or before April 30, 2022, at prices which do not exceed or fall short by more than 10 % of the average of the share prices (closing auction prices of the Deutsche Bank share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the respective three preceding stock exchange trading days. In this context, the shares acquired for this purpose may not, at the end of any day, exceed 5 % of the share capital of Deutsche Bank AG.

The Annual General Meeting of May 18, 2017 authorized the Management Board pursuant to Section 71 (1) No. 8 of the Stock Corporation Act to buy, on or before April 30, 2022, own shares of Deutsche Bank AG in a total volume of up to 10 % of the share capital at the time the resolution was taken or – if the value is lower – of the share capital at the time this authorization is exercised. Together with own shares acquired for trading purposes and/or for other reasons and which are from time to time in the company's possession or attributable to the company pursuant to Sections 71a et seq. of the Stock Corporation Act, the own shares purchased on the basis of this authorization may not at any time exceed 10 % of the company's respectively applicable share capital. The own shares may be bought through the stock exchange or by means of a public purchase offer to all shareholders. The countervalue for the purchase of shares (excluding ancillary purchase costs) through the stock exchange may not be more than 10 % higher or more than 20 % lower than the average of the share prices (closing auction prices of the Deutsche Bank share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the obligation to purchase. In the case of a public purchase offer, it may not be more than 10 % higher or more than 20 % lower than the average of the share prices (closing auction prices of the Deutsche Bank share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the day of publication of the offer. If the volume of shares offered in a public purchase offer exceeds the planned buyback volume, acceptance must be in proportion to the shares offered in each case. The preferred acceptance of small quantities of up to 50 of the company's shares offered for purchase per shareholder may be provided for.

The Management Board has also been authorized to dispose of the purchased shares and of any shares purchased on the basis of previous authorizations pursuant to Section 71 (1) No. 8 of the Stock Corporation Act on the stock exchange or by an offer to all shareholders. The Management Board has been authorized to dispose of the purchased shares against contribution-in kind and with the exclusion of shareholders' pre-emptive rights for the purpose of acquiring companies or shareholdings in companies or other assets that serve the company's business operations. In addition, the Management Board has been authorized, in case it disposes of such own shares by offer to all shareholders, to grant to the holders of the option rights, convertible bonds and convertible participatory rights issued by the company and its affiliated companies pre-emptive rights to the shares to the extent that they would be entitled to such rights if they exercised their option and/or conversion rights. Shareholders' pre-emptive rights are excluded for these cases and to this extent.

The Management Board has also been authorized to use shares purchased on the basis of authorizations pursuant to § 71 (1) No. 8 Stock Corporation Act to issue staff shares, with the exclusion of shareholders' pre-emptive rights, to employees and retired employees of the company and its affiliated companies or to use them to service option rights on shares of the company and/or rights or duties to purchase shares of the company granted to employees or members of executive or non-executive management bodies of the company and of affiliated companies.

Furthermore, the Management Board has been authorized, with the exclusion of shareholders' pre-emptive rights, to sell such own shares to third parties against cash payment if the purchase price is not substantially lower than the price of the shares on the stock exchange at the time of sale. Use may only be made of this authorization if it has been ensured that the number of shares sold on the basis of this authorization does not exceed 10 % of the company's share capital at the time this authorization becomes effective or – if the amount is lower – at the time this authorization is exercised. Shares that are issued or sold during the validity of this authorization with the exclusion of pre-emptive rights, in direct or analogous application of Section 186 (3) sentence 4 Stock Corporation Act, are to be included in the maximum limit of 10 % of the share capital. Also to be included are shares that are to be issued to service option and/or conversion rights from convertible bonds, bonds with warrants, convertible participatory rights or participatory rights, if these bond or participatory rights are issued during the validity of this authorization with the exclusion of pre-emptive rights in corresponding application of Section 186 (3) sentence 4 Stock Corporation Act.

The Management Board has also been authorized to cancel shares acquired on the basis of this or a preceding authorization without the execution of this cancellation process requiring a further resolution by the General Meeting.

The Annual General Meeting of May 18, 2017 authorized the Management Board pursuant to Section 71 (1) No. 8 of the Stock Corporation Act to execute the purchase of shares under the resolved authorization also with the use of put and call options or forward purchase contracts. The company may accordingly sell to third parties put options based on physical delivery and buy call options from third parties if it is ensured by the option conditions that these options are fulfilled only with shares which themselves were acquired subject to compliance with the principle of equal treatment. All share purchases based on put or call options are limited to shares in a maximum volume of 5 % of the actual share capital at the time of the resolution by the General Meeting on this authorization. The term of the options must be selected such that the share purchase upon exercising the option is carried out at the latest on April 30, 2022.

The purchase price to be paid for the shares upon exercise of the put options or upon the maturity of the forward purchase may not exceed more than 10 % or fall below 10 % of the average of the share prices (closing auction prices of the Deutsche Bank share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before conclusion of the respective transaction in each case excluding ancillary purchase costs but taking into account the option premium received. The call options may only be exercised if the purchase price to be paid does not exceed by more than 10 % or fall below 10 % of the average of the share prices (closing auction prices of the Deutsche Bank share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the acquisition of the shares.

To the sale and cancellation of shares acquired with the use of derivatives the general rules established by the General Meeting apply.

Own shares may continue to be purchased using existing derivatives that were agreed on the basis and during the existence of previous authorizations.

Significant Agreements which Take Effect, Alter or Terminate upon a Change of Control of the Company Following a Takeover Bid

Significant agreements which take effect, alter or terminate upon a change of control of the company following a takeover bid have not been entered into.

Agreements for Compensation in Case of a Takeover Bid

If a member of the Management Board leaves the bank within the scope of a change of control, she or he receives a one-off compensation payment described in greater detail in the Compensation Report.

Corporate Governance Statement pursuant to Sections 289f and 315d of the German Commercial Code

The entire Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code is available on our website under https://www.db.com/ir/en/reports.htm as well as in the chapter “3 – Corporate Governance Statement according to Sections 289f, 315d of the German Commercial Code / Corporate Governance Report”.

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Consolidated Financial Statements

Consolidated Statement of Income

in € m.	Notes	2017	2016	2015
Interest and similar income	5	24,092	25,636	25,967
Interest expense	5	11,714	10,929	10,086
Net interest income	5	12,378	14,707	15,881
Provision for credit losses	20	525	1,383	956
Net interest income after provision for credit losses		11,853	13,324	14,925
Commissions and fee income	6	11,002	11,744	12,765
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	5	2,926	1,401	3,842
Net gains (losses) on financial assets available for sale	7	479	653	203
Net income (loss) from equity method investments	17	137	455	164
Other income (loss)	8	(475)	1,053	669
Total noninterest income		14,070	15,307	17,644
Compensation and benefits	35	12,253	11,874	13,293
General and administrative expenses	9	11,973	15,454	18,632
Policyholder benefits and claims		0	374	256
Impairment of goodwill and other intangible assets	25	21	1,256	5,776
Restructuring activities	10	447	484	710
Total noninterest expenses		24,695	29,442	38,667
Income (loss) before income taxes		1,228	(810)	(6,097)
Income tax expense	36	1,963	546	675
Net income (loss)		(735)	(1,356)	(6,772)
Net income attributable to noncontrolling interests		15	45	21
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components		(751)	(1,402)	(6,794)

Earnings per Share

in € m.	Notes	2017	2016	2015
Earnings per share:[1,2]	11			
Basic		(€ 0.53)	(€ 1.08)	(€ 4.52)
Diluted		(€ 0.53)	(€ 1.08)	(€ 4.52)
Number of shares in million:[1]				
Denominator for basic earnings per share – weighted-average shares outstanding		1,967.7	1,555.3	1,555.1
Denominator for diluted earnings per share – adjusted weighted-average shares after assumed conversions[3]		1,967.7	1,555.3	1,555.1

[1] The number of average basic and diluted shares outstanding has been adjusted for all periods before April 2017 in order to reflect the effect of the bonus component of subscription rights issued in April 2017 in connection with the capital increase.
[2] Earnings were adjusted by € 298 and € 276 and € 228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2017, April 2016 and April 2015.
[3] Due to the net loss situation for 2017, 2016 and 2015 potentially dilutive shares are generally not considered for the earnings per share calculation, because to do so would decrease the net loss per share. Under a net income situation however, the number of adjusted weighted average shares after assumed conversion would have been increased by 62 million shares for 2017, 27 million shares for 2016 and 27 million shares for 2015.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Statement of Comprehensive Income

in € m.	2017	2016	2015
Net income (loss) recognized in the income statement	**(735)**	(1,356)	(6,772)
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement gains (losses) related to defined benefit plans, before tax	(69)	(861)	203
Total of income tax related to items that will not be reclassified to profit or loss	(23)	344	(213)
Items that are or may be reclassified to profit or loss			
Financial assets available for sale			
Unrealized net gains (losses) arising during the period, before tax	197	(2)	(242)
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(523)	(571)	(163)
Derivatives hedging variability of cash flows			
Unrealized net gains (losses) arising during the period, before tax	(34)	62	1
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(137)	(2)	20
Assets classified as held for sale			
Unrealized net gains (losses) arising during the period, before tax	(162)	529	662
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	162	(1,191)	0
Foreign currency translation			
Unrealized net gains (losses) arising during the period, before tax	(2,699)	203	2,156
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	20	(2)	4
Equity Method Investments			
Net gains (losses) arising during the period	(36)	11	48
Total of income tax related to items that are or may be reclassified to profit or loss	146	117	19
Other comprehensive income (loss), net of tax	**(3,157)**	(1,364)	2,493
Total comprehensive income (loss), net of tax	**(3,892)**	(2,721)	(4,278)
Attributable to:			
Noncontrolling interests	(20)	52	45
Deutsche Bank shareholders and additional equity components	(3,872)	(2,773)	(4,323)

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Balance Sheet

in € m.	Notes	Dec 31, 2017	Dec 31, 2016
Assets:			
Cash and central bank balances		225,655	181,364
Interbank balances (w/o central banks)		9,265	11,606
Central bank funds sold and securities purchased under resale agreements	21, 22	9,971	16,287
Securities borrowed	21, 22	16,732	20,081
Financial assets at fair value through profit or loss			
Trading assets		184,661	171,044
Positive market values from derivative financial instruments		361,032	485,150
Financial assets designated at fair value through profit or loss		91,276	87,587
Total financial assets at fair value through profit or loss	12, 13, 21, 22, 37	636,970	743,781
Financial assets available for sale	15, 21, 22	49,397	56,228
Equity method investments	17	866	1,027
Loans	19, 20, 21, 22	401,699	408,909
Securities held to maturity	16	3,170	3,206
Property and equipment	23	2,663	2,804
Goodwill and other intangible assets	25	8,839	8,982
Other assets	26, 27	101,491	126,045
Assets for current tax	36	1,215	1,559
Deferred tax assets	36	6,799	8,666
Total assets		1,474,732	1,590,546
Liabilities and equity:			
Deposits	28	580,812	550,204
Central bank funds purchased and securities sold under repurchase agreements	21, 22	18,105	25,740
Securities loaned	21, 22	6,688	3,598
Financial liabilities at fair value through profit or loss	12, 37		
Trading liabilities		71,462	57,029
Negative market values from derivative financial instruments		342,726	463,858
Financial liabilities designated at fair value through profit or loss		63,874	60,492
Investment contract liabilities		574	592
Total financial liabilities at fair value through profit or loss		478,636	581,971
Other short-term borrowings	31	18,411	17,295
Other liabilities	26, 27	132,208	155,440
Provisions	20, 29	5,219	10,973
Liabilities for current tax	36	1,001	1,329
Deferred tax liabilities	36	346	486
Long-term debt	32	159,715	172,316
Trust preferred securities	32	5,491	6,373
Obligation to purchase common shares		0	0
Total liabilities		1,406,633	1,525,727
Common shares, no par value, nominal value of € 2.56	34	5,291	3,531
Additional paid-in capital		39,918	33,765
Retained earnings		17,454	18,987
Common shares in treasury, at cost	34	(9)	0
Equity classified as obligation to purchase common shares		0	0
Accumulated other comprehensive income (loss), net of tax		520	3,550
Total shareholders' equity		63,174	59,833
Additional equity components		4,675	4,669
Noncontrolling interests		250	316
Total equity		68,099	64,819
Total liabilities and equity		1,474,732	1,590,546

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

in € m.	Common shares (no par value)	Additional paid-in capital	Retained earnings	Common shares in treasury, at cost	Equity classified as obligation to purchase common shares	Unrealized net gains (losses) on financial assets available for sale, net of applicable tax and other[2]
Balance as of December 31, 2014	3,531	33,626	29,279	(8)	0	1,675
Total comprehensive income, net of tax[1]	0	0	(6,794)	0	0	(291)
Common shares issued	0	0	0	0	0	0
Cash dividends paid	0	0	(1,034)	0	0	0
Coupon on additional equity components, net of tax	0	0	(228)	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(10)	0	0	0
Net change in share awards in the reporting period	0	(80)	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	880	0	0
Tax benefits related to share-based compensation plans	0	0	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(34)	0	0	0	0
Purchases of treasury shares	0	0	0	(9,177)	0	0
Sale of treasury shares	0	0	0	8,295	0	0
Net gains (losses) on treasury shares sold	0	(3)	0	0	0	0
Other	0	63	(31)	0	0	0
Balance as of December 31, 2015	3,531	33,572	21,182	(10)	0	1,384
Total comprehensive income, net of tax[1]	0	0	(1,402)	0	0	(472)
Common shares issued	0	0	0	0	0	0
Cash dividends paid	0	0	0	0	0	0
Coupon on additional equity components, net of tax	0	0	(276)	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(517)	0	0	0
Net change in share awards in the reporting period	0	64	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	239	0	0
Tax benefits related to share-based compensation plans	0	2	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(129)	0	0	0	0
Purchases of treasury shares	0	0	0	(5,264)	0	0
Sale of treasury shares	0	0	0	5,035	0	0
Net gains (losses) on treasury shares sold	0	(7)	0	0	0	0
Other	0	263	0	0	0	0
Balance as of December 31, 2016	3,531	33,765	18,987	0	0	912
Total comprehensive income, net of tax[1]	0	0	(751)	0	0	(223)
Common shares issued	1,760	6,277	0	0	0	0
Cash dividends paid	0	0	(392)	0	0	0
Coupon on additional equity components, net of tax	0	0	(298)	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(91)	0	0	0
Net change in share awards in the reporting period	0	(51)	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	424	0	0
Tax benefits related to share-based compensation plans	0	3	0	0	0	0
Additions to Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Deductions from Equity classified as obligation to purchase common shares	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	(104)	0	0	0	0
Purchases of treasury shares	0	0	0	(7,912)	0	0
Sale of treasury shares	0	0	0	7,479	0	0
Net gains (losses) on treasury shares sold	0	6	0	0	0	0
Other	0	22	0	0	0	0
Balance as of December 31, 2017	5,291	39,918	17,454	(9)	0	689

[1] Excluding remeasurement gains (losses) related to defined benefit plans, net of tax.
[2] Excluding unrealized net gains (losses) from equity method investments.

Unrealized net gains (losses) on derivatives hedging variability of cash flows, net of tax[2]	Unrealized net gains (losses) on assets classified as held for sale, net of tax[2]	Foreign currency translation, net of tax[2]	Unrealized net gains (losses) from equity method investments	Accumulated other comprehensive income, net of tax[1]	Total shareholders' equity	Additional equity components[3]	Noncontrolling interests	Total equity
79	0	151	18	1,923	**68,351**	4,619	253	**73,223**
18	662	2,044	48	2,481	(4,313)	0	45	(4,269)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(1,034)	0	(10)	(1,044)
0	0	0	0	0	(228)	0	0	(228)
0	0	0	0	0	(10)	0	0	(10)
0	0	0	0	0	(80)	0	0	(80)
0	0	0	0	0	880	0	0	880
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(34)	0	0	(34)
0	0	0	0	0	(9,177)	0	0	(9,177)
0	0	0	0	0	8,295	0	0	8,295
0	0	0	0	0	(3)	0	0	(3)
0	0	0	0	0	33	56[4]	(17)	72
97	662	2,196	66	4,404	**62,678**	4,675	270	**67,624**
46	(662)	223	11	(854)	(2,256)	0	52	(2,204)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	(11)	(11)
0	0	0	0	0	(276)	0	0	(276)
0	0	0	0	0	(517)	0	0	(517)
0	0	0	0	0	64	0	0	64
0	0	0	0	0	239	0	0	239
0	0	0	0	0	2	0	0	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(129)	0	0	(129)
0	0	0	0	0	(5,264)	0	0	(5,264)
0	0	0	0	0	5,035	0	0	5,035
0	0	0	0	0	(7)	0	0	(7)
0	0	0	0	0	263	(6)[4]	4	262
143	0	2,418	77	3,550	**59,833**	4,669	316	**64,819**
(125)	0	(2,646)	(36)	(3,030)	(3,781)	0	(20)	(3,800)
0	0	0	0	0	8,037	0	0	8,037
0	0	0	0	0	(392)	0	(11)	(403)
0	0	0	0	0	(298)	0	0	(298)
0	0	0	0	0	(91)	0	0	(91)
0	0	0	0	0	(51)	0	0	(51)
0	0	0	0	0	424	0	0	424
0	0	0	0	0	3	0	0	3
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	(104)	0	0	(104)
0	0	0	0	0	(7,912)	0	0	(7,912)
0	0	0	0	0	7,479	0	0	7,479
0	0	0	0	0	6	0	0	6
0	0	0	0	0	22	6[4]	(36)	(9)
18	0	(227)	40	520	**63,174**	4,675	250	**68,099**

3 Includes Additional Tier 1 Notes, which constitute unsecured and subordinated notes of Deutsche Bank and are classified as equity in accordance with IFRS.
4 Includes net proceeds from purchase and sale of Additional Equity Components.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Consolidated Statement of Cash Flows

in € m.	2017	2016	2015
Net Income (loss)	(735)	(1,356)	(6,772)
Cash flows from operating activities:			
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Provision for credit losses	525	1,383	956
Restructuring activities	447	484	710
Gain on sale of financial assets available for sale, equity method investments, and other	(575)	(899)	(430)
Deferred income taxes, net	1,234	(312)	(987)
Impairment, depreciation and other amortization, and accretion	2,159	3,745	8,908
Share of net income from equity method investments	(141)	(183)	(708)
Income (loss) adjusted for noncash charges, credits and other items	2,914	2,862	1,677
Adjustments for net change in operating assets and liabilities:			
Interest-earning time deposits with central banks and banks	966	(2,814)	30,096
Central bank funds sold, securities purchased under resale agreements, securities borrowed	8,560	19,440	(10,108)
Financial assets designated at fair value through profit or loss	(6,721)	20,337	12,935
Loans	2,759	18,190	(14,015)
Other assets	21,970	(7,847)	26,756
Deposits	34,601	(15,237)	26,537
Financial liabilities designated at fair value through profit or loss and investment contract liabilities	5,461	8,686	6,101
Central bank funds purchased, securities sold under repurchase agreements, securities loaned	(3,355)	16,362	(1,120)
Other short-term borrowings	1,148	(10,632)	(16,149)
Other liabilities	(23,107)	(12,888)	(14,177)
Senior long-term debt	(12,728)	12,328	13,536
Trading assets and liabilities, positive and negative market values from derivative financial instruments, net	1,596	30,341	13,788
Other, net	5,512	(8,518)	(8,605)
Net cash provided by (used in) operating activities	39,576	70,610	67,252
Cash flows from investing activities:			
Proceeds from:			
Sale of financial assets available for sale	10,657	26,855	18,027
Maturities of financial assets available for sale	6,798	6,029	3,986
Maturities of securities held to maturity	0	0	0
Sale of equity method investments	80	50	165
Sale of property and equipment	113	206	272
Purchase of:			
Financial assets available for sale	(13,472)	(21,639)	(29,665)
Securities held to maturity	0	0	0
Equity method investments	(12)	(81)	(95)
Property and equipment	(485)	(725)	(432)
Net cash received in (paid for) business combinations/divestitures	82	2,023	555
Other, net	(1,328)	(1,479)	(1,055)
Net cash provided by (used in) investing activities	2,433	11,239	(8,242)
Cash flows from financing activities:			
Issuances of subordinated long-term debt	881[2]	815	2,942
Repayments and extinguishments of subordinated long-term debt	(176)[2]	(1,102)	(2,043)
Issuances of trust preferred securities	266[3]	121	788
Repayments and extinguishments of trust preferred securities	(666)[3]	(840)	(5,114)
Common shares issued	8,037	0	0
Purchases of treasury shares	(7,912)	(5,264)	(9,177)
Sale of treasury shares	7,471	4,983	8,316
Additional Equity Components (AT1) issued	0	0	0
Purchases of Additional Equity Components (AT1)	(205)	(207)	(407)
Sale of Additional Equity Components (AT1)	217	202	442
Coupon on additional equity components, pre tax	(335)	(333)	(269)
Dividends paid to noncontrolling interests	(11)	(11)	(10)
Net change in noncontrolling interests	(37)	(13)	(17)
Cash dividends paid to Deutsche Bank shareholders	(392)	0	(1,034)
Net cash provided by (used in) financing activities	7,138	(1,649)	(5,583)

in € m.	2017	2016	2015
Net effect of exchange rate changes on cash and cash equivalents	(5,772)	(28)	94
Net increase (decrease) in cash and cash equivalents	43,376	80,172	53,521
Cash and cash equivalents at beginning of period	185,649	105,478	51,960
Cash and cash equivalents at end of period	229,025	185,649	105,478
Net cash provided by (used in) operating activities include			
Income taxes paid (received), net	689	1,572	902
Interest paid	11,784	10,808	10,608
Interest received	21,095	22,579	21,749
Dividends received	3,006	3,256	4,428
Cash and cash equivalents comprise			
Cash and central bank balances (not included: Interest-earning time deposits with central banks)	222,451	178,105[1]	94,923
Interbank balances (w/o central banks) (not included: time deposits with banks of € 5,896 m. as of December 31, 2017, € 7,079 m. as of December 31, 2016 and € 4,304 m as of December 31, 2015)	6,574	7,544[1]	10,555
Total	229,025	185,649[1]	105,478

[1] Prior year number restated.
[2] Non-cash changes for Subordinated Long Term Debt are € (367) million in total and driven by FX movements of € (372) million.
[3] Non-cash changes for Trust Preferred Securities are € (481) million in total and driven by FX movements of € (444) million and FV changes of € (51) million.

The accompanying notes are an integral part of the Consolidated Financial Statements.

Notes to the Consolidated Financial Statements

01 – Significant Accounting Policies and Critical Accounting Estimates

Basis of Accounting

Deutsche Bank Aktiengesellschaft (“Deutsche Bank” or the “Parent”) is a stock corporation organized under the laws of the Federal Republic of Germany. Deutsche Bank together with all entities in which Deutsche Bank has a controlling financial interest (the “Group”) is a global provider of a full range of corporate and investment banking, private clients and asset management products and services.

The accompanying consolidated financial statements are stated in euros, the presentation currency of the Group. All financial information presented in million euros has been rounded to the nearest million. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) and endorsed by the European Union (“EU”). The Group’s application of IFRS results in no differences between IFRS as issued by the IASB and IFRS as endorsed by the EU.

Some IFRS disclosures incorporated in the Management Report are an integral part of the Consolidated Financial Statements. These disclosures include Segmental Results of Operations and Entity Wide disclosures on Net Revenue Components under IFRS 8, “Operating Segments” provided in the Operating and Financial Review of the Management Report. Additionally the Risk Report includes disclosures about the nature and the extent of risks arising from financial instruments as required by IFRS 7, “Financial Instruments: Disclosures” and capital disclosures as required under IAS 1, “Presentation of Financial Statements”. These audited disclosures are identified by bracketing in the margins of the Management Report. In addition, with respect to the table entitled “Transitional template for regulatory capital, RWA and capital ratios” set forth in the Risk Report within the section “Risk and Capital Performance: Capital and Leverage Ratio: Development of regulatory capital”, the columns captioned “CRR/CRD 4” for each of December 31, 2017 and December 31, 2016 (but not the columns captioned "CRR/CRD 4 fully loaded") are also an integral part of the Consolidated Financial Statements, notwithstanding that they are not identified by bracketing in the margins. These disclosures are also audited.

Discount Rate for Defined Benefit Pension Plans

In 2017 the Group moved to a more standardized, simpler approach to set its discount rate used to value its defined benefit plans in the Eurozone; similar approaches are generally accepted and are already used for the Group’s other major pension plans in the United Kingdom and the United States. The refinement resulted in no change in the discount rate and so no effect on the Group’s Consolidated Statement of Comprehensive Income in 2017.

Adjustment of Impairment Methodology for Shipping Loans

In the third quarter of 2017, the Group adjusted the parameters for shipping loans being assessed for impairment under a going concern or gone concern scenario. This change in parameters resulted in an increase in the estimated impairment charge of € 70 million. The Group also revised its general haircut applied to shipping loans with gone concern exposures, which also resulted in an increase in the estimated impairment charge of an additional € 36 million. These changes in estimates are reflected in the allowance for credit losses.

Critical Accounting Estimates

The preparation of financial statements under IFRS requires management to make estimates and assumptions for certain categories of assets and liabilities. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management’s estimates. The Group’s significant accounting policies are described in “Significant Accounting Policies”.

Certain of the Group's accounting policies require critical accounting estimates that involve complex and subjective judgments and the use of assumptions, some of which may be for matters that are inherently uncertain and susceptible to change. Such critical accounting estimates could change from period to period and may have a material impact on the Group's financial condition, changes in financial condition or results of operations. Critical accounting estimates could also involve estimates where management could have reasonably used another estimate in the current accounting period. The Group has identified the following significant accounting policies that involve critical accounting estimates:

– the impairment of associates (see "Associates" below)
– the impairment of financial assets available for sale (see "Financial Assets and Liabilities – Financial Assets Classified as Available for Sale" below)
– the determination of fair value (see "Financial Assets and Liabilities – Determination of Fair Value" below)
– the recognition of trade date profit (see "Financial Assets and Liabilities – Recognition of Trade Date Profit" below)
– the impairment of loans and provisions for off-balance sheet positions (see "Impairment of Loans and Provision for Off-balance Sheet Positions" below)
– the impairment of goodwill and other intangibles (see "Goodwill and Other Intangible Assets" below)
– the recognition and measurement of deferred tax assets (see "Income Taxes" below)
– the accounting for legal and regulatory contingencies and uncertain tax positions (see "Provisions" below)

Significant Accounting Policies

The following is a description of the significant accounting policies of the Group. Other than as previously described, these policies have been consistently applied for 2015, 2016 and 2017.

Principles of Consolidation

The financial information in the Consolidated Financial Statements includes the parent company, Deutsche Bank AG, together with its consolidated subsidiaries, including certain structured entities presented as a single economic unit.

Subsidiaries

The Group's subsidiaries are those entities which it directly or indirectly controls. Control over an entity is evidenced by the Group's ability to exercise its power in order to affect any variable returns that the Group is exposed to through its involvement with the entity.

The Group sponsors the formation of structured entities and interacts with structured entities sponsored by third parties for a variety of reasons, including allowing clients to hold investments in separate legal entities, allowing clients to invest jointly in alternative assets, for asset securitization transactions, and for buying or selling credit protection.

When assessing whether to consolidate an entity, the Group evaluates a range of control factors, namely:

– the purpose and design of the entity
– the relevant activities and how these are determined
– whether the Group's rights result in the ability to direct the relevant activities
– whether the Group has exposure or rights to variable returns
– whether the Group has the ability to use its power to affect the amount of its returns

Where voting rights are relevant, the Group is deemed to have control where it holds, directly or indirectly, more than half of the voting rights over an entity unless there is evidence that another investor has the practical ability to unilaterally direct the relevant activities.

Potential voting rights that are deemed to be substantive are also considered when assessing control.

Likewise, the Group also assesses existence of control where it does not control the majority of the voting power but has the practical ability to unilaterally direct the relevant activities. This may arise in circumstances where the size and dispersion of holdings of the shareholders give the Group the power to direct the activities of the investee.

Subsidiaries are consolidated from the date on which control is transferred to the Group and are deconsolidated from the date that control ceases.

The Group reassesses the consolidation status at least at every quarterly reporting date. Therefore, any changes in the structure leading to a change in one or more of the control factors, require reassessment when they occur. This includes changes in decision making rights, changes in contractual arrangements, changes in the financing, ownership or capital structure as well as changes following a trigger event which was anticipated in the original documentation.

All intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated on consolidation.

Consistent accounting policies are applied throughout the Group for the purposes of consolidation. Issuances of a subsidiary's stock to third parties are treated as noncontrolling interests. Profit or loss attributable to noncontrolling interests are reported separately in the Consolidated Statement of Income and Consolidated Statement of Comprehensive Income.

At the date that control of a subsidiary is lost, the Group a) derecognizes the assets (including attributable goodwill) and liabilities of the subsidiary at their carrying amounts, b) derecognizes the carrying amount of any noncontrolling interests in the former subsidiary, c) recognizes the fair value of the consideration received and any distribution of the shares of the subsidiary, d) recognizes any investment retained in the former subsidiary at its fair value and e) recognizes any resulting difference of the above items as a gain or loss in the income statement. Any amounts recognized in prior periods in other comprehensive income in relation to that subsidiary would be reclassified to the Consolidated Statement of Income or transferred directly to retained earnings if required by other IFRS Standards.

Associates

An associate is an entity in which the Group has significant influence, but not a controlling interest, over the operating and financial management policy decisions of the entity. Significant influence is generally presumed when the Group holds between 20 % and 50 % of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Group has significant influence. Among the other factors that are considered in determining whether the Group has significant influence are representation on the board of directors (supervisory board in the case of German stock corporations) and material intercompany transactions. The existence of these factors could require the application of the equity method of accounting for a particular investment even though the Group's investment is less than 20 % of the voting stock.

Investments in associates are accounted for under the equity method of accounting. The Group's share of the results of associates is adjusted to conform to the accounting policies of the Group and is reported in the Consolidated Statement of Income as Net income (loss) from equity method investments. The Group's share in the associate's profits and losses resulting from intercompany sales is eliminated on consolidation.

If the Group previously held an equity interest in an entity (for example, as available for sale) and subsequently gained significant influence, the previously held equity interest is remeasured to fair value and any gain or loss is recognized in the Consolidated Statement of Income. Any amounts previously recognized in other comprehensive income associated with the equity interest would be reclassified to the Consolidated Statement of Income at the date the Group gains significant influence, as if the Group had disposed of the previously held equity interest.

Under the equity method of accounting, the Group's investments in associates and jointly controlled entities are initially recorded at cost including any directly related transaction costs incurred in acquiring the associate, and subsequently increased (or decreased) to reflect both the Group's pro-rata share of the post-acquisition net income (or loss) of the associate or jointly controlled entity and other movements included directly in the equity of the associate or jointly controlled entity. Goodwill arising on the acquisition of an associate or a jointly controlled entity is included in the carrying value of the investment (net of any accumulated impairment loss). As goodwill is not reported separately it is not specifically tested for impairment. Rather, the entire equity method investment is tested for impairment at each balance sheet date.

If there is objective evidence of impairment, an impairment test is performed by comparing the investment's recoverable amount, which is the higher of its value in use and fair value less costs to sell, with its carrying amount. An impairment loss recognized in prior periods is only reversed if there has been a change in the estimates used to determine the in-vestment's recoverable amount since the last impairment loss was recognized. If this is the case the carrying amount of the investment is increased to its higher recoverable amount. The increased carrying amount of the investment in associate attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognized for the investment in prior years.

At the date that the Group ceases to have significant influence over the associate or jointly controlled entity the Group recognizes a gain or loss on the disposal of the equity method investment equal to the difference between the sum of the fair value of any retained investment and the proceeds from disposing of the associate and the carrying amount of the investment. Amounts recognized in prior periods in other comprehensive income in relation to the associate are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities.

Critical Accounting Estimates: As the assessment of whether there is objective evidence of impairment may require significant management judgment and the estimates for impairment could change from period to period based on future events that may or may not occur, the Group considers this to be a critical accounting estimate.

Foreign Currency Translation

The Consolidated Financial Statements are prepared in euro, which is the presentation currency of the Group. Various entities in the Group use a different functional currency, being the currency of the primary economic environment in which the entity operates.

An entity records foreign currency revenues, expenses, gains and losses in its functional currency using the exchange rates prevailing at the dates of recognition.

Monetary assets and liabilities denominated in currencies other than the entity's functional currency are translated at the period end closing rate. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the Consolidated Statement of Income as net gains (losses) on financial assets/liabilities at fair value through profit or loss in order to align the translation amounts with those recognized from foreign currency related transactions (derivatives) which hedge these monetary assets and liabilities.

Nonmonetary items that are measured at historical cost are translated using the historical exchange rate at the date of the transaction. Translation differences on nonmonetary items which are held at fair value through profit or loss are recognized in profit or loss. Translation differences on available for sale nonmonetary items (equity securities) are included in other comprehensive income and recognized in the Consolidated Statement of Income when the non-monetary item is sold as part of the overall gain or loss on sale of the item.

For purposes of translation into the presentation currency, assets and liabilities of foreign operations are translated at the period end closing rate and items of income and expense are translated into euros at the rates prevailing on the dates of the transactions, or average rates of exchange where these approximate actual rates. The exchange differences arising on the translation of a foreign operation are included in other comprehensive income. For foreign operations that are subsidiaries, the amount of exchange differences attributable to any noncontrolling interests is recognized in noncontrolling interests.

Upon disposal of a foreign subsidiary and associate (which results in loss of control or significant influence over that operation) the total cumulative exchange differences recognized in other comprehensive income are reclassified to profit or loss.

Upon partial disposal of a foreign operation that is a subsidiary and which does not result in loss of control, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to noncontrolling interests as this is deemed a transaction with equity holders. For a partial disposal of an associate which does not result in a loss of significant influence, the proportionate share of cumulative exchange differences is reclassified from other comprehensive income to profit or loss.

Interest, Commissions and Fees

Revenue is recognized when the amount of revenue and associated costs can be reliably measured, it is probable that economic benefits associated with the transaction will be realized and the stage of completion of the transaction can be reliably measured. This concept is applied to the key revenue generating activities of the Group as follows.

Net Interest Income – Interest from all interest-bearing assets and liabilities is recognized as net interest income using the effective interest method. The effective interest rate is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or expense over the relevant period using the estimated future cash flows. The estimated future cash flows used in this calculation include those determined by the contractual terms of the asset or liability, all fees that are considered to be integral to the effective interest rate, direct and incremental transaction costs and all other premiums or discounts.

Once an impairment loss has been recognized on a loan, held-to-maturity investment or available for sale debt instruments, although the accrual of interest in accordance with the contractual terms of the instrument is discontinued, interest income is recognized based on the rate of interest that was used to discount future cash flows for the purpose of measuring the impairment loss. For a loan and held to maturity investment this would be the original effective interest rate, but a new effective interest rate would be established each time an available for sale debt instrument is impaired as impairment is measured to fair value and would be based on a current market rate.

The Group recognizes income from government grants which are associated to interest-bearing assets and liabilities in net interest income when there is reasonable assurance that it will receive the grants and will comply with the conditions attached to the grants.

Commissions and Fee Income – The recognition of fee revenue (including commissions) is determined by the purpose of the fees and the basis of accounting for any associated financial instruments. If there is an associated financial instrument, fees that are an integral part of the effective interest rate of that financial instrument are included within the effective yield calculation. However, if the financial instrument is carried at fair value through profit or loss, any associated fees are recognized in profit or loss when the instrument is initially recognized, provided there are no significant unobservable inputs used in determining its fair value. Fees earned from services that are provided over a specified service period are recognized over that service period. Fees earned for the completion of a specific service or significant event are recognized when the service has been completed or the event has occurred.

Loan commitment fees related to commitments that are accounted off-balance sheet are recognized in commissions and fee income over the life of the commitment if it is unlikely that the Group will enter into a specific lending arrangement. If it is probable that the Group will enter into a specific lending arrangement, the loan commitment fee is deferred until the origination of a loan and recognized as an adjustment to the loan's effective interest rate.

Performance-linked fees or fee components are recognized when the performance criteria are fulfilled.

The following fee income is predominantly earned from services that are provided over a period of time: investment fund management fees, fiduciary fees, custodian fees, portfolio and other management and advisory fees, credit-related fees and commission income. Fees predominantly earned from providing transaction-type services include underwriting fees, corporate finance fees and brokerage fees.

Expenses that are directly related and incremental to the generation of fee income are presented net in Commissions and Fee Income.

Arrangements involving multiple services or products – If the Group contracts to provide multiple products, services or rights to a counterparty, an evaluation is made as to whether an overall fee should be allocated to the different components of the arrangement for revenue recognition purposes. The assessment considers the value of items or services delivered to ensure that the Group's continuing involvement in other aspects of the arrangement are not essential to the items delivered. It also assesses the value of items not yet delivered and, if there is a right of return on delivered items, the probability of future delivery of remaining items or services. If it is determined that it is appropriate to look at the arrangements as separate components, the amounts received are allocated based on the relative value of each component.

If there is no objective and reliable evidence of the value of the delivered item or an individual item is required to be recognized at fair value then the residual method is used. The residual method calculates the amount to be recognized for the delivered component as being the amount remaining after allocating an appropriate amount of revenue to all other components.

Financial Assets and Liabilities

The Group classifies its financial assets and liabilities into the following categories: financial assets and liabilities at fair value through profit or loss, loans, held-to-maturity, financial assets available for sale ("AFS") and other financial liabilities. Appropriate classification of financial assets and liabilities is determined at the time of initial recognition or when reclassified in the Consolidated Balance Sheet.

Financial assets and financial liabilities classified at fair value through profit or loss and financial assets classified as AFS are recognized or derecognized on trade date if a regular way period for the instrument exist. Trade date is the date on which the Group commits to purchase or sell the asset or issue or repurchase the financial liability. Financial instruments measured at amortized cost are recognized on a settlement date basis.

Financial Assets and Liabilities at Fair Value through Profit or Loss

The Group classifies certain financial assets and financial liabilities as either held for trading or designated at fair value through profit or loss. They are carried at fair value and presented as financial assets at fair value through profit or loss and financial liabilities at fair value through profit or loss, respectively. Related realized and unrealized gains and losses are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss. Interest on interest earning assets such as trading loans and debt securities and dividends on equity instruments are presented in interest and similar income for financial instruments at fair value through profit or loss.

Trading Assets and Liabilities – Financial instruments are classified as held for trading if they have been originated, acquired or incurred principally for the purpose of selling or repurchasing them in the near term, or they form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking. Trading assets include debt and equity securities, derivatives held for trading purposes, commodities and trading loans. Trading liabilities consist primarily of derivative liabilities and short positions.

Financial Instruments Designated at Fair Value through Profit or Loss – Certain financial assets and liabilities that do not meet the definition of trading assets and liabilities are designated at fair value through profit or loss using the fair value option. To be designated at fair value through profit or loss, financial assets and liabilities must meet one of the following criteria: (1) the designation eliminates or significantly reduces a measurement or recognition inconsistency; (2) a group of financial assets or liabilities or both is managed and its performance is evaluated on a fair value basis in accordance with a documented risk management or investment strategy; or (3) the instrument contains one or more embedded derivatives unless: (a) the embedded derivative does not significantly modify the cash flows that otherwise would be required by the contract; or (b) it is clear with little or no analysis that separation is prohibited. In addition, the Group allows the fair value option to be designated only for those financial instruments for which a reliable estimate of fair value can be obtained. Financial assets and liabilities which are designated at fair value through profit or loss, under the fair value option, include repurchase and reverse repurchase agreements, certain loans and loan commitments, debt and equity securities and structured note liabilities.

Non-Participating Investment Contracts (“Investment Contracts”) – All of the Group’s investment contracts are unit-linked and do not contain significant insurance risk or discretionary participation features. The contract liabilities are determined using current unit prices multiplied by the number of units attributed to the contract holders as of the balance sheet date. As this amount represents fair value, the liabilities have been classified as financial liabilities at fair value through profit or loss. Deposits collected under investment contracts are accounted for as an adjustment to the investment contract liabilities. Investment income attributable to investment contracts is included in the Consolidated Statement of Income. Investment contract claims reflect the excess of amounts paid over the account balance released. Investment contract policyholders are charged fees for policy administration, investment management, surrenders or other contract services.

Loan Commitments

Certain loan commitments are classified as derivatives held for trading or designated at fair value through profit or loss under the fair value option. All other loan commitments remain off-balance sheet. Therefore, the Group does not recognize and measure changes in fair value of these off-balance sheet loan commitments that result from changes in market interest rates or credit spreads. However, as specified in the discussion “Impairment of Loans and Provision for Off-Balance sheet positions”, these off-balance sheet loan commitments are assessed for impairment individually and where appropriate, collectively.

Loans

Loans include originated and purchased non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and which are not classified as financial assets at fair value through profit or loss, held-to-maturity or financial assets AFS. An active market exists when quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm’s length basis.

Loans not acquired in a business combination or in an asset purchase are initially recognized at their transaction price representing the fair value, which is the cash amount advanced to the borrower. In addition, the net of direct and incremental transaction costs and fees are included in the initial carrying amount of loans. These loans are subsequently measured at amortized cost using the effective interest method less impairment.

Loans which have been acquired as either part of a business combination or as an asset purchase are initially recognized at fair value at the acquisition date. This includes loans for which an impairment loss had been established by the acquiree before their initial recognition by the Group. The fair value at the acquisition date incorporates expected cash flows which consider the credit quality of these loans including any incurred losses and becomes the new amortized cost base. Interest income is recognized using the effective interest method. Subsequent to the acquisition date the Group assesses whether there is objective evidence of impairment in line with the policies described in the section entitled “Impairment of Loans and Provision for Off-

Balance Sheet Positions". If the loans are determined to be impaired then a loan loss allowance is recognized with a corresponding charge to the provision for credit losses line in the Consolidated Statement of Income. Releases of such loan loss allowances established after their initial recognition are included in the provision for credit losses line. Subsequent improvements in the credit quality of such loans for which no loss allowance had been recorded are recognized immediately through an adjustment to the current carrying value and a corresponding gain is recognized in interest income.

Financial Instruments Held-to-Maturity

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and a fixed maturity that the Group has the positive intention and ability to hold to maturity and which are not classified as financial assets at fair value through profit or loss, loans or financial assets AFS.

Held-to-maturity investments are initially recorded at fair value plus any directly attributable transaction costs and are subsequently measured at amortized cost using the effective interest method. Subsequent to the acquisition date, the Group assesses whether there is objective evidence of impairment in line with the policies described in the section entitled "Impairment of Loans and Provision for Off-Balance Sheet provisions". If a held-to-maturity investment is considered impaired, then an impairment loss is recognized in the Consolidated Statement of Income.

Financial Assets Classified as Available for Sale

Financial assets that are classified as AFS are initially recognized at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset. The amortization of premiums and accretion of discount are recorded in net interest income. Financial assets classified as AFS are carried at fair value with the changes in fair value reported in other comprehensive income, unless the asset is subject to a fair value hedge, in which case changes in fair value resulting from the risk being hedged are recorded in other income. For monetary financial assets classified as AFS (debt instruments), changes in carrying amounts relating to changes in foreign exchange rate are recognized in the Consolidated Statement of Income and other changes in carrying amount are recognized in other comprehensive income as indicated above. For financial assets classified as AFS that are nonmonetary items (equity instruments), the fair value gain or loss is recognized in other comprehensive income, which also includes any related foreign exchange component.

Equity investments classified as AFS are assessed for impairment if objective evidence demonstrates a significant or prolonged decline in the fair value of the investment below cost. In the case of debt securities classified as AFS, impairment is assessed based on the same criteria as for loans.

If there is evidence of impairment, any amounts previously recognized in other comprehensive income are recognized in the Consolidated Statement of Income for the period, reported in net gains (losses) on financial assets available for sale. This impairment loss for the period is determined as the difference between the acquisition cost (net of any principal repayments and amortization) and current fair value of the asset less any impairment loss on that investment previously recognized in the Consolidated Statement of Income.

When an AFS debt security is impaired, any subsequent decreases in fair value are recognized in the Consolidated Statement of Income as it is considered further impairment. Any subsequent increases are also recognized in the Consolidated Statement of Income until the asset is no longer considered impaired. When the fair value of the AFS debt security recovers to at least amortized cost it is no longer considered impaired and subsequent changes in fair value are reported in other comprehensive income.

Reversals of impairment losses on equity investments classified as AFS are not reversed through the Consolidated Statement of Income; increases in their fair value after impairment are recognized in other comprehensive income.

Realized gains and losses are reported in net gains (losses) on financial assets available for sale. Generally, the weighted-average cost method is used to determine the cost of financial assets. Unrealized gains and losses recorded in other comprehensive income are transferred to the Consolidated Statement of Income on disposal of an available for sale asset and reported in net gains (losses) on financial assets available for sale.

Critical Accounting Estimates – Because the assessment of objective evidence of impairment require significant management judgment and the estimate of impairment could change from period to period based upon future events that may or may not occur, the Group considers the impairment of Financial Assets classified as Available for Sale to be a critical accounting estimate. For additional information see Note 7 "Net Gains (Losses) on Financial Assets Available for Sale".

Financial Liabilities

Except for financial liabilities at fair value through profit or loss, financial liabilities are measured at amortized cost using the effective interest method.

Financial liabilities include long-term and short-term debt issued which are initially measured at fair value, which is the consideration received, net of transaction costs incurred. Repurchases of issued debt in the market are treated as extinguishments and any related gain or loss is recorded in the Consolidated Statement of Income. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

Reclassification of Financial Assets

The Group may reclassify certain financial assets out of the financial assets at fair value through profit or loss classification (trading assets) and the AFS classification into the loans or held-to-maturity classification. For assets to be reclassified there must be a clear change in management intent with respect to the assets since initial recognition and the financial asset must meet the definition of a loan or held-to-maturity investment at the reclassification date. Additionally, there must be an intent and ability to hold the asset for the foreseeable future at the reclassification date. For held-to-maturity investments there must be a positive intention and ability to hold the asset until maturity.

Financial assets are reclassified at their fair value at the reclassification date. Any gain or loss already recognized in the Consolidated Statement of Income is not reversed. The fair value of the instrument at reclassification date becomes the new amortized cost of the instrument. The expected cash flows on the financial instruments are estimated at the reclassification date and these estimates are used to calculate a new effective interest rate for the instruments. If there is a subsequent increase in expected future cash flows on reclassified assets as a result of increased recoverability, the effect of that increase is recognized as an adjustment to the effective interest rate from the date of the change in estimate rather than as an adjustment to the carrying amount of the asset at the date of the change in estimate. If there is a subsequent decrease in expected future cash flows the asset would be assessed for impairment as discussed in the section entitled “Impairment of Loans and Provision for Off-Balance Sheet Positions”. Any changes in the timing of the cash flows of reclassified assets which are not deemed impaired are recorded as an adjustment to the carrying amount of the asset.

For instruments reclassified from AFS to loans or held-to-maturity, any unrealized gain or loss recognized in other comprehensive income is subsequently amortized into interest income using the effective interest rate of the instrument. If the instrument is subsequently impaired, any unrealized loss which is held in accumulated other comprehensive income for that instrument at that date is immediately recognized in the Consolidated Statement of Income.

To the extent that assets categorized as loans are repaid, restructured or eventually sold and the amount received is less than the carrying value at that time, then a loss would be recognized in the Consolidated Statement of Income as a component of the provision for credit losses, if the loan is impaired, or otherwise in other Income, if the loan is not impaired.

Offsetting of Financial Instruments

Financial assets and liabilities are offset, with the net amount presented in the Consolidated Balance Sheet, only if the Group holds a currently enforceable legal right to set off the recognized amounts and there is an intention to settle on a net basis or to realize an asset and settle the liability simultaneously. The legal right to set off the recognized amounts must be enforceable in both the normal course of business and in the event of default, insolvency or bankruptcy of both the Group and its counterparty. In all other situations they are presented gross. When financial assets and financial liabilities are offset in the Consolidated Balance Sheet, the associated income and expense items will also be offset in the Consolidated Statement of Income, unless specifically prohibited by an applicable accounting standard.

The majority of the offsetting applied by the Group relates to derivatives and repurchase and reverse repurchase agreements. A significant portion of offsetting is applied to interest rate derivatives and related cash margin balances, which are cleared through central clearing parties such as the London Clearing House. The Group also offsets repurchase and reverse repurchase agreements for which the Group has the right to set off and has the intent to settle on a net basis or to realize an asset and settle a liability simultaneously. For further information please refer to Note 18 “Offsetting Financial Assets and Financial Liabilities”.

Determination of Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an arm's length transaction between market participants at the measurement date. The fair value of instruments that are quoted in active markets is determined using the quoted prices where they represent those at which regularly and recently occurring transactions take place. The Group measures certain portfolios of financial assets and financial liabilities on the basis of their net risk exposures when the following criteria are met:

- The group of financial assets and liabilities is managed on the basis of its net exposure to a particular market risk (or risks) or to the credit risk of a particular counterparty, in accordance with a documented risk management strategy,
- the fair values are provided to key management personnel, and
- the financial assets and liabilities are measured at fair value through profit or loss.

This portfolio valuation approach is consistent with how the Group manages its net exposures to market and counterparty credit risks.

Critical Accounting Estimates – The Group uses valuation techniques to establish the fair value of instruments where prices quoted in active markets are not available. Therefore, where possible, parameter inputs to the valuation techniques are based on observable data derived from prices of relevant instruments traded in an active market. These valuation techniques involve some level of management estimation and judgment, the degree of which will depend on the price transparency for the instrument or market and the instrument's complexity.

In reaching estimates of fair value management judgment needs to be exercised. The areas requiring significant management judgment are identified, documented and reported to senior management as part of the valuation control process and the standard monthly reporting cycle. The specialist model validation and valuation control groups focus attention on the areas of subjectivity and judgment.

The level of management judgment required in establishing fair value of financial instruments for which there is a quoted price in an active market is usually minimal. Similarly there is little subjectivity or judgment required for instruments valued using valuation models which are standard across the industry and where all parameter inputs are quoted in active markets.

The level of subjectivity and degree of management judgment required is more significant for those instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less liquid or less observable. Management judgment is required in the selection and application of appropriate parameters, assumptions and modelling techniques. In particular, where data are obtained from infrequent market transactions then extrapolation and interpolation techniques must be applied. Where no market data are available for a particular instrument then pricing inputs are determined by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions, and making appropriate adjustment to reflect the actual instrument being valued and current market conditions. Where different valuation techniques indicate a range of possible fair values for an instrument then management has to decide what point within the range of estimates appropriately represents the fair value. Further, some valuation adjustments may require the exercise of management judgment to achieve fair value.

Under IFRS, the financial assets and liabilities carried at fair value are required to be disclosed according to the inputs to the valuation method that are used to determine their fair value. Specifically, segmentation is required between those valued using quoted market prices in an active market (level 1), valuation techniques based on observable parameters (level 2) and valuation techniques using significant unobservable parameters (level 3). Management judgment is required in determining the category to which certain instruments should be allocated. This specifically arises when the valuation is determined by a number of parameters, some of which are observable and others are not. Further, the classification of an instrument can change over time to reflect changes in market liquidity and therefore price transparency.

The Group provides a sensitivity analysis of the impact upon the level 3 financial instruments of using a reasonably possible alternative for the unobservable parameter. The determination of reasonably possible alternatives requires significant management judgment.

For financial instruments measured at amortized cost (which includes loans, deposits and short and long term debt issued) the Group discloses the fair value. Generally there is limited or no trading activity in these instruments and therefore the fair value determination requires significant management judgment.

For further discussion of the valuation methods and controls and quantitative disclosures with respect to the determination of fair value, please refer to Note 13 "Financial Instruments carried at Fair Value" and Note 14 "Fair Value of Financial Instruments not carried at Fair Value".

Recognition of Trade Date Profit

If there are significant unobservable inputs used in the valuation technique, the financial instrument is recognized at the transaction price and any profit implied from the valuation technique at trade date is deferred.

Using systematic methods, the deferred amount is recognized over the period between trade date and the date when the market is expected to become observable, or over the life of the trade (whichever is shorter). Such methodology is used because it reflects the changing economic and risk profile of the instrument as the market develops or as the instrument itself progresses to maturity. Any remaining trade date deferred profit is recognized in the Consolidated Statement of Income when the transaction becomes observable or the Group enters into off-setting transactions that substantially eliminate the instrument's risk. In the rare circumstances that a trade date loss arises, it would be recognized at inception of the transaction to the extent that it is probable that a loss has been incurred and a reliable estimate of the loss amount can be made.

Critical Accounting Estimates – Management judgment is required in determining whether there exist significant unobservable inputs in the valuation technique. Once deferred, the decision to subsequently recognize the trade date profit requires a careful assessment of the then current facts and circumstances supporting observability of parameters and/or risk mitigation.

Derivatives and Hedge Accounting

Derivatives are used to manage exposures to interest rate, foreign currency, credit and other market price risks, including exposures arising from forecast transactions. All freestanding contracts that are considered derivatives for accounting purposes are carried at fair value on the Consolidated Balance Sheet regardless of whether they are held for trading or nontrading purposes.

The changes in fair value on derivatives held for trading are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss.

Embedded Derivatives

Some hybrid contracts contain both a derivative and a non-derivative component. In such cases, the derivative component is termed an embedded derivative, with the non-derivative component representing the host contract. If the economic characteristics and risks of embedded derivatives are not closely related to those of the host contract and the hybrid contract itself is not carried at fair value through profit or loss, the embedded derivative is bifurcated and reported at fair value, with gains and losses recognized in net gains (losses) on financial assets/liabilities at fair value through profit or loss. The host contract will continue to be accounted for in accordance with the appropriate accounting standard. The carrying amount of an embedded derivative is reported in the same Consolidated Balance Sheet line item as the host contract. Certain hybrid instruments have been designated at fair value through profit or loss using the fair value option.

Hedge Accounting

For accounting purposes there are three possible types of hedges: (1) hedges of changes in the fair value of assets, liabilities or unrecognized firm commitments (fair value hedges); (2) hedges of the variability of future cash flows from highly probable forecast transactions and floating rate assets and liabilities (cash flow hedges); and (3) hedges of the translation adjustments resulting from translating the functional currency financial statements of foreign operations into the presentation currency of the parent (hedges of net investments in foreign operations).

When hedge accounting is applied, the Group designates and documents the relationship between the hedging instrument and the hedged item as well as its risk management objective and strategy for undertaking the hedging transactions and the nature of the risk being hedged. This documentation includes a description of how the Group will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Hedge effectiveness is assessed at inception and throughout the term of each hedging relationship. Hedge effectiveness is always assessed, even when the terms of the derivative and hedged item are matched.

Hedging derivatives are reported as other assets and other liabilities. In the event that a derivative is subsequently de-designated from a hedging relationship, it is transferred to financial assets/liabilities at fair value through profit or loss.

For hedges of changes in fair value, the changes in the fair value of the hedged asset, liability or unrecognized firm commitment, or a portion thereof, attributable to the risk being hedged, are recognized in the Consolidated Statement of Income along with changes in the entire fair value of the derivative. When hedging interest rate risk, any interest accrued or paid on both the derivative and the hedged item is reported in interest income or expense and the unrealized gains and losses from the hedge accounting fair value adjustments are reported in other income. When hedging the foreign exchange risk of an AFS security, the fair value adjustments related to the security's foreign exchange exposures are also recorded in other income. Hedge ineffectiveness is reported in other income and is measured as the net effect of changes in the fair value of the hedging instrument and changes in the fair value of the hedged item arising from changes in the market rate or price related to the risk(s) being hedged.

If a fair value hedge of a debt instrument is discontinued prior to the instrument's maturity because the derivative is terminated or the relationship is de-designated, any remaining interest rate-related fair value adjustments made to the carrying amount of the debt instrument (basis adjustments) are amortized to interest income or expense over the remaining term of the original hedging relationship. For other types of fair value adjustments and whenever a fair value hedged asset or liability is sold or otherwise derecognized, any basis adjustments are included in the calculation of the gain or loss on derecognition.

For hedges of variability in future cash flows, there is no change to the accounting for the hedged item and the derivative is carried at fair value, with changes in value reported initially in other comprehensive income to the extent the hedge is effective. These amounts initially recorded in other comprehensive income are subsequently reclassified into the Consolidated Statement of Income in the same periods during which the forecast transaction affects the Consolidated Statement of Income. Thus, for hedges of interest rate risk, the amounts are amortized into interest income or expense at the same time as the interest is accrued on the hedged transaction.

Hedge ineffectiveness is recorded in other income and is measured as changes in the excess (if any) in the absolute cumulative change in fair value of the actual hedging derivative over the absolute cumulative change in the fair value of the hypothetically perfect hedge.

When hedges of variability in cash flows attributable to interest rate risk are discontinued, amounts remaining in accumulated other comprehensive income are amortized to interest income or expense over the remaining life of the original hedge relationship, unless the hedged transaction is no longer expected to occur in which case the amount will be reclassified into other income immediately. When hedges of variability in cash flows attributable to other risks are discontinued, the related amounts in accumulated other comprehensive income are reclassified into either the same Consolidated Statement of Income caption and period as profit or loss from the forecast transaction, or into other income when the forecast transaction is no longer expected to occur.

For hedges of the translation adjustments resulting from translating the functional currency financial statements of foreign operations (hedges of net investments in foreign operations) into the functional currency of the parent, the portion of the change in fair value of the derivative due to changes in the spot foreign exchange rates is recorded as a foreign currency translation adjustment in other comprehensive income to the extent the hedge is effective; the remainder is recorded as other income in the Consolidated Statement of Income.

Changes in fair value of the hedging instrument relating to the effective portion of the hedge are subsequently recognized in profit or loss on disposal of the foreign operations.

Impairment of Loans and Provision for Off-Balance Sheet Positions

The Group first assesses whether objective evidence of impairment exists individually for loans that are individually significant. It then assesses collectively for loans that are not individually significant and loans which are significant but for which there is no objective evidence of impairment under the individual assessment.

To allow management to determine whether a loss event has occurred on an individual basis, all significant counterparty relationships are reviewed periodically. This evaluation considers current information and events related to the counterparty, such as the counterparty experiencing significant financial difficulty or a breach of contract, for example, default or delinquency in interest or principal payments.

If there is evidence of impairment leading to an impairment loss for an individual counterparty relationship, then the amount of the loss is determined as the difference between the carrying amount of the loan(s), including accrued interest, and the present value of expected future cash flows discounted at the loan's original effective interest rate or the effective interest rate established upon reclassification to loans, including cash flows that may result from foreclosure less costs for obtaining and selling the collateral. The carrying amount of the loans is reduced by the use of an allowance account and the amount of the loss is recognized in the Consolidated Statement of Income as a component of the provision for credit losses.

The collective assessment of impairment is to establish an allowance amount relating to loans that are either individually significant but for which there is no objective evidence of impairment, or are not individually significant but for which there is, on a portfolio basis, a loss amount that is probable of having occurred and is reasonably estimable. The loss amount has three components. The first component is an amount for transfer and currency convertibility risks for loan exposures in countries where there are serious doubts about the ability of counterparties to comply with the repayment terms due to the economic or political situation prevailing in the respective country of domicile. This amount is calculated using ratings for country risk and transfer risk which are established and regularly reviewed for each country in which the Group does business. The second component is an allowance amount representing the incurred losses on the portfolio of smaller-balance homogeneous loans, which are loans to individuals and small business customers of the private and retail business. The loans are grouped according to similar credit risk characteristics and the allowance for each group is determined using statistical models based on historical experience. The third component represents an estimate of incurred losses inherent in the group of loans that have not yet been individually identified or measured as part of the smaller-balance homogeneous loans. Loans that were found not to be impaired when evaluated on an individual basis are included in the scope of this component of the allowance.

Once a loan is identified as impaired, although the accrual of interest in accordance with the contractual terms of the loan is discontinued, the accretion of the net present value of the written down amount of the loan due to the passage of time is recognized as interest income based on the original effective interest rate of the loan.

At each balance sheet date, all impaired loans are reviewed for changes to the present value of expected future cash flows discounted at the loan's original effective interest rate. Any change to the previously recognized impairment loss is recognized as a change to the allowance account and recorded in the Consolidated Statement of Income as a component of the provision for credit losses.

When it is considered that there is no realistic prospect of recovery and all collateral has been realized or transferred to the Group, the loan and any associated allowance is charged off (the loan and the related allowance are removed from the balance sheet). Individually significant loans where specific loan loss provisions are in place are evaluated at least quarterly on a case-by-case basis. For this category of loans, the number of days past due is an indicator for a charge-off but is not a determining factor. A charge-off will only take place after considering all relevant information, such as the occurrence of a significant change in the borrower's financial position such that the borrower can no longer pay the obligation, or the proceeds from the collateral are insufficient to completely satisfy the current carrying amount of the loan.

For collectively assessed loans, which are primarily mortgages and consumer finance loans, the timing of a charge-off depends on whether there is any underlying collateral and the Group's estimate of the amount collectible and the legal requirements in the jurisdiction in which the loan is originated.

Subsequent recoveries, if any, are credited to the allowance account and are recorded in the Consolidated Statement of Income as a component of the provision for credit losses.

The process to determine the provision for off-balance sheet positions is similar to the methodology used for loans. Any loss amounts are recognized as an allowance in the Consolidated Balance Sheet within provisions and charged to the Consolidated Statement of Income as a component of the provision for credit losses.

If in a subsequent period the amount of a previously recognized impairment loss decreases and the decrease is due to an event occurring after the impairment was recognized, the impairment loss is reversed by reducing the allowance account accordingly. Such reversal is recognized in profit or loss.

Critical Accounting Estimates – The accounting estimates and judgments related to the impairment of loans and provision for off-balance sheet positions is a critical accounting estimate because the underlying assumptions used for both the individually and collectively assessed impairment can change from period to period and may significantly affect the Group's results of operations.

In assessing assets for impairments, management judgment is required, particularly in circumstances of economic and financial uncertainty, such as those of the recent financial crisis, when developments and changes to expected cash flows can occur both with greater rapidity and less predictability. The actual amount of the future cash flows and their timing may differ from the estimates used by management and consequently may cause actual losses to differ from reported allowances.

For those loans which are deemed to be individually significant, the determination of the impairment allowance often requires the use of considerable judgment concerning such matters as local economic conditions, the financial performance of the counterparty and the value of any collateral held, for which there may not be a readily accessible market.

The determination of the allowance for portfolios of loans of smaller balance homogenous loans and for those loans which are individually significant but for which no objective evidence of impairment exists is calculated using statistical models. Such statistical models incorporate numerous estimates and judgments. The Group performs a regular review of the models and underlying data and assumptions. The probability of defaults, loss recovery rates and judgments concerning ability of borrowers in foreign countries to transfer the foreign currency necessary to comply with debt repayments, amongst other things, are incorporated into this review.

The quantitative disclosures are provided in Note 19 "Loans" and Note 20 "Allowance for Credit Losses".

Derecognition of Financial Assets and Liabilities

Financial Asset Derecognition

A financial asset is considered for derecognition when the contractual rights to the cash flows from the financial asset expire, or the Group has either transferred the contractual right to receive the cash flows from that asset, or has assumed an obligation to pay those cash flows to one or more recipients, subject to certain criteria.

The Group derecognizes a transferred financial asset if it transfers substantially all the risks and rewards of ownership.

The Group enters into transactions in which it transfers previously recognized financial assets but retains substantially all the associated risks and rewards of those assets; for example, a sale to a third party in which the Group enters into a concurrent total return swap with the same counterparty. These types of transactions are accounted for as secured financing transactions.

In transactions in which substantially all the risks and rewards of ownership of a financial asset are neither retained nor transferred, the Group derecognizes the transferred asset if control over that asset is not retained, i.e., if the transferee has the practical ability to sell the transferred asset. The rights and obligations retained in the transfer are recognized separately as assets and liabilities, as appropriate. If control over the asset is retained, the Group continues to recognize the asset to the extent of its continuing involvement, which is determined by the extent to which it remains exposed to changes in the value of the transferred asset.

The derecognition criteria are also applied to the transfer of part of an asset, rather than the asset as a whole, or to a group of similar financial assets in their entirety, when applicable. If transferring a part of an asset, such part must be a specifically identified cash flow, a fully proportionate share of the asset, or a fully proportionate share of a specifically-identified cash flow.

If an existing financial asset is replaced by another asset from the same counterparty on substantially different terms, or if the terms of the financial asset are substantially modified (due to forbearance measures or otherwise), the existing financial asset is derecognized and a new asset is recognized. Any difference between the respective carrying amounts is recognized in the Consolidated Statement of Income.

Securitization

The Group securitizes various consumer and commercial financial assets, which is achieved via the transfer of these assets to a structured entity, which issues securities to investors to finance the acquisition of the assets. Financial assets awaiting securitization are classified and measured as appropriate under the policies in the “Financial Assets and Liabilities” section. If the structured entity is not consolidated then the transferred assets may qualify for derecognition in full or in part, under the policy on derecognition of financial assets. Synthetic securitization structures typically involve derivative financial instruments for which the policies in the “Derivatives and Hedge Accounting” section would apply. Those transfers that do not qualify for derecognition may be reported as secured financing or result in the recognition of continuing involvement liabilities. The investors and the securitization vehicles generally have no recourse to the Group’s other assets in cases where the issuers of the financial assets fail to perform under the original terms of those assets.

Interests in the securitized financial assets may be retained in the form of senior or subordinated tranches, interest only strips or other residual interests (collectively referred to as “retained interests”). Provided the Group’s retained interests do not result in consolidation of a structured entity, nor in continued recognition of the transferred assets, these interests are typically recorded in financial assets at fair value through profit or loss and carried at fair value. Consistent with the valuation of similar financial instruments, the fair value of retained tranches or the financial assets is initially and subsequently determined using market price quotations where available or internal pricing models that utilize variables such as yield curves, prepayment speeds, default rates, loss severity, interest rate volatilities and spreads. The assumptions used for pricing are based on observable transactions in similar securities and are verified by external pricing sources, where available. Where observable transactions in similar securities and other external pricing sources are not available, management judgment must be used to determine fair value. The Group may also periodically hold interests in securitized financial assets and record them at amortized cost.

In situations where the Group has a present obligation (either legal or constructive) to provide financial support to an unconsolidated securitization entity a provision will be created if the obligation can be reliably measured and it is probable that there will be an outflow of economic resources required to settle it.

When an asset is derecognized a gain or loss equal to the difference between the consideration received and the carrying amount of the transferred asset is recorded. When a part of an asset is derecognized, gains or losses on securitization depend in part on the carrying amount of the transferred financial assets, allocated between the financial assets derecognized and the retained interests based on their relative fair values at the date of the transfer.

Derecognition of Financial Liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. If an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the Consolidated Statement of Income.

Repurchase and Reverse Repurchase Agreements

Securities purchased under resale agreements ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralized financings and are recognized initially at fair value, being the amount of cash disbursed and received, respectively. The party disbursing the cash takes possession of the securities serving as collateral for the financing and having a market value equal to, or in excess of, the principal amount loaned. The securities received under reverse repurchase agreements and securities delivered under repurchase agreements are not recognized on, or derecognized from, the balance sheet, because the risks and rewards of ownership are not obtained nor relinquished. Securities delivered under repurchase agreements which are not derecognized from the balance sheet and where the counterparty has the right by contract or custom to sell or repledge the collateral are disclosed in Note 22 "Assets Pledged and Received as Collateral".

The Group has chosen to apply the fair value option to certain repurchase and reverse repurchase portfolios that are managed on a fair value basis.

Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements is reported as interest income and interest expense, respectively.

Securities Borrowed and Securities Loaned

Securities borrowed transactions generally require the Group to deposit cash with the securities lender. In a securities loaned transaction, the Group generally receives either cash collateral, in an amount equal to or in excess of the market value of securities loaned, or securities. The Group monitors the fair value of securities borrowed and securities loaned and additional collateral is disbursed or obtained, if necessary.

The amount of cash advanced or received is recorded as securities borrowed and securities loaned, respectively, in the Consolidated Balance Sheet.

The securities borrowed are not themselves recognized in the financial statements. If they are sold to third parties, the obligation to return the securities is recorded as a financial liability at fair value through profit or loss and any subsequent gain or loss is included in the Consolidated Statement of Income in net gains (losses) on financial assets/ liabilities at fair value through profit or loss. Securities lent to counterparties are also retained on the Consolidated Balance Sheet.

Fees received or paid are reported in interest income and interest expense, respectively. Securities lent to counterparties which are not derecognized from the Consolidated Balance Sheet and where the counterparty has the right by contract or custom to sell or repledge the collateral are disclosed are disclosed in Note 22 "Assets Pledged and Received as Collateral".

Goodwill and Other Intangible Assets

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition.

For the purpose of calculating goodwill, fair values of acquired assets, liabilities and contingent liabilities are determined by reference to market values or by discounting expected future cash flows to present value. This discounting is either performed using market rates or by using risk-free rates and risk-adjusted expected future cash flows. Any noncontrolling interests in the acquiree is measured either at fair value or at the noncontrolling interests' proportionate share of the acquiree's identifiable net assets (this is determined for each business combination).

Goodwill on the acquisition of subsidiaries is capitalized and reviewed for impairment annually or more frequently if there are indications that impairment may have occurred. For the purposes of impairment testing, goodwill acquired in a business combination is allocated to cash-generating units (“CGUs”), which are the smallest identifiable groups of assets that generate cash inflows largely independent of the cash inflows from other assets or groups of assets and that are expected to benefit from the synergies of the combination and considering the business level at which goodwill is monitored for internal management purposes. In identifying whether cash inflows from an asset (or a group of assets) are largely independent of the cash inflows from other assets (or groups of assets) various factors are considered, including how management monitors the entity’s operations or makes decisions about continuing or disposing of the entity’s assets and operations.

If goodwill has been allocated to a CGU and an operation within that unit is disposed of, the attributable goodwill is included in the carrying amount of the operation when determining the gain or loss on its disposal.

Certain non-integrated investments are not allocated to a CGU. Impairment testing is performed individually for each of these assets.

Corporate assets are allocated to a CGU when the allocation can be done on a reasonable and consistent basis. If this is not possible, the individual CGU is tested without the corporate assets. They are then tested on the level of the minimum collection of CGUs to which they can be allocated on a reasonable and consistent basis.

Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. Intangible assets that have a finite useful life are stated at cost less any accumulated amortization and accumulated impairment losses. Customer-related intangible assets that have a finite useful life are amortized over periods of between 1 and 20 years on a straight-line basis based on their expected useful life. These assets are tested for impairment and their useful lives reaffirmed at least annually.

Certain intangible assets have an indefinite useful life and hence are not amortized, but are tested for impairment at least annually or more frequently if events or changes in circumstances indicate that impairment may have occurred.

Costs related to software developed or obtained for internal use are capitalized if it is probable that future economic benefits will flow to the Group and the cost can be measured reliably. Capitalized costs are amortized using the straight-line method over the asset’s useful life which is deemed to be either three, five or ten years. Eligible costs include external direct costs for materials and services, as well as payroll and payroll-related costs for employees directly associated with an internal-use software project. Overhead costs, as well as costs incurred during the research phase or after software is ready for use, are expensed as incurred. Capitalized software costs are tested for impairment either annually if still under development or any time when there is an indication of impairment once the software is in use.

Critical Accounting Estimates – The determination of the recoverable amount in the impairment assessment of non-financial assets requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques, or a combination thereof, necessitating management to make subjective judgments and assumptions. Because these estimates and assumptions could result in significant differences to the amounts reported if underlying circumstances were to change, the Group considers these estimates to be critical.

The quantitative disclosures are provided in Note 25 “Goodwill and Other Intangible Assets”.

Provisions

Provisions are recognized if the Group has a present legal or constructive obligation as a result of past events, if it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation as of the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to be required to settle the obligation, using a pre-tax rate that reflects the current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognized as interest expense.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party (for example, because the obligation is covered by an insurance policy), an asset is recognized if it is virtually certain that reimbursement will be received.

Critical Accounting Estimates – The use of estimates is important in determining provisions for potential losses that may arise from litigation, regulatory proceedings and uncertain income tax positions. The Group estimates and provides for potential losses that may arise out of litigation, regulatory proceedings and uncertain income tax positions to the extent that such losses are probable and can be estimated, in accordance with IAS 37, “Provisions, Contingent Liabilities and Contingent Assets” or IAS 12, “Income Taxes”, respectively. Significant judgment is required in making these estimates and the Group’s final liabilities may ultimately be materially different.

Contingencies in respect of legal matters are subject to many uncertainties and the outcome of individual matters is not predictable with assurance. Significant judgment is required in assessing probability and making estimates in respect of contingencies, and the Group’s final liability may ultimately be materially different. The Group’s total liability in respect of litigation, arbitration and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case, the Group’s experience and the experience of others in similar cases, and the opinions and views of legal counsel. Predicting the outcome of the Group’s litigation matters is inherently difficult, particularly in cases in which claimants seek substantial or indeterminate damages. See Note 29 “Provisions” for information on the Group’s judicial, regulatory and arbitration proceedings.

Income Taxes

The Group recognizes the current and deferred tax consequences of transactions that have been included in the consolidated financial statements using the provisions of the respective jurisdictions’ tax laws. Current and deferred taxes are recognized in profit or loss except to the extent that the tax relates to items that are recognized directly in equity or other comprehensive income in which case the related tax is recognized either directly in equity or other comprehensive income accordingly.

Deferred tax assets and liabilities are recognized for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profit will be available against which those unused tax losses, unused tax credits and deductible temporary differences can be utilized.

Deferred tax assets and liabilities are measured based on the tax rates that are expected to apply in the period that the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Current tax assets and liabilities are offset when (1) they arise from the same tax reporting entity or tax group of reporting entities, (2) the legally enforceable right to offset exists and (3) they are intended to be settled net or realized simultaneously.

Deferred tax assets and liabilities are offset when the legally enforceable right to offset current tax assets and liabilities exists and the deferred tax assets and liabilities relate to income taxes levied by the same taxing authority on either the same tax reporting entity or tax group of reporting entities.

Deferred tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, branches and associates and interests in joint ventures except when the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future. Deferred income tax assets are provided on deductible temporary differences arising from such investments only to the extent that it is probable that the differences will reverse in the foreseeable future and sufficient taxable income will be available against which those temporary differences can be utilized.

Deferred tax related to fair value re-measurement of AFS investments, cash flow hedges and other items, which are charged or credited directly to other comprehensive income, is also credited or charged directly to other comprehensive income and subsequently recognized in the Consolidated Statement of Income once the underlying transaction or event to which the deferred tax relates is recognized in the Consolidated Statement of Income.

For share-based payment transactions, the Group may receive a tax deduction related to the compensation paid in shares. The amount deductible for tax purposes may differ from the cumulative compensation expense recorded. At any reporting date, the Group must estimate the expected future tax deduction based on the current share price. The associated current and deferred tax consequences are recognized as income or expense in the Consolidated Statement of Income for the period. If the amount deductible, or expected to be deductible, for tax purposes exceeds the cumulative compensation expense, the excess tax benefit is recognized directly in equity.

Critical Accounting Estimates – In determining the amount of deferred tax assets, the Group uses historical tax capacity and profitability information and, if relevant, forecasted operating results based upon approved business plans, including a review of the eligible carry-forward periods, available tax planning opportunities and other relevant considerations. Each quarter, the Group re-evaluates its estimate related to deferred tax assets, including its assumptions about future profitability.

The Group believes that the accounting estimate related to the deferred tax assets is a critical accounting estimate because the underlying assumptions can change from period to period and requires significant management judgment. For example, tax law changes or variances in future projected operating performance could result in a change of the deferred tax asset. If the Group was not able to realize all or part of its net deferred tax assets in the future, an adjustment to its deferred tax assets would be charged to income tax expense or directly to equity in the period such determination was made. If the Group was to recognize previously unrecognized deferred tax assets in the future, an adjustment to its deferred tax asset would be credited to income tax expense or directly to equity in the period such determination was made.

For further information on the Group’s deferred taxes (including quantitative disclosures on recognized deferred tax assets) see Note 36 “Income Taxes”.

Business Combinations and Noncontrolling Interests

The Group uses the acquisition method to account for business combinations. At the date the Group obtains control of the subsidiary, the cost of an acquisition is measured at the fair value of the consideration given, including any cash or non-cash consideration (equity instruments) transferred, any contingent consideration, any previously held equity interest in the acquiree and liabilities incurred or assumed. The excess of the aggregate of the cost of an acquisition and any noncontrolling interests in the acquiree over the Group’s share of the fair value of the identifiable net assets acquired is recorded as goodwill. If the aggregate of the acquisition cost and any noncontrolling interests is below the fair value of the identifiable net assets (negative goodwill), a gain is reported in other income. Acquisition-related costs are recognized as expenses in the period in which they are incurred.

In business combinations achieved in stages (“step acquisitions”), a previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts recognized in prior periods in other comprehensive income associated with the previously held investment would be recognized on the same basis as would be required if the Group had directly disposed of the previously held equity interest.

Noncontrolling interests are shown in the consolidated balance sheet as a separate component of equity, which is distinct from the Group’s shareholders’ equity. The net income attributable to noncontrolling interests is separately disclosed on the face of the Consolidated Statement of Income. Changes in the ownership interest in subsidiaries which do not result in a change of control are treated as transactions between equity holders and are reported in additional paid-in capital (“APIC”).

Non-Current Assets Held for Sale

Individual non-current non-financial assets (and disposal groups) are classified as held for sale if they are available for immediate sale in their present condition subject only to the customary sales terms of such assets (and disposal groups) and their sale is considered highly probable. For a sale to be highly probable, management must be committed to a sales plan and actively looking for a buyer. Furthermore, the assets (and disposal groups) must be actively marketed at a reasonable sales price in relation to their current fair value and the sale should be expected to be completed within one year. Non-current non-financial assets (and disposal groups) which meet the criteria for held for sale classification are measured at the lower of their carrying amount and fair value less costs to sell and are presented within “Other assets” and “Other liabilities” in the balance sheet. The comparatives are not represented when non-current assets (and disposal groups) are classified as held for sale. If the disposal group contains financial instruments, no adjustment to their carrying amounts is permitted.

Property and Equipment

Property and equipment includes own-use properties, leasehold improvements, furniture and equipment and software (operating systems only). Own-use properties are carried at cost less accumulated depreciation and accumulated impairment losses. Depreciation is generally recognized using the straight-line method over the estimated useful lives of the assets. The range of estimated useful lives is 25 to 50 years for property and 3 to 10 years for furniture and equipment (including initial improvements to purchased buildings). Leasehold improvements are capitalized and subsequently depreciated on a straight-line basis over the shorter of the term of the lease and the estimated useful life of the improvement, which generally ranges from 3 to 18 years. Depreciation of property and equipment is included in general and administrative expenses. Maintenance and repairs are also charged to general and administrative expenses. Gains and losses on disposals are included in other income.

Property and equipment are assessed for any indication of impairment at each quarterly reporting date. If such indication exists, the recoverable amount, which is the higher of fair value less costs to sell and value in use, must be estimated and an impairment charge is recorded to the extent the recoverable amount is less than its carrying amount. Value in use is the present value of the future cash flows expected to be derived from the asset. After the recognition of impairment of an asset, the depreciation charge is adjusted in future periods to reflect the asset's revised carrying amount. If an impairment is later reversed, the depreciation charge is adjusted prospectively.

Properties leased under a finance lease are capitalized as assets in property and equipment and depreciated over the terms of the leases.

Financial Guarantees

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

The Group has chosen to apply the fair value option to certain written financial guarantees that are managed on a fair value basis. Financial guarantees that the Group has not designated at fair value are recognized initially in the financial statements at fair value on the date the guarantee is given. Subsequent to initial recognition, the Group's liabilities under such guarantees are measured at the higher of the amount initially recognized, less cumulative amortization, and the best estimate of the expenditure required to settle any financial obligation as of the balance sheet date. These estimates are determined based on experience with similar transactions and history of past losses, and management's determination of the best estimate.

Any increase in the liability relating to guarantees is recorded in the Consolidated Statement of Income in provision for credit losses.

Leasing Transactions

The Group enters into lease contracts, predominantly for premises, as a lessee. The terms and conditions of these contracts are assessed and the leases are classified as operating leases or finance leases according to their economic substance at inception of the lease.

Assets held under finance leases are initially recognized on the consolidated balance sheet at an amount equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheet as a finance lease obligation. The discount rate used in calculating the present value of the minimum lease payments is either the interest rate implicit in the lease, if it is practicable to determine, or the incremental borrowing rate. Contingent rentals are recognized as an expense in the periods in which they are incurred.

Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences when the lessee controls the physical use of the property. Lease incentives are treated as a reduction of rental expense and are also recognized over the lease term on a straight-line basis. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

Employee Benefits

Pension Benefits

The Group provides a number of pension plans. In addition to defined contribution plans, there are retirement benefit plans accounted for as defined benefit plans. The assets of all the Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of salary and are expensed based on employee services rendered, generally in the year of contribution.

All retirement benefit plans accounted for as defined benefit plans are valued using the projected unit-credit method to determine the present value of the defined benefit obligation and the related service costs. Under this method, the determination is based on actuarial calculations which include assumptions about demographics, salary increases and interest and inflation rates. Actuarial gains and losses are recognized in other comprehensive income and presented in equity in the period in which they occur. The majority of the Group's benefit plans is funded.

Other Post-Employment Benefits

In addition, the Group maintains unfunded contributory post-employment medical plans for a number of current and retired employees who are mainly located in the United States. These plans pay stated percentages of eligible medical and dental expenses of retirees after a stated deductible has been met. The Group funds these plans on a cash basis as benefits are due. Analogous to retirement benefit plans these plans are valued using the projected unit-credit method. Actuarial gains and losses are recognized in full in the period in which they occur in other comprehensive income and presented in equity.

Refer to Note 35 “Employee Benefits” for further information on the accounting for pension benefits and other post-employment benefits.

Termination benefits

Termination benefits arise when employment is terminated by the Group before the normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits as a liability and an expense if the Group is demonstrably committed to a detailed formal plan without realistic possibility of withdrawal. In the case of an offer made to encourage voluntary redundancy, termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than twelve months after the end of the reporting period are discounted to their present value. The discount rate is determined by reference to market yields on high-quality corporate bonds.

Share-Based Compensation

Compensation expense for awards classified as equity instruments is measured at the grant date based on the fair value of the share-based award. For share awards, the fair value is the quoted market price of the share reduced by the present value of the expected dividends that will not be received by the employee and adjusted for the effect, if any, of restrictions beyond the vesting date. In case an award is modified such that its fair value immediately after modification exceeds its fair value immediately prior to modification, a remeasurement takes place and the resulting increase in fair value is recognized as additional compensation expense.

The Group records the offsetting amount to the recognized compensation expense in additional paid-in capital (“APIC”). Compensation expense is recorded on a straight-line basis over the period in which employees perform services to which the awards relate or over the period of the tranches for those awards delivered in tranches. Estimates of expected forfeitures are periodically adjusted in the event of actual forfeitures or for changes in expectations. The timing of expense recognition relating to grants which, due to early retirement provisions, include a nominal but non-substantive service period are accelerated by shortening the amortization period of the expense from the grant date to the date when the employee meets the eligibility criteria for the award, and not the vesting date. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately.

Compensation expense for share-based awards payable in cash is remeasured to fair value at each balance sheet date and recognized over the vesting period in which the related employee services are rendered. The related obligations are included in other liabilities until paid.

Obligations to Purchase Common Shares

Forward purchases of Deutsche Bank shares, and written put options where Deutsche Bank shares are the underlying, are reported as obligations to purchase common shares if the number of shares is fixed and physical settlement for a fixed amount of cash is required. At inception, the obligation is recorded at the present value of the settlement amount of the forward or option. For forward purchases and written put options of Deutsche Bank shares, a corresponding charge is made to shareholders’ equity and reported as equity classified as an obligation to purchase common shares.

The liabilities are accounted for on an accrual basis, and interest costs, which consist of time value of money and dividends, on the liability are reported as interest expense. Upon settlement of such forward purchases and written put options, the liability is extinguished and the charge to equity is reclassified to common shares in treasury.

Deutsche Bank common shares subject to such forward contracts are not considered to be outstanding for purposes of basic earnings per share calculations, but are for dilutive earnings per share calculations to the extent that they are, in fact, dilutive.

Option and forward contracts on Deutsche Bank shares are classified as equity if the number of shares is fixed and physical settlement is required. All other contracts in which Deutsche Bank shares are the underlying are recorded as financial assets or liabilities at fair value through profit or loss.

Consolidated Statement of Cash Flows

For purposes of the consolidated statement of cash flows, the Group's cash and cash equivalents include highly liquid investments that are readily convertible into cash and which are subject to an insignificant risk of change in value. Such investments include cash and balances at central banks and demand deposits with banks.

The Group's assignment of cash flows to the operating, investing or financing category depends on the business model ("management approach"). For the Group the primary operating activity is to manage financial assets and financial liabilities. Therefore, the issuance and management of long-term borrowings is a core operating activity which is different than for a non-financial company, where borrowing is not a principal revenue producing activity and thus is part of the financing category.

The Group views the issuance of senior long-term debt as an operating activity. Senior long-term debt comprises structured notes and asset-backed securities, which are designed and executed by Corporate & Investment Bank business lines and which are revenue generating activities. The other component is debt issued by Treasury, which is considered interchangeable with other funding sources; all of the funding costs are allocated to business activities to establish their profitability.

Cash flows related to subordinated long-term debt and trust preferred securities are viewed differently than those related to senior-long term debt because they are managed as an integral part of the Group's capital, primarily to meet regulatory capital requirements. As a result they are not interchangeable with other operating liabilities, but can only be interchanged with equity and thus are considered part of the financing category.

The amounts shown in the consolidated statement of cash flows do not precisely match the movements in the consolidated balance sheet from one period to the next as they exclude non-cash items such as movements due to foreign exchange translation and movements due to changes in the group of consolidated companies.

Movements in balances carried at fair value through profit or loss represent all changes affecting the carrying value. This includes the effects of market movements and cash inflows and outflows. The movements in balances carried at fair value are usually presented in operating cash flows.

02 – Recently Adopted and New Accounting Pronouncements

New Accounting Pronouncements

The following accounting pronouncements were not effective as of December 31, 2017 and therefore have not been applied in preparing these financial statements.

IFRS 2 Share-based Payments

In June 2016, the IASB issued narrow-scope amendments to IFRS 2, "Share-based Payment" which clarify the accounting for certain types of share-based payment transactions. The amendments which were developed through the IFRS Interpretations Committee clarify the accounting for cash-settled share-based payment transactions that include a performance condition, the classification of share-based payment transactions with net settlement features and the accounting for modifications of share-based payment transactions from cash-settled to equity-settled. They are effective for annual periods beginning on or after January 1, 2018. The amendments will not have a material impact on the Group's consolidated financial statements. The amendments have been endorsed by the EU.

IFRS 9 Financial Instruments

In July 2014, the IASB issued the final version of IFRS 9 "Financial Instruments", which replaces IAS 39, "Financial Instruments: Recognition and Measurement". IFRS 9 introduces new requirements on how an entity should classify and measure financial assets, requires changes to the reporting of 'own credit' with respect to issued debt liabilities that are designated at fair value, replaces the current rules for impairment of financial assets and amends the requirements for hedge accounting. The standard also requires entities to provide users of financial statements with more informative and relevant disclosures. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The standard has been endorsed by the EU, except for the Amendment to IFRS 9 "Prepayment features with negative compensation" as discussed below.

The Group estimates the adoption of IFRS 9 to lead to an overall reduction in the Group's total shareholders' equity of € 0.9 billion before tax. € 0.7 billion of this impact is driven by the new impairment requirements of IFRS 9. These higher loan loss provisions and classification and measurement effects are partially offset by a €0.2 billion tax impact resulting in a post-tax impact on the Group's total shareholders' equity of € 0.7 billion. This translates to a reduction in the Group's CET 1 capital ratio of 8 basis points.

This estimate may change as a result of completion of the activities noted in the implementation program sections below and upon the Group filing its 2018 audited financial statements.

Implementation program

The Group has run a centrally managed IFRS 9 program sponsored by the Group's chief financial officer which has included business functions and subject matter experts on methodology, data sourcing and modelling, IT processing and reporting. The Group's implementation of IFRS 9 has covered performing an assessment of the population of financial instruments impacted by the classification and measurement requirements of IFRS 9 and developing an impairment methodology to support the calculation of the Expected Credit Loss allowance. The Group commenced in 2015 the development of an approach for reviewing business models and methodology for testing the Solely Payments of Principal and Interest criteria of IFRS 9. Concurrently, the Group also developed its approach for assessing significant increase in credit risk, incorporating forward looking information, including macro-economic factors (implemented in 2017), preparing the required IT systems and process architecture, as well as development of a related IFRS 9 governance and control framework. The Group has performed a final parallel run based on December 31, 2017 data.

Overall governance of the program's implementation has been through the Group's IFRS 9 Steering Committee and includes representation from Finance, Risk and IT. Guidance and training on IFRS 9 across the Group have been delivered across businesses and functions as part of the Group's control process and implementation program. The Group enhanced its governance environment to ensure an updated framework for classification and measurement, and impairment by implementing appropriate validations and controls over new key processes and significant areas of judgment. The specific process and business controls under this updated framework are being incorporated and finalized. Governance over the Expected Credit Loss calculation process is shared across Risk and Finance functions.

Classification and Measurement of Financial Assets and Liabilities

IFRS 9 requires that an entity's business model and a financial instrument's contractual cash flows will determine its classification and measurement in the financial statements. Upon initial recognition each financial asset will be classified as either fair value through profit or loss ('FVTPL'), amortized cost, or fair value through Other Comprehensive Income ('FVOCI'). As the requirements under IFRS 9 are different than the assessments under the existing IAS 39 rules, there will be some differences from the classification and measurement of financial assets under IAS 39, including whether to elect the fair value option on certain assets. The classification and measurement of financial liabilities remain largely unchanged under IFRS 9 from current requirements.

In 2015, the Group made an initial determination of business models and assessed the contractual cash flow characteristics of the financial assets within such business models to determine the potential classification and measurement changes as a result of IFRS 9. As a result of the initial analysis performed, in 2016 the Group identified a population of financial assets which are to be measured at either amortized cost or fair value through other comprehensive income, which will be subject to the IFRS 9 impairment rules. In 2017, the Group updated its business model assessments and completed outstanding classification decisions. On initial recognition of an equity investment not held for trading, the Group may on an investment-by-investment basis, irrevocably elect to present subsequent fair value changes in OCI. The Group has not made any such elections.

Where issued debt liabilities are designated at fair value, the fair value movements attributable to an entity's own credit risk will be recognized in Other Comprehensive Income rather than in the Statement of Income. The standard also allows the Group the option to elect to apply early the presentation of fair value movements of an entity's credit risk in Other Comprehensive Income prior to adopting IFRS 9 in full. The Group did not early adopt this requirement.

Impairment of Financial Assets

The impairment requirements of IFRS 9 apply to debt instruments that are measured at amortized cost or FVOCI, and off balance sheet lending commitments such as loan commitments and financial guarantees (hereafter collectively referred to in this note as "financial assets").

The determination of impairment losses and allowance moves from an incurred credit loss model whereby credit losses are recognized when a defined loss event occurs under IAS 39, to an expected loss model under IFRS 9, where provisions are taken upon initial recognition of the financial asset (or the date that the Group becomes a party to the loan commitment or financial guarantee), based on expectations of potential credit losses at that time under IFRS 9. Under IAS 39, the Group first evaluates individually whether objective evidence of impairment exists for loans that are individually significant. It then collectively assesses loans that are not individually significant and loans which are significant but for which there is no objective evidence of impairment available under the individual assessment.

Under IFRS 9 for financial assets originated or purchased, the Group recognizes a loss allowance at an amount equal to 12-month expected credit losses, if the credit risk at the reporting date has not increased significantly since initial recognition (Stage 1). This amount represents the expected credit losses resulting from default events that are possible within the next 12 months.

IFRS 9 requires the recognition of credit losses over the remaining life of the financial assets (‘lifetime expected losses’) which are considered to have experienced a significant increase in credit risk (Stage 2) and for financial assets that are credit impaired at the reporting date (Stage 3). As the primary definition for credit impaired financial assets moving to Stage 3, the Group applies the default definition as laid out in CRR Article 178. Forward-looking information, including macro-economic factors, must be taken into account to measure IFRS 9 compliant expected credit losses.

The lifetime expected credit losses represent default events over the expected life of a financial instrument. The Group measures expected credit losses considering the risk of default over the maximum contractual period (including any borrower’s extension options) over which it is exposed to credit risk, even if, for risk management purposes, the Group considers a longer period. The determination of the maximum contractual period considers the date at which the Group has the right to require repayment of an advance or terminate a loan commitment or guarantee.

Retail overdrafts, credit card facilities and certain corporate revolving facilities typically include both a loan and an undrawn commitment component, and in these cases the Group’s contractual ability to demand repayment and cancel the undrawn commitment does not limit the Group’s credit loss exposure to the facility's contractual term. These facilities do not have a fixed term or repayment structure and are managed on a collective basis. While the Group has the ability to cancel these facilities with immediate effect, this contractual right is not enforced in normal day-to-day credit risk management process, but only when the Group becomes aware of an increase in credit risk on the facility. Consequently, for such facilities, the Group measures expected credit losses over a period longer than the maximum contractual term. This longer period is estimated taking into consideration credit risk management actions which the Group expects to take to mitigate credit losses. These credit risk management actions include reducing limits and facility cancellation.

The Group uses three main components to measure expected credit losses which are a probability of default (‘PD’), a loss given default (‘LGD’) and the exposure at default (‘EAD’). Therefore, the Group has leveraged existing parameters used for determination of capital demand under Basel IRBA and internal risk management practices as much as possible on a transaction level. For the purpose of IFRS 9 the allowance for credit losses is affected by a variety of key characteristics, such as, but not limited to, the expected balance at default and the related amortization profile as well as the expected life of the financial asset. As a consequence, the allowance for credit losses for Stage 2 financial assets increases based on the expected lifetime or the expected EAD. Incorporating forecasts of future economic conditions into the measurement of expected credit losses additionally causes an impact on the allowance for credit losses for each stage. In order to calculate lifetime expected credit losses, the Group’s calculation includes deriving the corresponding lifetime PDs from migration matrices that reflect the economic forecasts. One or more triggers that have a detrimental impact on the estimated future cash flows must be identified to determine whether a financial asset is credit impaired and thus must be classified as Stage 3.

Under IFRS 9, when determining whether the credit risk (i.e. risk of default) of a financial instrument has increased significantly since initial recognition, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes quantitative and qualitative information based on the Group’s historical experience, credit risk assessment and forward-looking information (including macro-economic factors), which is discussed further below.

The Group has established a framework which incorporates both quantitative and qualitative processes to determine whether the credit risk on a particular financial instrument has increased significantly since initial recognition. The Group’s framework aligns with internal credit risk management process. The Group’s quantitative processes compare actual lifetime PD at the reporting date, with initial expectations at the date of initial recognition. If for the remaining lifetime the PD of a transaction given current expectations exceeds the PD of the threshold rating based on the initial expectations, the transaction is considered as significantly deteriorated. The threshold rating, which is determined on a portfolio basis and validated annually, corresponds to a quantile of the forward rating distribution derived from the initial rating of the transaction and the forward-looking information available at inception. The Group’s qualitative processes leverage existing risk management indicators (e.g. watch lists, management by the workout department and forbearance triggers) which allow the Group to identify whether the credit risk of financial assets has significantly increased. Furthermore, financial assets are transferred to Stage 2 if 30 days past due.

Under IFRS 9, when the terms of a financial asset are modified and the modification does not result in derecognition, a gain or loss is recognized in the income statement as the difference between the original contractual cash flows and the modified cash flows discounted at the original Effective Interest Rate ("EIR"). For modified financial assets the determination of whether the asset’s credit risk has increased significantly reflects comparison of:

– the remaining lifetime PD at the reporting date based on the modified terms; with
– the remaining lifetime PD estimated based on data on initial recognition and the original contractual terms.

Generally, forbearance is a qualitative indicator of default and credit impairment and expectations of forbearance are relevant to assessing whether there is a significant increase in credit risk. Following forbearance, a customer needs to demonstrate consistently good payment behavior over a period of time before the exposure is no longer considered to be in Stage 3 or the PD is considered to have decreased such that the exposure reverts back to be measured Stage 1.

IFRS 9 does not distinguish between individually significant or not individually significant financial assets. Therefore, the Group decided to measure the allowance for credit losses on an individual transaction basis. Similarly, the assessment for transferring financial assets between Stages 1, 2 and 3 is also made on an individual transaction basis. For detailed information on the current impairment approach under IAS 39 please refer to Note 1 “Significant Accounting Policies and Critical Accounting Estimates”. As a result of IFRS 9, there is an increase in subjectivity as the allowance for credit losses is based on reasonable and supportable forward-looking information which take into consideration future macro-economic scenarios as provided by Deutsche Bank Research. These macro-economic scenarios are continuously monitored and in addition to being used for the Group’s expected credit loss calculation, this information also forms the basis for performing the Group’s capital planning and stress-testing. This information provided by Deutsche Bank Research is used to generate possible future scenarios by utilizing the Group’s stress testing infrastructure with appropriate modifications to align with IFRS 9 requirements. The Group has identified certain synergies with the capital forecasting and stress-testing processes and continues to consider opportunities that may exist. The transition impact and effects resulting from the continuous application of IFRS 9 are reflected in the Group’s capital planning for 2018 and onwards. The general use of forward-looking information, including macro-economic factors, as well as adjustments taking into account extraordinary factors, are monitored by the Group's Risk and Finance Credit Loss Provision Forum.

A financial asset is considered credit-impaired on purchase or origination if there is objective evidence of impairment at the point of initial recognition, i.e. rated as defaulted by credit risk management. Such defaulted financial assets are termed Purchased or Credit Impaired (POCI) financial assets and are initially recognized at their fair value (typically the purchase price which embeds expectations of lifetime expected credit losses) and therefore no separate credit loss allowance is recognized on initial recognition. Subsequently, POCI financial assets are measured to reflect lifetime expected credit losses, and all subsequent changes in lifetime expected credit losses, whether positive or negative, are recognized in the income statement as a component of the provision for credit losses. POCI financial assets can only be classified in Stage 3.

For financial assets in Stage 1 and Stage 2, the Group calculates interest income by applying the EIR to the gross carrying amount (i.e. without deduction for expected credit losses). Interest income for financial assets in Stage 3 is calculated by applying the EIR to the amortized cost (i.e. the gross carrying amount less the loss allowance). For financial assets classified as POCI only, interest income is calculated by applying a credit-adjusted EIR (based on an initial expectation of further credit losses) to the amortized cost of these POCI assts. As a result of the amendments to IAS 1 following IFRS 9, the Group will present separately in the income statement, interest revenue calculated using the effective interest method.

IFRS 9 results in an increase in the overall level of allowances for credit losses as noted above. This estimated increase is driven by the requirement to record an allowance equal to 12 months expected credit losses on those instruments whose credit risk has not significantly increased since initial recognition as well as the larger population of financial assets to which lifetime expected losses must be applied.

Hedge accounting

IFRS 9 also incorporates new hedge accounting rules that intend to align hedge accounting with risk management practices. Generally, some restrictions under current rules have been removed and a greater variety of hedging instruments and hedged items become available for hedge accounting. IFRS 9 includes an accounting policy choice to defer the adoption of IFRS 9 hedge accounting and to continue with IAS 39 hedge accounting. The Group has decided to exercise this accounting policy choice and therefore will not adopt IFRS 9 hedge accounting as of January 1, 2018, the effective date of IFRS 9. However, the Group will implement the revised hedge accounting disclosures that are required by the IFRS 9 related amendments to IFRS 7 “Financial Instruments: Disclosures”’.

Amendments to IFRS 9 “Prepayment Features with Negative Compensation”

In October 2017, the IASB issued an amendment to IFRS 9 “Financial Instruments”, which allows entities to measure particular pre-payable financial assets with so-called negative compensation (also known as two way break clauses) at amortized cost or at fair value through other comprehensive income if the prepayment amount substantially represents unpaid principal and interest and reasonable compensation. Reasonable compensation may be positive or negative. Prior to this amendment financial assets with this negative compensation feature would have failed the solely payments of principal and interest test and be mandatorily measured at fair value through profit or loss. The amendment will be effective for annual periods beginning on or after January 1, 2019, with early adoption permitted. The Group expects to early adopt this amendment during 2018 following endorsement by the EU. The amendment will not have a material impact on the Group’s consolidated financial statements.

IFRS 15 Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15, “Revenue from Contracts with Customers”, which specifies how and when revenue is recognized, but does not impact income recognition related to financial instruments in scope of IAS 39/ IFRS 9. The IASB issued subsequent amendments to IFRS 15 in September 2015 and a further clarification to it in April 2016. The new requirements replace several other IFRS standards and interpretations that currently govern revenue recognition under IFRS and provide a single, principles-based five-step model to be applied to all contracts with customers. The standard and its amendments also require entities to provide users of financial statements with more informative and relevant disclosures. The Group has run a centrally managed IFRS 15 program which included subject matter experts from finance and business functions. The Group’s implementation of IFRS 15 consisted of a detailed analysis of each type of commission and fee income in line with the new five-step revenue recognition model. No material impact on the Group’s consolidated financial statements was identified. The requirements are effective for annual periods beginning on or after January 1, 2018. The standard and its amendments have been endorsed by the EU.

IFRS 16 Leases

In January 2016, the IASB issued IFRS 16, “Leases”, which introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. There will be only minor changes to the current accounting for lessors. The standard also requires entities to provide users of financial statements with more informative and relevant disclosures. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Group is currently assessing the impact of IFRS 16. The standard has been endorsed by the EU.

IFRS 17 Insurance Contracts

In May 2017, the IASB issued IFRS 17, “Insurance Contracts”, which establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. IFRS 17 replaces IFRS 4 which has given companies dispensation to carry on accounting for insurance contracts using national accounting standards, resulting in a multitude of different approaches. IFRS 17 solves the comparison problems created by IFRS 4 by requiring all insurance contracts to be accounted for in a consistent manner, benefiting both investors and insurance companies. Insurance obligations will be accounted for using current values – instead of historical cost. The information will be updated regularly, providing more useful information to users of financial statements. IFRS 17 is effective for annual periods beginning on or after January 1, 2021. Based on the Group’s current business activities it is initially estimated that IFRS 17 will not have a material impact on the Group’s consolidated financial statements. The standard has yet to be endorsed by the EU.

03 – Acquisitions and Dispositions

Business Combinations

During the years 2017, 2016 and 2015, the Group did not undertake any acquisitions accounted for as business combinations.

Acquisitions and Dispositions of Noncontrolling Interests while Retaining Control

During 2017 and 2016, the Group did not engage in acquisitions or dispositions of noncontrolling interests while retaining control over the related subsidiaries.

Dispositions

During 2017, 2016 and 2015, the Group finalized several dispositions of subsidiaries/businesses. These disposals are mainly of businesses the Group had previously classified as held for sale. Accordingly, disposals in 2017 included the Group's Argentine subsidiary Deutsche Bank S.A. and Sal. Oppenheim's Luxembourg-based fund administration and custody business. Divestitures in 2016 comprised the sale of Abbey Life and Maher Terminals Port Elizabeth. Dispositions in 2015 mainly consisted of the sale of the Canadian port operations of Maher Terminals. For more detail on these transactions, please refer to Note 26 "Non-Current Assets and Disposal Groups Held for Sale". The total cash consideration received for these dispositions in 2017, 2016 and 2015 was € 129 million, € 2.0 billion and € 555 million, respectively. The table below shows the assets and liabilities that were included in these disposals.

in € m.	2017	2016	2015
Cash and cash equivalents	47	0	0
All remaining assets	848	14,858	443
Total assets disposed	895	14,858	443
Total liabilities disposed	814	12,250	52

04 – Business Segments and Related Information

The Group's segmental information has been prepared in accordance with the "management approach", which requires presentation of the segments on the basis of the internal management reports of the entity which are regularly reviewed by the chief operating decision maker, which is the Deutsche Bank Management Board, in order to allocate resources to a segment and to assess its financial performance.

Business Segments

The Group's segment reporting follows the organizational structure as reflected in its internal management reporting systems, which are the basis for assessing the financial performance of the business segments and for allocating resources to the business segments. Generally, restatements due to changes in the organizational structure were implemented in the presentation of prior period comparatives if they were considered in the Group's management reporting systems.

Beginning of the second quarter of 2017, in accordance with our strategy announcement on March 5, 2017, our business operations are reorganized under a new divisional structure comprising the following divisions:

– Corporate & Investment Bank ("CIB"),
– Private & Commercial Bank ("PCB"),
– Deutsche Asset Management ("Deutsche AM")

The key changes compared to Deutsche Bank's previously reported segmental information are outlined below.

Corporate & Investment Bank (CIB) - The new corporate division "Corporate & Investment Bank" combines the former segments "Global Markets" and "Corporate & Investment Banking". It comprises the Bank's Corporate Finance, Global Markets and Global Transaction Banking businesses.

Private & Commercial Bank (PCB) - The corporate division "Private & Commercial Bank" combines the businesses with private and commercial clients of Deutsche Bank and Postbank, which formerly had been reported separately, and the wealth management activities for wealthy clients, foundations and family offices.

Deutsche Asset Management (Deutsche AM) - The corporate division Deutsche Asset Management remains materially unchanged and contains the asset management activities of Deutsche Bank. It focuses on providing investment solutions to individual investors and institutions that serve them.

Certain Infrastructure functions previously reported under Consolidation & Adjustments, reflected in our business segments on an allocated basis, have been integrated more closely into our business divisions.

From 2017 onwards, Non-Core Operations Unit (NCOU) ceased to exist as a standalone division. The remaining legacy assets as of December 31, 2016 are now managed by the corresponding operating segments, predominately in Corporate & Investment Bank and Private & Commercial Bank.

Measurement of Segment Profit or Loss

Segment reporting requires a presentation of the segment results based on management reporting methods, including a reconciliation between the results of the business segments and the consolidated financial statements, which is presented in the "Management Report: Operating and Financial Review: Deutsche Bank Group: Corporate Divisions: Consolidation & Adjustments". The information provided about each segment is based on internal management reporting about segment profit or loss, assets and other information which is regularly reviewed by the chief operating decision maker. Segment assets are presented in the Group's internal management reporting based on a consolidated view, i.e., the amounts do not include intersegment balances.

Non-IFRS compliant accounting methods are rarely used in the Group's management reporting and represent either valuation or classification differences. The largest valuation differences relate to measurement at fair value in management reporting versus measurement at amortized cost under IFRS and to the recognition of trading results from own shares in revenues in management reporting (mainly in CIB) and in equity under IFRS. The major classification difference relates to noncontrolling interest, which represents the net share of minority shareholders in revenues, provision for credit losses, noninterest expenses and income tax expenses. Noncontrolling interest is reported as a component of pre-tax income for the businesses in management reporting (with a reversal in C&A) and a component of net income appropriation under IFRS.

Since the Group's business activities are diverse in nature and its operations are integrated, certain estimates and judgments have been made to apportion revenue and expense items among the business segments.

The management reporting systems allocate the Group's external net interest income according to the value of funding consumed or provided by each segment's activities, with transfer pricing referencing the Group's access to financing in the wholesale markets. Furthermore, to retain comparability with those competitors that have legally independent units with their own equity funding, the Group allocates a net notional interest credit on its consolidated capital, in line with each segment's proportion of average shareholders' equity.

Management uses certain measures for equity and related ratios as part of its internal reporting system because it believes that these measures provide it with a useful indication of the financial performance of the business segments. The Group discloses such measures to provide investors and analysts with further insight into how management operates the Group's businesses and to enable them to better understand the Group's results. These measures include:

Allocation of Average Shareholders' Equity - Starting 2017, the Group has refined its capital allocation methodology. Shareholders' equity is now fully allocated to the Group's segments based on the regulatory capital demand of each segment and is no longer capped at the amount of shareholders' equity required to meet the externally communicated targets for the Group's Common Equity Tier 1 ratio and the Group's Leverage ratio. Regulatory capital demand reflects the combined contribution of each segment to the Groups' Common Equity Tier 1 ratio, the Groups' Leverage ratio and the Group's Capital Loss under Stress. Contributions in each of the three dimensions are weighted to reflect their relative importance and level of constraint for the Group. Contributions to the Common Equity Tier 1 ratio and the Leverage ratio are measured though Risk-Weighted Assets (RWA) and Leverage Ratio Exposure (LRE) assuming full implementation of CRR/CRD 4 rules. The Group's Capital Loss under Stress is a measure of the Group's overall economic risk exposure under a defined stress scenario. Goodwill and other intangibles continue to be directly attributed to the Group's segments in order to allow the determination of allocated tangible shareholders' equity and the respective returns. Shareholders' equity and tangible shareholders' equity is allocated on a monthly basis and averaged across quarters and for the full year. All reported periods in 2015 and 2016 have been restated.

Segment average shareholders' equity in December 2015 represents the spot values for the period end. The difference between the spot values of the segments and the average Group amount is captured in C&A

For purposes of the 2017 average shareholders' equity allocation the Non-Core Operations Unit (NCOU) balances from year-end 2016 have been allocated to Consolidation & Adjustments (C&A) as Non-Core Operations Unit (NCOU) has ceased to exist as a separate corporate division from 2017 onwards.

Net interest income as a component of net revenue, income (loss) before income taxes and related ratios is presented on a fully taxable-equivalent basis for U.S. tax-exempt securities for Corporate & Investment Bank. This enables management to measure performance of taxable and tax-exempt securities on a comparable basis. This change in presentation resulted in an increase in Corporate & Investment Bank net interest income of € 113.6 million for full year 2017 (€ 126.4 million for full year 2016, € 122.8 million for full year 2015). This increase is offset in Group consolidated figures through a reversal in C&A. The tax rate used in determining the fully taxable-equivalent net interest income in respect of the majority of the US tax-exempt securities is 35 %.

Segmental Results of Operations

For the results of the business segments, including the reconciliation to the consolidated results of operations under IFRS please see "Management Report: Operating and Financial Review: Results of Operations: Segment Results of Operations".

Entity-Wide Disclosures

The Group's Entity-Wide Disclosures include net revenues from internal and external counterparties. Excluding revenues from internal counterparties would require disproportionate IT investment and is not in line with the Bank's management approach. For detail on our Net Revenue Components please see "Management Report: Operating and Financial Review: Results of Operations: Corporate Divisions".

The following table presents total net revenues (before provisions for credit losses) by geographic area for the years ended December 31, 2017, 2016 and 2015, respectively. The information presented for CIB, PCB, Deutsche AM and NCOU has been classified based primarily on the location of the Group's office in which the revenues are recorded. The information for C&A is presented on a global level only, as management responsibility for C&A is held centrally.

in € m.	2017	2016	2015
Germany:			
Corporate & Investment Bank	1,503	1,924	1,942
Private & Commercial Bank	7,225	7,571	7,289
Deutsche Asset Management	1,009	888	963
Non-Core Operations Unit	0	221	105
Total Germany[1]	9,737	10,604	10,299
UK:			
Corporate & Investment Bank	3,817	4,298	5,309
Private & Commercial Bank	34	83	77
Deutsche Asset Management	434	836	748
Non-Core Operations Unit	0	(322)	(73)
Total UK	4,284	4,895	6,061
Rest of Europe, Middle East and Africa:			
Corporate & Investment Bank	1,268	1,544	1,647
Private & Commercial Bank	2,037	2,360	2,111
Deutsche Asset Management	465	497	402
Non-Core Operations Unit	0	23	9
Total Rest of Europe, Middle East and Africa	3,770	4,425	4,169
Americas (primarily United States):			
Corporate & Investment Bank	4,999	5,928	6,209
Private & Commercial Bank	390	625	691
Deutsche Asset Management	492	578	727
Non-Core Operations Unit	0	(305)	754
Total Americas	5,881	6,826	8,381
Asia/Pacific:			
Corporate & Investment Bank	2,639	3,068	3,792
Private & Commercial Bank	491	451	469
Deutsche Asset Management	133	216	176
Non-Core Operations Unit	0	1	(0)
Total Asia/Pacific	3,263	3,735	4,436
Consolidation & Adjustments	(488)	(471)	179
Consolidated net revenues[2]	26,447	30,014	33,525

[1] All Postbank operations are disclosed as German operations subject to further systems integration.
[2] Consolidated net revenues comprise interest and similar income, interest expenses and total noninterest income (including net commission and fee income). Revenues are attributed to countries based on the location in which the Group's booking office is located. The location of a transaction on the Group's books is sometimes different from the location of the headquarters or other offices of a customer and different from the location of the Group's personnel who entered into or facilitated the transaction. Where the Group records a transaction involving its staff and customers and other third parties in different locations frequently depends on other considerations, such as the nature of the transaction, regulatory considerations and transaction processing considerations.

Notes to the Consolidated Income Statement

05 – Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

Net Interest Income

in € m.	2017	2016	2015
Interest and similar income:			
Interest income on cash and central bank balances	1,070	433	88
Interest income on interbank balances (w/o central banks)	245	252	411
Central bank funds sold and securities purchased under resale agreements	292	359	377
Interest income on financial assets available for sale	1,083	1,313	1,292
Dividend income on financial assets available for sale	88	205	301
Loans	11,941	12,311	12,219
Interest income on securities held to maturity	68	67	0
Other	1,406	1,417	782
Total interest and similar income not at fair value through profit or loss	16,193	16,357	15,470
Financial assets at fair value through profit or loss	7,899	9,279	10,496
Total interest and similar income	24,092	25,636	25,967
Interest expense:			
Interest-bearing deposits	2,833	2,583	2,764
Central bank funds purchased and securities sold under repurchase agreements	431	255	153
Other short-term borrowings	135	179	229
Long-term debt	1,795	1,759	1,480
Trust preferred securities	413	437	568
Other	1,437	1,083	357
Total interest expense not at fair value through profit or loss	7,044	6,295	5,552
Financial liabilities at fair value through profit or loss	4,671	4,634	4,534
Total interest expense	11,714	10,929	10,086
Net interest income	12,378	14,707	15,881

Interest income recorded on impaired financial assets was € 61 million, € 63 million and € 67 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Other interest income for the year ended December 31, 2017 included € 116 million which were related to government grants under the Targeted Longer-Term Refinancing Operations II (TLTRO II)-program.

Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m.	2017	2016	2015
Trading income:			
Sales & Trading (Equity)	1,152	616	544
Sales & Trading (FIC)	3,969	3,448	3,750
Total Sales & Trading	5,122	4,064	4,294
Other trading income	(1,748)	(3,517)	(420)
Total trading income	3,374	547	3,874
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss:			
Breakdown by financial asset/liability category:			
Securities purchased/sold under resale/repurchase agreements	3	(3)	3
Securities borrowed/loaned	(1)	1	0
Loans and loan commitments	(32)	(109)	(453)
Deposits	(30)	(28)	0
Long-term debt[1]	(398)	303	761
Other financial assets/liabilities designated at fair value through profit or loss	10	691	(344)
Total net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	(448)	854	(32)
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,926	1,401	3,842

Combined Net Interest Income and Net Gains (Losses) on Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m.	2017	2016	2015
Net interest income	12,378	14,707	15,881
Trading income[1]	3,374	547	3,874
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	(448)	854	(32)
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,926	1,401	3,842
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	15,304	16,108	19,723
Sales & Trading (Equity)	1,592	1,934	2,838
Sales & Trading (FIC)	4,707	5,210	5,987
Total Sales & Trading	6,299	7,144	8,826
Financing	1,641	1,839	1,523
Global Transaction Banking	1,937	2,098	2,218
Remaining Products	(800)	(309)	(219)
Corporate & Investment Bank	9,078	10,773	12,348
Private & Commercial Bank	6,158	6,420	6,573
Deutsche Asset Management	30	365	255
Non-Core Operations Unit	0	(1,307)	(362)
Consolidation & Adjustments	37	(143)	910
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	15,304	16,108	19,723

[1] Trading income includes gains and losses from derivatives not qualifying for hedge accounting.

The Group's trading and risk management businesses include significant activities in interest rate instruments and related derivatives. Under IFRS, interest and similar income earned from trading instruments and financial instruments designated at fair value through profit or loss (i.e., coupon and dividend income), and the costs of funding net trading positions, are part of net interest income. The Group's trading activities can periodically drive income to either net interest income or to net gains (losses) of financial assets/liabilities at fair value through profit or loss depending on a variety of factors, including risk management strategies. The above table combines net interest income and net gains (losses) of financial assets/liabilities at fair value through profit or loss by business division and by product within Corporate & Investment Bank.

06 – Commissions and Fee Income

in € m.	2017	2016	2015
Commission and fee income and expense:			
Commission and fee income	14,102	14,999	16,412
Commission and fee expense	3,100	3,255	3,647
Net commissions and fee income	11,002	11,744	12,765

in € m.	2017	2016	2015
Net commissions and fee income:			
Net commissions and fees from fiduciary activities	4,320	4,287	4,480
Net commissions, brokers' fees, mark-ups on securities underwriting and other securities activities	2,985	3,305	4,134
Net fees for other customer services	3,698	4,152	4,151
Net commissions and fee income	11,002	11,744	12,765

07 – Net Gains (Losses) on Financial Assets Available for Sale

in € m.	2017	2016	2015
Net gains (losses) on financial assets available for sale:			
Net gains (losses) on debt securities:	114	229	48
Net gains (losses) from disposal	115	230	58
Impairments	(1)	(1)	(10)
Net gains (losses) on equity securities:	219	79	104
Net gains (losses) from disposal/remeasurement	219	96	156
Impairments	(1)	(17)	(52)
Net gains (losses) on loans:	37	6	52
Net gains (losses) from disposal	45	21	83
Impairments	(8)	(15)	(31)
Reversal of impairments	0	0	0
Net gains (losses) on other equity interests:	110	339	1
Net gains (losses) from disposal	137	348	14
Impairments	(27)	(9)	(13)
Total net gains (losses) on financial assets available for sale	479	653	203

Please also refer to Note 15 “Financial Assets Available for Sale” of this report.

08 – Other Income

in € m.	2017	2016	2015
Other income:			
Net gains (losses) on disposal of loans	19	(128)	237
Insurance premiums[1]	4	89	108
Net income (loss) from hedge relationships qualifying for hedge accounting	(609)	(370)	(910)
Consolidated investments	0	362	470
Remaining other income[2]	112	1,100	763
Total other income (loss)	(475)	1,053	669

[1] Net of reinsurance premiums paid. The development is primarily driven by Abbey Life Assurance Company Limited which has been sold in 2016.
[2] Includes net gains (losses) of € (81) million, € 744 million and € 237 million for the years ended December 31, 2017, 2016 and 2015, respectively, that are related to non-current assets and disposal groups held for sale.

09 – General and Administrative Expenses

in € m.	2017	2016	2015
General and administrative expenses:			
IT costs	3,798	3,872	3,664
Occupancy, furniture and equipment expenses	1,849	1,972	1,944
Professional service fees	1,769	2,305	2,283
Communication and data services	686	761	807
Travel and representation expenses	405	450	505
Banking and transaction charges	744	664	598
Marketing expenses	309	285	294
Consolidated investments	0	334	406
Other expenses[1]	2,414	4,812	8,129
Total general and administrative expenses	11,973	15,454	18,632

[1] Includes litigation related expenses of € 213 million in 2017, € 2.4 billion in 2016 and € 5.2 billion in 2015. See Note 29 “Provisions”, for more detail on litigation.

10 – Restructuring

Restructuring forms part of the Group's multi-year strategy originally announced in October 2015 and further refined and amended in March 2017. To implement the strategy we have defined measures that aim to further strengthen the bank, position it for growth and simplify its organizational set-up. The measures also target to reduce adjusted costs through higher efficiency, by optimizing and streamlining processes, and by exploiting synergies.

Restructuring expense is comprised of termination benefits, additional expenses covering the acceleration of deferred compensation awards not yet amortized due to the discontinuation of employment and contract termination costs related to real estate.

in € m.	2017	2016	2015
Corporate & Investment Bank	(82)	(292)	(128)
Private & Commercial Bank	(360)	(141)	(585)
Deutsche Asset Management	(6)	(47)	2
Non-Core Operations Unit	0	(4)	1
Total Net Restructuring Charges	**(447)**	(484)	(710)

in € m.	2017	2016	2015
Restructuring – Staff related	(430)	(491)	(663)
thereof:			
Termination Benefits	(402)	(432)	(602)
Retention Acceleration	(26)	(54)	(61)
Social Security	(2)	(5)	(0)
Restructuring – Non Staff related	(17)	7	(46)
Total Net Restructuring Charges	**(447)**	(484)	(710)

Provisions for restructuring amounted to € 696 million and € 741 million and € 651 million as of December 31, 2017 and December 31, 2016 and December 31, 2015, respectively. The majority of the current provisions for restructuring are expected to be utilized in the next two years.

During 2017, 2,045 full-time equivalent staff was reduced through restructuring (2016: 1,451 and 2015: 662).

Full-time equivalent staff	2017	2016	2015
Corporate & Investment Bank	502	356	237
Private & Commercial Bank	1,054	453	141
Deutsche Asset Management	38	101	22
Non-Core Operations Unit	0	0	1
Infrastructure/Regional Management	451	541	261
Total full-time equivalent staff	**2,045**	1,451	662

11 – Earnings per Share

Basic earnings per share amounts are computed by dividing net income (loss) attributable to Deutsche Bank shareholders by the average number of common shares outstanding during the year. The average number of common shares outstanding is defined as the average number of common shares issued, reduced by the average number of shares in treasury and by the average number of shares that will be acquired under physically-settled forward purchase contracts, and increased by undistributed vested shares awarded under deferred share plans.

Diluted earnings per share assumes the conversion into common shares of outstanding securities or other contracts to issue common stock, such as share options, convertible debt, unvested deferred share awards and forward contracts. The aforementioned instruments are only included in the calculation of diluted earnings per share if they are dilutive in the respective reporting period.

Computation of basic and diluted earnings per share

in € m.	2017	2016	2015
Net income (loss) attributable to Deutsche Bank shareholders – numerator for basic earnings per share[1]	**(1,049)**	(1,678)	(7,022)
Effect of dilutive securities:			
Forwards and options	0	0	0
Convertible debt	0	0	0
Net income (loss) attributable to Deutsche Bank shareholders after assumed conversions – numerator for diluted earnings per share[1]	**(1,049)**	(1,678)	(7,022)
Number of shares in million			
Weighted-average shares outstanding – denominator for basic earnings per share	**1,967.7**	1,555.3	1,555.1
Effect of dilutive securities:			
Forwards	0.0	0.0	0.0
Employee stock compensation options	0.0	0.0	0.0
Deferred shares	0.0	0.0	0.0
Other (including trading options)	0.0	0.0	0.0
Dilutive potential common shares	0.0	0.0	0.0
Adjusted weighted-average shares after assumed conversions – denominator for diluted earnings per share	**1,967.7**	1,555.3	1,555.1

[1] Earnings were adjusted by € 298 million, € 276 million and € 228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2017, April 2016 and April 2015.

Earnings per share

in €	2017	2016	2015
Basic earnings per share	(0.53)	(1.08)	(4.52)
Diluted earnings per share	(0.53)	(1.08)	(4.52)

On April 7, 2017, Deutsche Bank AG completed a capital increase with subscription rights. As the subscription price of the new shares was lower than the market price of the existing shares, the capital increase included a bonus element. According to IAS 33, the bonus element is the result of an implicit change in the number of shares outstanding for all periods prior to the capital increase without a fully proportionate change in resources. As a consequence, the weighted average number of shares outstanding has been adjusted retrospectively.

Due to the net loss situation for 2017, 2016 and 2015 potentially dilutive shares are generally not considered for the earnings per share calculation, because to do so would have been anti-dilutive and hence decreased the net loss per share.

Instruments outstanding and not included in the calculation of diluted earnings per share[1]

Number of shares in m.	2017	2016	2015
Call options sold	0.0	0.0	0.0
Employee stock compensation options	0.0	0.0	0.0
Deferred shares	104.4	69.6	52.5

[1] Not included in the calculation of diluted earnings per share, because to do so would have been anti-dilutive.

Notes to the Consolidated Balance Sheet

12 – Financial Assets/Liabilities at Fair Value through Profit or Loss

in € m.	Dec 31, 2017	Dec 31, 2016
Financial assets classified as held for trading:		
Trading assets:		
Trading securities	173,196	156,926
Other trading assets[1]	11,466	14,117
Total trading assets	184,661	171,044
Positive market values from derivative financial instruments	361,032	485,150
Total financial assets classified as held for trading	545,693	656,194
Financial assets designated at fair value through profit or loss:		
Securities purchased under resale agreements	57,843	47,404
Securities borrowed	20,254	21,136
Loans	4,802	7,505
Other financial assets designated at fair value through profit or loss	8,377	11,541
Total financial assets designated at fair value through profit or loss	91,276	87,587
Total financial assets at fair value through profit or loss	636,970	743,781

[1] Includes traded loans of € 10.9 billion and € 13.2 billion at December 31, 2017 and 2016 respectively.

in € m.	Dec 31, 2017	Dec 31, 2016
Financial liabilities classified as held for trading:		
Trading liabilities:		
Trading securities	71,148	56,592
Other trading liabilities	314	437
Total trading liabilities	71,462	57,029
Negative market values from derivative financial instruments	342,726	463,858
Total financial liabilities classified as held for trading:	414,189	520,887
Financial liabilities designated at fair value through profit or loss:		
Securities sold under repurchase agreements	53,840	50,397
Loan commitments	8	40
Long-term debt	6,439	6,473
Other financial liabilities designated at fair value through profit or loss	3,587	3,582
Total financial liabilities designated at fair value through profit or loss	63,874	60,492
Investment contract liabilities	574	592
Total financial liabilities at fair value through profit or loss	478,636	581,971

Financial Assets & Liabilities designated at Fair Value through Profit or Loss

The Group has designated various lending relationships at fair value through profit or loss. Lending facilities consist of drawn loan assets and undrawn irrevocable loan commitments. The maximum exposure to credit risk on a drawn loan is its fair value. The Group's maximum exposure to credit risk on drawn loans, including securities purchased under resale agreements and securities borrowed, was € 83 billion and € 76 billion as of December 31, 2017, and 2016, respectively. Exposure to credit risk also exists for undrawn irrevocable loan commitments and is predominantly counterparty credit risk.

The credit risk on the securities purchased under resale agreements and securities borrowed designated under the fair value option is mitigated by the holding of collateral. The valuation of these instruments takes into account the credit enhancement in the form of the collateral received. As such there is no material movement during the year or cumulatively due to movements in counterparty credit risk on these instruments.

Changes in fair value of loans[1] and loan commitments attributable to movements in counterparty credit risk[2]

in € m.	Dec 31, 2017 Loans	Dec 31, 2017 Loan commitments	Dec 31, 2016 Loans	Dec 31, 2016 Loan commitments
Notional value of loans and loan commitments exposed to credit risk	2,865	1,973	3,604	3,357
Annual change in the fair value reflected in the Statement of Income	7	14	9	45
Cumulative change in the fair value[3]	10	30	9	37
Notional of credit derivatives used to mitigate credit risk	536	4,728	358	4,997
Annual change in the fair value reflected in the Statement of Income	(0)	(42)	(1)	(3)
Cumulative change in the fair value[3]	1	(46)	(2)	(6)

[1] Where the loans are over-collateralized there is no material movement in valuation during the year or cumulatively due to movements in counterparty credit risk.
[2] Determined using valuation models that exclude the fair value impact associated with market risk.
[3] Changes are attributable to loans and loan commitments held at reporting date, which may differ from those held in prior periods. No adjustments are made to prior year to reflect differences in the underlying population.

Changes in fair value of financial liabilities attributable to movements in the Group's credit risk[1]

in € m.	Dec 31, 2017	Dec 31, 2016
Annual change in the fair value reflected in the Statement of Income	60	(73)
Cumulative change in the fair value	72	11

[1] The fair value of a financial liability incorporates the credit risk of that financial liability. Changes in the fair value of financial liabilities issued by consolidated structured entities have been excluded as this is not related to the Group's credit risk but to that of the legally isolated structured entity, which is dependent on the collateral it holds.

The excess of the contractual amount repayable at maturity over the carrying value of financial liabilities[1]

in € m.	Dec 31, 2017	Dec 31, 2016
Including undrawn loan commitments[2]	6,088	8,396
Excluding undrawn loan commitments	2,073	2,779

[1] Assuming the liability is extinguished at the earliest contractual maturity that the Group can be required to repay. When the amount payable is not fixed, it is determined by reference to conditions existing at the reporting date.
[2] The contractual cash flows at maturity for undrawn loan commitments assume full drawdown of the facility.

13 – Financial Instruments carried at Fair Value

Valuation Methods and Control

The Group has an established valuation control framework which governs internal control standards, methodologies, and procedures over the valuation process.

Prices Quoted in Active Markets – The fair value of instruments that are quoted in active markets are determined using the quoted prices where they represent prices at which regularly and recently occurring transactions take place.

Valuation Techniques – The Group uses valuation techniques to establish the fair value of instruments where prices, quoted in active markets, are not available. Valuation techniques used for financial instruments include modelling techniques, the use of indicative quotes for proxy instruments, quotes from recent and less regular transactions and broker quotes.

For some financial instruments a rate or other parameter, rather than a price, is quoted. Where this is the case then the market rate or parameter is used as an input to a valuation model to determine fair value. For some instruments, modelling techniques follow industry standard models, for example, discounted cash flow analysis and standard option pricing models. These models are dependent upon estimated future cash flows, discount factors and volatility levels. For more complex or unique instruments, more sophisticated modelling techniques are required, and may rely upon assumptions or more complex parameters such as correlations, prepayment speeds, default rates and loss severity.

Frequently, valuation models require multiple parameter inputs. Where possible, parameter inputs are based on observable data or are derived from the prices of relevant instruments traded in active markets. Where observable data is not available for parameter inputs, then other market information is considered. For example, indicative broker quotes and consensus pricing information are used to support parameter inputs where they are available. Where no observable information is available to support parameter inputs then they are based on other relevant sources of information such as prices for similar transactions, historic data, economic fundamentals, and research information, with appropriate adjustment to reflect the terms of the actual instrument being valued and current market conditions.

Valuation Adjustments – Valuation adjustments are an integral part of the valuation process. In making appropriate valuation adjustments, the Group follows methodologies that consider factors such as bid-offer spreads, counterparty/own credit and funding risk. Bid-offer spread valuation adjustments are required to adjust mid-market valuations to the appropriate bid or offer valuation. The bid or offer valuation is the best representation of the fair value for an instrument, and therefore its fair value. The carrying value of a long position is adjusted from mid to bid, and the carrying value of a short position is adjusted from mid to offer. Bid-offer valuation adjustments are determined from bid-offer prices observed in relevant trading activity and in quotes from other broker-dealers or other knowledgeable counterparties. Where the quoted price for the instrument is already a bid-offer price then no additional bid-offer valuation adjustment is necessary. Where the fair value of financial instruments is derived from a modelling technique, then the parameter inputs into that model are normally at a mid-market level. Such instruments are generally managed on a portfolio basis and, when specified criteria are met, valuation adjustments are taken to reflect the cost of closing out the net exposure the Bank has to individual market or counterparty risks. These adjustments are determined from bid-offer prices observed in relevant trading activity and quotes from other broker-dealers.

Where complex valuation models are used, or where less-liquid positions are being valued, then bid-offer levels for those positions may not be available directly from the market, and therefore for the close-out cost of these positions, models and parameters must be estimated. When these adjustments are designed, the Group closely examines the valuation risks associated with the model as well as the positions themselves, and the resulting adjustments are closely monitored on an ongoing basis.

Counterparty Credit Valuation Adjustments (CVAs) are required to cover expected credit losses to the extent that the valuation technique does not already include an expected credit loss factor relating to the non-performance risk of the counterparty. The CVA amount is applied to all relevant over-the-counter (OTC) derivatives, and is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the probability of default, based on available market information, including Credit Default Swap (CDS) spreads. Where counterparty CDS spreads are not available, relevant proxies are used.

The fair value of the Group's financial liabilities at fair value through profit or loss (i.e., OTC derivative liabilities and structured note liabilities designated at fair value through profit or loss) incorporates Debt Valuation Adjustments (DVA) to measure the change in the Group's own credit risk of the financial liability. For derivative liabilities the Group considers its own creditworthiness by assessing all counterparties' potential future exposure to the Group, taking into account any collateral posted by the Group, the effect of relevant netting arrangements, expected loss given default and the probability of default of the Group, based on the Group's market CDS level. The change in the Group's own credit risk for structured note liabilities is calculated by discounting the contractual cash flows of the instrument using the rate at which similar instruments would be issued at the measurement date as this reflects the value from the perspective of a market participant who holds the identical item as an asset.

When determining CVA and DVA, additional adjustments are made where appropriate to achieve fair value, due to the expected loss estimate of a particular arrangement, or where the credit risk being assessed differs in nature to that described by the available CDS instrument.

Funding Valuation Adjustments (FVA) are required to incorporate the market implied funding costs into the fair value of derivative positions. The FVA reflects a discounting spread applied to uncollateralized and partially collateralized derivatives and is determined by assessing the market-implied funding costs on both assets and liabilities.

Where there is uncertainty in the assumptions used within a modelling technique, an additional adjustment is taken to calibrate the model price to the expected market price of the financial instrument. Typically, such transactions have bid-offer levels which are less observable, and these adjustments aim to estimate the bid-offer by computing the liquidity-premium associated with the transaction. Where a financial instrument is of sufficient complexity that the cost of closing it out would be higher than the cost of closing out its component risks, then an additional adjustment is taken to reflect this.

Valuation Control – The Group has an independent specialized valuation control group within the Finance function which governs and develops the valuation control framework and manages the valuation control processes. The mandate of this specialist function includes the performance of the independent valuation control process for all businesses, the continued development of valuation control methodologies and techniques, as well as devising and governing the formal valuation control policy framework. Special attention of this independent valuation control group is directed to areas where management judgment forms part of the valuation process.

Results of the valuation control process are collected and analyzed as part of a standard monthly reporting cycle. Variances of differences outside of preset and approved tolerance levels are escalated both within the Finance function and with Senior Business Management for review, resolution and, if required, adjustment.

For instruments where fair value is determined from valuation models, the assumptions and techniques used within the models are independently validated by an independent specialist model validation group that is part of the Group's Risk Management function.

Quotes for transactions and parameter inputs are obtained from a number of third party sources including exchanges, pricing service providers, firm broker quotes and consensus pricing services. Price sources are examined and assessed to determine the quality of fair value information they represent, with greater emphasis given to those possessing greater valuation certainty and relevance. The results are compared against actual transactions in the market to ensure the model valuations are calibrated to market prices.

Price and parameter inputs to models, assumptions and valuation adjustments are verified against independent sources. Where they cannot be verified to independent sources due to lack of observable information, the estimate of fair value is subject to procedures to assess its reasonableness. Such procedures include performing revaluation using independently generated models (including where existing models are independently recalibrated), assessing the valuations against appropriate proxy instruments and other benchmarks, and performing extrapolation techniques. Assessment is made as to whether the valuation techniques produce fair value estimates that are reflective of market levels by calibrating the results of the valuation models against market transactions where possible.

Fair Value Hierarchy

The financial instruments carried at fair value have been categorized under the three levels of the IFRS fair value hierarchy as follows:

Level 1 – Instruments valued using quoted prices in active markets are instruments where the fair value can be determined directly from prices which are quoted in active, liquid markets and where the instrument observed in the market is representative of that being priced in the Group's inventory.

These include: government bonds, exchange-traded derivatives and equity securities traded on active, liquid exchanges.

Level 2 – Instruments valued with valuation techniques using observable market data are instruments where the fair value can be determined by reference to similar instruments trading in active markets, or where a technique is used to derive the valuation but where all inputs to that technique are observable.

These include: many OTC derivatives; many investment-grade listed credit bonds; some CDS; many collateralized debt obligations (CDO); and many less-liquid equities.

Level 3 – Instruments valued using valuation techniques using market data which is not directly observable are instruments where the fair value cannot be determined directly by reference to market-observable information, and some other pricing technique must be employed. Instruments classified in this category have an element which is unobservable and which has a significant impact on the fair value.

These include: more-complex OTC derivatives; distressed debt; highly-structured bonds; illiquid asset-backed securities (ABS); illiquid CDO's (cash and synthetic); monoline exposures; some private equity placements; many commercial real estate (CRE) loans; illiquid loans; and some municipal bonds.

Carrying value of the financial instruments held at fair value[1]

in € m.	Dec 31, 2017 Quoted prices in active market (Level 1)	Dec 31, 2017 Valuation technique observable parameters (Level 2)	Dec 31, 2017 Valuation technique unobservable parameters (Level 3)	Dec 31, 2016 Quoted prices in active market (Level 1)	Dec 31, 2016 Valuation technique observable parameters (Level 2)	Dec 31, 2016 Valuation technique unobservable parameters (Level 3)
Financial assets held at fair value:						
Trading assets	106,075	69,543	9,043	89,943	70,415	10,686
Trading securities	105,792	62,770	4,634	89,694	62,220	5,012
Other trading assets	283	6,773	4,409	248	8,195	5,674
Positive market values from derivative financial instruments	12,280	341,413	7,340	8,802[5]	466,551[5]	9,798
Financial assets designated at fair value through profit or loss	6,547	83,242	1,488	10,118	75,867	1,601
Financial assets available for sale	29,579	15,713	4,104	35,626[4]	16,449[4]	4,153
Other financial assets at fair value	0	3,258[2]	47	28	3,618[2]	33
Total financial assets held at fair value	154,480	513,169	22,022	144,517	632,900	26,271
Financial liabilities held at fair value:						
Trading liabilities	53,644	17,817	2	41,664	15,311	52
Trading securities	53,644	17,503	2	41,664	14,874	52
Other trading liabilities	0	314	0	0	437	0
Negative market values from derivative financial instruments	9,163	327,572	5,992	9,913[6]	445,089[6]	8,857
Financial liabilities designated at fair value through profit or loss	4	62,426	1,444	4	58,259	2,229
Investment contract liabilities	0	574	0	0	592	0
Other financial liabilities at fair value	0	1,294[2]	(298)[3]	0	4,647[2]	(848)[3]
Total financial liabilities held at fair value	62,810	409,683	7,139	51,581	523,898	10,290

1 Amounts in this table are generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments, as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".
2 Predominantly relates to derivatives qualifying for hedge accounting.
3 Relates to derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated. The separated embedded derivatives may have a positive or a negative fair value but have been presented in this table to be consistent with the classification of the host contract. The separated embedded derivatives are held at fair value on a recurring basis and have been split between the fair value hierarchy classifications.
4 Financial assets available for sale have been restated by € 6.9 billion in 'Quoted prices in active market (Level 1)' and negative € 6.9 billion in 'Valuation technique observable parameters (Level 2)'.
5 Reassessment of trades have resulted a restatement in positive market values for derivatives financial instrument by € 5.0 billion in 'Valuation technique observable parameters (Level 2)' and negative € 5.0 billion in 'Quoted prices in active market (Level 1)'.
6 Reassessment of trades have resulted a restatement in negative market values for derivatives financial instrument by € 3.7 billion in 'Valuation technique observable parameters (Level 2)' and negative € 3.7 billion in 'Quoted prices in active market (Level 1)'

In 2017, there were transfers from Level 1 to Level 2 on financial assets available for sale (€ 1.0 billion of assets) due to changes in liquidity.

Valuation Techniques

The following is an explanation of the valuation techniques used in establishing the fair value of the different types of financial instruments that the Group trades.

Sovereign, Quasi-sovereign and Corporate Debt and Equity Securities – Where there are no recent transactions then fair value may be determined from the last market price adjusted for all changes in risks and information since that date. Where a close proxy instrument is quoted in an active market then fair value is determined by adjusting the proxy value for differences in the risk profile of the instruments. Where close proxies are not available then fair value is estimated using more complex modelling techniques. These techniques include discounted cash flow models using current market rates for credit, interest, liquidity and other risks. For equity securities modeling techniques may also include those based on earnings multiples.

Mortgage- and Other Asset-Backed Securities (MBS/ABS) include residential and commercial MBS and other ABS including CDOs. ABS have specific characteristics as they have different underlying assets and the issuing entities have different capital structures. The complexity increases further where the underlying assets are themselves ABS, as is the case with many of the CDO instruments.

Where no reliable external pricing is available, ABS are valued, where applicable, using either relative value analysis which is performed based on similar transactions observable in the market, or industry-standard valuation models making largest possible use of available observable inputs. The industry standard models calculate principal and interest payments for a given deal based on assumptions that can be independently price tested. The inputs include prepayment speeds, loss assumptions (timing and severity) and a discount rate (spread, yield or discount margin). These inputs/assumptions are derived from actual transactions, external market research and market indices where appropriate.

Loans – For certain loans fair value may be determined from the market price on a recently occurring transaction adjusted for all changes in risks and information since that transaction date. Where there are no recent market transactions then broker quotes, consensus pricing, proxy instruments or discounted cash flow models are used to determine fair value. Discounted cash flow models incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan or other credit markets, where available and appropriate.

Leveraged loans can have transaction-specific characteristics which can limit the relevance of market-observed transactions. Where similar transactions exist for which observable quotes are available from external pricing services then this information is used with appropriate adjustments to reflect the transaction differences. When no similar transactions exist, a discounted cash flow valuation technique is used with credit spreads derived from the appropriate leveraged loan index, incorporating the industry classification, subordination of the loan, and any other relevant information on the loan and loan counterparty.

Over-The-Counter Derivative Financial Instruments – Market standard transactions in liquid trading markets, such as interest rate swaps, foreign exchange forward and option contracts in G7 currencies, and equity swap and option contracts on listed securities or indices are valued using market standard models and quoted parameter inputs. Parameter inputs are obtained from pricing services, consensus pricing services and recently occurring transactions in active markets wherever possible.

More complex instruments are modeled using more sophisticated modeling techniques specific for the instrument and are calibrated to available market prices. Where the model output value does not calibrate to a relevant market reference then valuation adjustments are made to the model output value to adjust for any difference. In less active markets, data is obtained from less frequent market transactions, broker quotes and through extrapolation and interpolation techniques. Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions.

Financial Liabilities Designated at Fair Value through Profit or Loss under the Fair Value Option – The fair value of financial liabilities designated at fair value through profit or loss under the fair value option incorporates all market risk factors including a measure of the Group’s credit risk relevant for that financial liability. The financial liabilities include structured note issuances, structured deposits, and other structured securities issued by consolidated vehicles, which may not be quoted in an active market. The fair value of these financial liabilities is determined by discounting the contractual cash flows using the relevant credit-adjusted yield curve. The market risk parameters are valued consistently to similar instruments held as assets, for example, any derivatives embedded within the structured notes are valued using the same methodology discussed in the “Over-The-Counter Derivative Financial Instruments” section above.

Where the financial liabilities designated at fair value through profit or loss under the fair value option are collateralized, such as securities loaned and securities sold under repurchase agreements, the credit enhancement is factored into the fair valuation of the liability.

Investment Contract Liabilities – Assets which are linked to the investment contract liabilities are owned by the Group. The investment contract obliges the Group to use these assets to settle these liabilities. Therefore, the fair value of investment contract liabilities is determined by the fair value of the underlying assets (i.e., amount payable on surrender of the policies).

Analysis of Financial Instruments with Fair Value Derived from Valuation Techniques Containing Significant Unobservable Parameters (Level 3)

Some of the financial assets and financial liabilities in Level 3 of the fair value hierarchy have identical or similar offsetting exposures to the unobservable input. However, according to IFRS they are required to be presented gross.

Trading Securities – Certain illiquid emerging market corporate bonds and illiquid highly structured corporate bonds are included in this level of the hierarchy. In addition, some of the holdings of notes issued by securitization entities, commercial and residential MBS, collateralized debt obligation securities and other ABS are reported here. The decrease in the year is mainly due to a combination of sales, settlements and losses offset by purchases and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

Positive and Negative Market Values from Derivative Instruments categorized in this level of the fair value hierarchy are valued based on one or more significant unobservable parameters. The unobservable parameters may include certain correlations, certain longer-term volatilities, certain prepayment rates, credit spreads and other transaction-specific parameters.

Level 3 derivatives includes certain options where the volatility is unobservable; certain basket options in which the correlations between the referenced underlying assets are unobservable; longer-term interest rate option derivatives; multi-currency foreign exchange derivatives; and certain credit default swaps for which the credit spread is not observable.

The decrease in assets was due to settlements and losses marginally offset by transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments. The decrease in liabilities was due to settlements, gains and transfers between Level 2 and Level 3.

Other Trading Instruments classified in Level 3 of the fair value hierarchy mainly consist of traded loans valued using valuation models based on one or more significant unobservable parameters. Level 3 loans comprise illiquid leveraged loans and illiquid residential and commercial mortgage loans. The balance decreased in the year due to sales, settlements and losses offset by purchases, issuances and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

Financial Assets/Liabilities designated at Fair Value through Profit or Loss – Certain corporate loans and structured liabilities which were designated at fair value through profit or loss under the fair value option are categorized in this level of the fair value hierarchy. The corporate loans are valued using valuation techniques which incorporate observable credit spreads, recovery rates and unobservable utilization parameters. Revolving loan facilities are reported in the third level of the hierarchy because the utilization in the event of the default parameter is significant and unobservable.

In addition, certain hybrid debt issuances designated at fair value through profit or loss containing embedded derivatives are valued based on significant unobservable parameters. These unobservable parameters include single stock volatility correlations. Assets marginally decreased during the year due to sales, settlements, losses and transfers between Level 2 and Level 3 offset by purchases and issuances. Liabilities decreased in the year due to settlements, gains and transfers between Level 2 and Level 3 offset by issuances.

Financial Assets Available for Sale include non-performing loan portfolios where there is no trading intent and unlisted equity instruments where there is no close proxy and the market is very illiquid. The marginal decrease in assets in the year is due to sales and settlements offset by purchases, transfers between Level 2 and Level 3 and gains.

Reconciliation of financial instruments classified in Level 3

Reconciliation of financial instruments classified in Level 3

Dec 31, 2017

in € m.	Balance, beginning of year	Changes in the group of consolidated companies	Total gains/ losses[1]	Purchases	Sales	Issuances[2]	Settlements[3]	Transfers into Level 3[4]	Transfers out of Level 3[4]	Balance, end of year
Financial assets held at fair value:										
Trading securities	5,012	(1)	(153)	2,144	(1,660)	0	(818)	772	(662)	4,634
Positive market values from derivative financial instruments	9,798	(0)	(610)	0	0	0	(1,889)	2,298	(2,257)	7,340
Other trading assets	5,674	(7)	(283)	2,095	(2,328)	636	(1,803)	950	(524)	4,409
Financial assets designated at fair value through profit or loss	1,601	0	(78)	807	(118)	63	(710)	58	(134)	1,488
Financial assets available for sale	4,153	(40)	205[5]	722	(249)	0	(1,206)	539	(21)	4,104
Other financial assets at fair value	33	0	33	0	0	0	(26)	7	0	47
Total financial assets held at fair value	26,271	(47)	(886)[6,7]	5,768	(4,356)	699	(6,453)	4,624	(3,598)	22,022
Financial liabilities held at fair value:										
Trading securities	52	0	(6)	0	0	0	(46)	1	0	2
Negative market values from derivative financial instruments	8,857	(5)	(64)	0	0	0	(1,827)	924	(1,892)	5,992
Other trading liabilities	0	0	(0)	0	0	0	0	0	0	0
Financial liabilities designated at fair value through profit or loss	2,229	(7)	(128)	0	0	146	(564)	154	(387)	1,444
Other financial liabilities at fair value	(848)	0	268	0	0	0	286	(18)	15	(298)
Total financial liabilities held at fair value	10,290	(12)	69[6,7]	0	0	146	(2,151)	1,061	(2,265)	7,139

1 Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets available for sale reported in the consolidated statement of income and unrealized net gains (losses) on financial assets available for sale and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in Level 1 or Level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within Level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.
2 Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.
3 Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.
4 Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year.
5 Total gains and losses on available for sale include a gain of € 94 million recognized in other comprehensive income, net of tax, and a loss of € 8 million recognized in the income statement presented in net gains (losses) on financial assets available for sale.
6 This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a loss of € 565 million and for total financial liabilities held at fair value this is a gain of € 123 million. The effect of exchange rate changes is reported in other comprehensive income, net of tax.
7 For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains.

in € m.	Balance, beginning of year	Changes in the group of consolidated companies	Total gains/ losses[1]	Purchases	Sales	Issuances[2]	Settlements[3]	Transfers into Level 3[4]	Transfers out of Level 3[4]	Balance, end of year
										Dec 31, 2016
Financial assets held at fair value:										
Trading securities	6,669	(0)	143	1,736	(3,605)	0	(990)	1,589	(528)	5,012
Positive market values from derivative financial instruments	9,445	(60)	(88)	0	0	0	(1,290)	4,158	(2,367)	9,798
Other trading assets	6,082	66	56	2,196	(3,606)	735	(1,527)	2,616	(944)	5,674
Financial assets designated at fair value through profit or loss	4,478	(509)	40	2	(273)	131	(1,073)	86	(1,282)	1,601
Financial assets available for sale	4,874	(1)	255[5]	920	(630)	0	(1,377)	187	(74)	4,153
Other financial assets at fair value[6]	0	0	0	0	0	0	0	33	0	33
Total financial assets held at fair value	31,549	(504)	405[6,7]	4,853	(8,114)	866	(6,257)	8,669	(5,195)	26,271
Financial liabilities held at fair value:										
Trading securities	18	0	0	0	0	0	34	0	(0)	52
Negative market values from derivative financial instruments	7,879	(317)	620	0	0	0	(508)	3,316	(2,134)	8,857
Other trading liabilities	0	0	0	0	0	0	0	0	0	0
Financial liabilities designated at fair value through profit or loss	3,053	0	(75)	0	0	587	(729)	245	(851)	2,229
Other financial liabilities at fair value	(1,146)	0	135	0	0	0	3	(26)	187	(848)
Total financial liabilities held at fair value	9,805	(317)	680[6,7]	0	0	587	(1,200)	3,534	(2,799)	10,290

1 Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets available for sale reported in the consolidated statement of income and unrealized net gains (losses) on financial assets available for sale and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in Level 1 or Level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within Level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.
2 Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.
3 Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.
4 Transfers in and transfers out of Level 3 are related to changes in observability of input parameters. During the year they are recorded at their fair value at the beginning of year. For instruments transferred into Level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of Level 3 the table does not show any gains or losses or cash flows on the instruments during the year since the table is presented as if they have been transferred out at the beginning of the year.
5 Total gains and losses on available for sale include a loss of € 94 million recognized in other comprehensive income, net of tax, and a gain of € 187 million recognized in the income statement presented in net gains (losses) on financial assets available for sale.
6 This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a gain of € 4 million and for total financial liabilities held at fair value this is a gain of € 50 million. The effect of exchange rate changes is reported in other comprehensive income, net of tax.
7 For assets positive balances represent gains, negative balances represent losses. For liabilities positive balances represent losses, negative balances represent gains.

Sensitivity Analysis of Unobservable Parameters

Where the value of financial instruments is dependent on unobservable parameter inputs, the precise level for these parameters at the balance sheet date might be drawn from a range of reasonably possible alternatives. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence and in line with the Group's approach to valuation control detailed above. Were the Group to have marked the financial instruments concerned using parameter values drawn from the extremes of the ranges of reasonably possible alternatives then as of December 31, 2017 it could have increased fair value by as much as € 1.6 billion or decreased fair value by as much as € 1.0 billion. As of December 31, 2016 it could have increased fair value by as much as € 1.8 billion or decreased fair value by as much as € 1.0 billion.

The changes in sensitive amounts from December 31, 2016 to December 31, 2017 show a material reduction to the positive fair value movement, and a smaller reduction to the negative fair value movement from using reasonable possible alternatives.

These moves are primarily driven by the overall reduction in the Level 3 population in the same period (e.g. Group Level 3 assets down from € 26.3 billion at the end of 2016 to € 22.0 billion at the end of 2017), with this largely the result of de-risking / asset sales. The reduction in positive fair value movement moved in line with the reduction in the Level 3 population, whilst the reduction in negative fair value movement was proportionally smaller due to idiosyncratic factors across a number of trades.

Our sensitivity calculation of unobservable parameters for Level 3 aligns to the approach used to assess valuation uncertainty for Prudent Valuation purposes. Prudent Valuation is a capital requirement for assets held at fair value. It provides a mechanism for quantifying and capitalizing valuation uncertainty in accordance with the European Commission Delegated Regulation (EU) 2016/101, which supplements Article 34 of Regulation (EU) No. 575/2013 (CRR), requiring institutions to apply as a deduction from CET 1 for the amount of any additional value adjustments on all assets measured at fair value calculated in accordance with Article 105(14). This utilizes exit price analysis performed for the relevant assets and liabilities in the Prudent Valuation assessment. The downside sensitivity may be limited in some cases where the fair value is already demonstrably prudent.

This disclosure is intended to illustrate the potential impact of the relative uncertainty in the fair value of financial instruments for which valuation is dependent on unobservable input parameters. However, it is unlikely in practice that all unobservable parameters would be simultaneously at the extremes of their ranges of reasonably possible alternatives. Hence, the estimates disclosed above are likely to be greater than the true uncertainty in fair value at the balance sheet date. Furthermore, the disclosure is neither predictive nor indicative of future movements in fair value.

For many of the financial instruments considered here, in particular derivatives, unobservable input parameters represent only a subset of the parameters required to price the financial instrument, the remainder being observable. Hence for these instruments the overall impact of moving the unobservable input parameters to the extremes of their ranges might be relatively small compared with the total fair value of the financial instrument. For other instruments, fair value is determined based on the price of the entire instrument, for example, by adjusting the fair value of a reasonable proxy instrument. In addition, all financial instruments are already carried at fair values which are inclusive of valuation adjustments for the cost to close out that instrument and hence already factor in uncertainty as it reflects itself in market pricing. Any negative impact of uncertainty calculated within this disclosure, then, will be over and above that already included in the fair value contained in the financial statements.

Breakdown of the sensitivity analysis by type of instrument[1]

	Dec 31, 2017		Dec 31, 2016	
in € m.	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives
Securities:				
Debt securities	126	90	213	137
Commercial mortgage-backed securities	6	6	13	12
Mortgage and other asset-backed securities	26	28	46	40
Corporate, sovereign and other debt securities	94	56	154	85
Equity securities	95	67	116	68
Derivatives:				
Credit	155	125	238	158
Equity	164	138	209	150
Interest related	340	173	429	187
Foreign Exchange	65	12	32	21
Other	106	73	143	92
Loans:				
Loans	504	320	377	227
Other	0	0	0	0
Total	1,556	999	1,758	1,040

[1] Where the exposure to an unobservable parameter is offset across different instruments then only the net impact is disclosed in the table.

Quantitative Information about the Sensitivity of Significant Unobservable Inputs

The behavior of the unobservable parameters on Level 3 fair value measurement is not necessarily independent, and dynamic relationships often exist between the other unobservable parameters and the observable parameters. Such relationships, where material to the fair value of a given instrument, are explicitly captured via correlation parameters, or are otherwise controlled via pricing models or valuation techniques. Frequently, where a valuation technique utilizes more than one input, the choice of a certain input will bound the range of possible values for other inputs. In addition, broader market factors (such as interest rates, equity, credit or commodity indices or foreign exchange rates) can also have effects.

The range of values shown below represents the highest and lowest inputs used to value the significant exposures within Level 3. The diversity of financial instruments that make up the disclosure is significant and therefore the ranges of certain parameters can be large. For example, the range of credit spreads on mortgage backed securities represents performing, more liquid positions with lower spreads then the less liquid, non-performing positions which will have higher credit spreads. As Level 3 contains the less liquid fair value instruments, the wide ranges of parameters seen is to be expected, as there is a high degree of pricing differentiation within each exposure type to capture the relevant market dynamics. There follows a brief description of each of the principal parameter types, along with a commentary on significant interrelationships between them.

Credit Parameters are used to assess the creditworthiness of an exposure, by enabling the probability of default and resulting losses of a default to be represented. The credit spread is the primary reflection of creditworthiness, and represents the premium or yield return above the benchmark reference instrument (typically LIBOR, or relevant Treasury Instrument, depending upon the asset being assessed), that a bond holder would require to allow for the credit quality difference between that entity and the reference benchmark. Higher credit spreads will indicate lower credit quality, and lead to a lower value for a given bond or other loan-asset that is to be repaid to the holder or lender by the borrower. Recovery Rates represent an estimate of the amount a lender would receive in the case of a default of a loan, or a bond holder would receive in the case of default of the bond. Higher recovery rates will give a higher valuation for a given bond position, if other parameters are held constant. Constant Default Rate (CDR) and Constant Prepayment Rate (CPR) allow more complex loan and debt assets to be assessed, as these parameters estimate the ongoing defaults arising on scheduled repayments and coupons, or whether the borrower is making additional (usually voluntary) prepayments. These parameters are particularly relevant when forming a fair value opinion for mortgage or other types of lending, where repayments are delivered by the borrower through time, or where the borrower may pre-pay the loan (seen for example in some residential mortgages). Higher CDR will lead to lower valuation of a given loan or mortgage as the lender will ultimately receive less cash.

Interest rates, credit spreads, inflation rates, foreign exchange rates and equity prices are referenced in some option instruments, or other complex derivatives, where the payoff a holder of the derivative will receive is dependent upon the behavior of these underlying references through time. Volatility parameters describe key attributes of option behavior by enabling the variability of returns of the underlying instrument to be assessed. This volatility is a measure of probability, with higher volatilities denoting higher probabilities of a particular outcome occurring. The underlying references (interest rates, credit spreads etc.) have an effect on the valuation of options, by describing the size of the return that can be expected from the option. Therefore the value of a given option is dependent upon the value of the underlying instrument, and the volatility of that instrument, representing the size of the payoff, and the probability of that payoff occurring. Where volatilities are high, the option holder will see a higher option value as there is greater probability of positive returns. A higher option value will also occur where the payoff described by the option is significant.

Correlations are used to describe influential relationships between underlying references where a derivative or other instrument has more than one underlying reference. Behind some of these relationships, for example commodity correlation and interest rate-foreign exchange correlations, typically lie macroeconomic factors such as the impact of global demand on groups of commodities, or the pricing parity effect of interest rates on foreign exchange rates. More specific relationships can exist between credit references or equity stocks in the case of credit derivatives and equity basket derivatives, for example. Credit correlations are used to estimate the relationship between the credit performance of a range of credit names, and stock correlations are used to estimate the relationship between the returns of a range of equities. A derivative with a correlation exposure will be either long- or short-correlation. A high correlation suggests a strong relationship between the underlying references is in force, and this will lead to an increase in value of a long-correlation derivative. Negative correlations suggest that the relationship between underlying references is opposing, i.e., an increase in price of one underlying reference will lead to a reduction in the price of the other.

An EBITDA (‘earnings before interest, tax, depreciation and amortization’) multiple approach can be used in the valuation of less liquid securities. Under this approach the enterprise value (‘EV’) of an entity can be estimated via identifying the ratio of the EV to EBITDA of a comparable observable entity and applying this ratio to the EBITDA of the entity for which a valuation is being estimated. Under this approach a liquidity adjustment is often applied due to the difference in liquidity between the generally listed comparable used and the company under valuation. A higher EV/EBITDA multiple will result in a higher fair value.

Financial instruments classified in Level 3 and quantitative information about unobservable inputs

						Dec 31, 2017
	Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)[1]	Significant unobservable input(s) (Level 3)		Range
Financial instruments held at fair value – held for trading, designated at fair value and available-for-sale:						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	79	0	Price based	Price	0 %	102 %
			Discounted cash flow	Credit spread (bps)	136	2,217
Mortgage- and other asset-backed securities	714	0	Price based	Price	0 %	102 %
			Discounted cash flow	Credit spread (bps)	12	2,000
				Recovery rate	0 %	90 %
				Constant default rate	0 %	25 %
				Constant prepayment rate	0 %	29 %
Total mortgage- and other asset-backed securities	793	0				
Debt securities and other debt obligations	3,870	1,307	Price based	Price	0 %	176 %
Held for trading	3,559	2	Discounted cash flow	Credit spread (bps)	34	500
Corporate, sovereign and other debt securities	3,559					
Available-for-sale	267					
Designated at fair value	44	1,305				
Equity securities	913	0	Market approach	Price per net asset value	60 %	100 %
Held for trading	282	0		Enterprise value/EBITDA (multiple)	1	14
Available-for-sale	480		Discounted cash flow	Weighted average cost capital	8 %	20 %
Designated at fair value	151					
Loans	7,397	0	Price based	Price	0 %	161 %
Held for trading	4,376	0	Discounted cash flow	Credit spread (bps)	190	1,578
Designated at fair value	338			Constant default rate	–	–
Available-for-sale	2,684			Recovery rate	40 %	40 %
Loan commitments	0	8	Discounted cash flow	Credit spread (bps)	5	261
				Recovery rate	37 %	75 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	1,710[2]	131[3]	Discounted cash flow	IRR	1 %	24 %
				Repo rate (bps)	224	254
Total non-derivative financial instruments held at fair value	14,683	1,446				

[1] Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.
[2] Other financial assets include € 34 million of other trading assets, € 956 million of other financial assets designated at fair value and € 674 million other financial assets available for sale.
[3] Other financial liabilities include € 131 million of securities sold under repurchase agreements designated at fair value.

in € m. (unless stated otherwise)	Fair value Assets	Fair value Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range Dec 31, 2017	
Financial instruments held at fair value:						
Market values from derivative financial instruments:						
Interest rate derivatives	4,466	2,250	Discounted cash flow	Swap rate (bps)	(72)	1,036
				Inflation swap rate	(3) %	11 %
				Constant default rate	0 %	16 %
				Constant prepayment rate	2 %	38 %
			Option pricing model	Inflation volatility	0 %	5 %
				Interest rate volatility	0 %	103 %
				IR - IR correlation	(25) %	100 %
				Hybrid correlation	(85) %	90 %
Credit derivatives	630	909	Discounted cash flow	Credit spread (bps)	0	17,957
				Recovery rate	0 %	94 %
			Correlation pricing model	Credit correlation	37 %	90 %
Equity derivatives	728	1,347	Option pricing model	Stock volatility	6 %	90 %
				Index volatility	7 %	53 %
				Index - index correlation	–	–
				Stock - stock correlation	2 %	93 %
				Stock Forwards	0 %	7 %
				Index Forwards	0 %	95 %
FX derivatives	1,113	1,058	Option pricing model	Volatility	(6) %	31 %
Other derivatives	402	129[1]	Discounted cash flow	Credit spread (bps)	–	–
			Option pricing model	Index volatility	0 %	79 %
				Commodity correlation	10 %	75 %
Total market values from derivative financial instruments	7,340	5,693				

[1] Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

	Fair value				Dec 31, 2016	
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)[1]	Significant unobservable input(s) (Level 3)		Range
Financial instruments held at fair value – held for trading, designated at fair value and available-for-sale:						
Mortgage and other asset backed securities held for trading:						
Commercial mortgage-backed securities	294	0	Price based	Price	0 %	103 %
			Discounted cash flow	Credit spread (bps)	119	2,000
Mortgage- and other asset-backed securities	1,071	0	Price based	Price	0 %	110 %
			Discounted cash flow	Credit spread (bps)	105	2,000
				Recovery rate	0 %	100 %
				Constant default rate	0 %	18 %
				Constant prepayment rate	0 %	29 %
Total mortgage- and other asset-backed securities	1,365	0				
Debt securities and other debt obligations	3,626	1,757	Price based	Price	0 %	169 %
Held for trading	3,373	52	Discounted cash flow	Credit spread (bps)	26	882
Corporate, sovereign and other debt securities	3,373					
Available-for-sale	253					
Designated at fair value	0	1,705				
Equity securities	937	0	Market approach	Price per net asset value	60 %	100 %
Held for trading	274	0		Enterprise value/EBITDA (multiple)	1	12
Available-for-sale	633		Discounted cash flow	Weighted average cost capital	8 %	22 %
Designated at fair value	30					
Loans	7,571	0	Price based	Price	0 %	180 %
Held for trading	4,105	0	Discounted cash flow	Credit spread (bps)	180	4,612
Designated at fair value	980			Constant default rate	0 %	24 %
Available-for-sale	2,486			Recovery rate	25 %	80 %
Loan commitments	0	40	Discounted cash flow	Credit spread (bps)	0	481
				Recovery rate	30 %	99 %
			Loan pricing model	Utilization	0 %	100 %
Other financial instruments	2,974[2]	485[3]	Discounted cash flow	IRR	3 %	24 %
				Repo rate (bps)	178	214
Total non-derivative financial instruments held at fair value	16,474	2,282				

1 Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.
2 Other financial assets include € 1.6 billion of other trading assets, € 592 million of other financial assets designated at fair value and € 780 million other financial assets available for sale.
3 Other financial liabilities include € 444 million of securities sold under repurchase agreements designated at fair value and € 41 million of other financial liabilities designated at fair value.

in € m. (unless stated otherwise)	Fair value Assets	Fair value Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Dec 31, 2016 Range	
Financial instruments held at fair value:						
Market values from derivative financial instruments:						
Interest rate derivatives	5,587	3,446	Discounted cash flow	Swap rate (bps)	(0)	2,309
				Inflation swap rate	(1) %	16 %
				Constant default rate	0 %	15 %
				Constant prepayment rate	0 %	19 %
			Option pricing model	Inflation volatility	0 %	5 %
				Interest rate volatility	0 %	123 %
				IR - IR correlation	(12) %	99 %
				Hybrid correlation	(50) %	93 %
Credit derivatives	829	1,126	Discounted cash flow	Credit spread (bps)	0	8,427
				Recovery rate	0 %	100 %
			Correlation pricing model	Credit correlation	13 %	85 %
Equity derivatives	1,142	2,098	Option pricing model	Stock volatility	10 %	67 %
				Index volatility	10 %	44 %
				Index - index correlation	73 %	88 %
				Stock - stock correlation	8 %	88 %
				Stock Forwards	0 %	8 %
				Index Forwards	0 %	20 %
FX derivatives	1,654	1,780	Option pricing model	Volatility	(8) %	39 %
Other derivatives	586	(441)[1]	Discounted cash flow	Credit spread (bps)	0	0
			Option pricing model	Index volatility	5 %	110 %
				Commodity correlation	(21) %	85 %
Total market values from derivative financial instruments	9,798	8,008				

[1] Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

Unrealized Gains or Losses on Level 3 Instruments held or in Issue at the Reporting Date

The unrealized gains or losses on Level 3 Instruments are not due solely to unobservable parameters. Many of the parameter inputs to the valuation of instruments in this level of the hierarchy are observable and the gain or loss is partly due to movements in these observable parameters over the period. Many of the positions in this level of the hierarchy are economically hedged by instruments which are categorized in other levels of the fair value hierarchy. The offsetting gains and losses that have been recorded on all such hedges are not included in the table below, which only shows the gains and losses related to the Level 3 classified instruments themselves held at the reporting date in accordance with IFRS 13.The unrealized gains and losses on Level 3 instruments are included in both net interest income and net gains on financial assets/liabilities at fair value through profit or loss in the consolidated income statement.

in € m.	Dec 31, 2017	Dec 31, 2016
Financial assets held at fair value:		
Trading securities	(15)	28
Positive market values from derivative financial instruments	171	1,597
Other trading assets	55	(80)
Financial assets designated at fair value through profit or loss	2	(1)
Financial assets available for sale	123	90
Other financial assets at fair value	33	(6)
Total financial assets held at fair value	**368**	1,628
Financial liabilities held at fair value:		
Trading securities	3	(2)
Negative market values from derivative financial instruments	(740)	(1,001)
Other trading liabilities	0	(0)
Financial liabilities designated at fair value through profit or loss	4	59
Other financial liabilities at fair value	(249)	(139)
Total financial liabilities held at fair value	**(981)**	(1,082)
Total	**(613)**	547

Recognition of Trade Date Profit

If there are significant unobservable inputs used in a valuation technique, the financial instrument is recognized at the transaction price and any trade date profit is deferred. The table below presents the year-to-year movement of the trade date profits deferred due to significant unobservable parameters for financial instruments classified at fair value through profit or loss. The balance is predominantly related to derivative instruments.

in € m.	2017	2016
Balance, beginning of year	916	955
New trades during the period	277	454
Amortization	(282)	(297)
Matured trades	(140)	(158)
Subsequent move to observability	(71)	(39)
Exchange rate changes	(11)	0
Balance, end of year	690	916

14 – Fair Value of Financial Instruments not carried at Fair Value

The valuation techniques used to establish fair value for the Group's financial instruments which are not carried at fair value in the balance sheet and their respective IFRS fair value hierarchy categorization are consistent with those outlined in Note 13 "Financial Instruments carried at Fair Value".

Other financial instruments not carried at fair value are not managed on a fair value basis, for example, retail loans and deposits and credit facilities extended to corporate clients. For these instruments fair values are calculated for disclosure purposes only and do not impact the balance sheet or income statement. Additionally, since the instruments generally do not trade there is significant management judgment required to determine these fair values.

Short-term financial instruments – The carrying value represents a reasonable estimate of fair value for the following financial instruments which are predominantly short-term:

Assets	Liabilities
Cash and central bank balances	Deposits
Interbank balances (w/o central banks)	Central bank funds purchased and securities sold under repurchase agreements
Central bank funds sold and securities purchased under resale agreements	Securities loaned
Securities borrowed	Other short-term borrowings
Other financial assets	Other financial liabilities

For longer-term financial instruments within these categories, fair value is determined by discounting contractual cash flows using rates which could be earned for assets with similar remaining maturities and credit risks and, in the case of liabilities, rates at which the liabilities with similar remaining maturities could be issued, at the balance sheet date.

Loans – Fair value is determined using discounted cash flow models that incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan agreement or credit default swap markets, where available and appropriate.

For retail lending portfolios with a large number of homogenous loans (i.e. German residential mortgages), the fair value is calculated on a portfolio basis by discounting the portfolio's contractual cash flows using own new interest rates on this type of loan. For similar retail lending portfolios outside Germany, the fair value is calculated on a portfolio basis by discounting the portfolio's contractual cash flows using risk-free interest rates. This present value calculation is then adjusted for credit risk by discounting at the margins which could be earned on similar loans if issued at the balance sheet date. For other portfolios the present value calculation is adjusted for credit risk by calculating the expected loss over the estimated life of the loan based on various parameters including probability of default and loss given default and level of collateralization. The fair value of corporate lending portfolios is estimated by discounting a projected margin over expected maturities using parameters derived from the current market values of collateralized loan obligation ("CLO") transactions collateralized with loan portfolios that are similar to the Group's corporate lending portfolio.

Securities purchased under resale agreements, securities borrowed, securities sold under repurchase agreements and securities loaned – Fair value is derived from valuation techniques by discounting future cash flows using the appropriate credit risk-adjusted discount rate. The credit risk-adjusted discount rate includes consideration of the collateral received or pledged in the transaction. These products are typically short-term and highly collateralized, therefore the fair value is not significantly different to the carrying value.

Long-term debt and trust preferred securities – Fair value is determined from quoted market prices, where available. Where quoted market prices are not available, fair value is estimated using a valuation technique that discounts the remaining contractual cash at a rate at which an instrument with similar characteristics could be issued at the balance sheet date.

Estimated fair value of financial instruments not carried at fair value on the balance sheet1

					Dec 31, 2017
in € m.	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets:					
Cash and central bank balances	225,655	225,655	225,655	0	0
Interbank balances (w/o central banks)	9,265	9,265	76	9,189	0
Central bank funds sold and securities purchased under resale agreements	9,971	9,973	0	9,973	0
Securities borrowed	16,732	16,732	0	16,732	0
Loans	401,699	403,842	0	24,643[2]	379,199[2]
Securities held to maturity	3,170	3,238	3,238	0	0
Other financial assets	88,936	88,939	0	88,939	0
Financial liabilities:					
Deposits	580,812	580,945	2,108	578,837	(0)
Central bank funds purchased and securities sold under repurchase agreements	18,105	18,103	0	18,103	0
Securities loaned	6,688	6,688	0	6,688	0
Other short-term borrowings	18,411	18,412	0	18,412	0
Other financial liabilities	117,366	117,366	1,875	115,491	0
Long-term debt	159,715	161,829	0	152,838	8,991
Trust preferred securities	5,491	5,920	0	5,920	0

					Dec 31, 2016
in € m.	Carrying value	Fair value	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets:					
Cash and central bank balances	181,364	181,364	181,364	0	0
Interbank balances (w/o central banks)	11,606	11,606	58	11,548	0
Central bank funds sold and securities purchased under resale agreements	16,287	16,287	0	16,287	0
Securities borrowed	20,081	20,081	0	20,081	0
Loans	408,909	407,834	0	28,703	379,132
Securities held to maturity	3,206	3,305	3,305	0	0
Other financial assets	112,479	112,468	0	112,468	0
Financial liabilities:					
Deposits	550,204	550,402	2,232	548,170	0
Central bank funds purchased and securities sold under repurchase agreements	25,740	25,739	0	25,739	0
Securities loaned	3,598	3,598	0	3,598	0
Other short-term borrowings	17,295	17,289	0	17,268	21
Other financial liabilities	135,273	135,273	1,282	133,991	0
Long-term debt	172,316	171,178	0	161,976	9,201
Trust preferred securities	6,373	6,519	0	6,263	257

[1] Amounts generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".
[2] Finance supply chain loan portfolio of € 9.2 billion was reclassified from 'Valuation technique unobservable parameters (Level 3)' to 'Valuation technique observable parameters (Level 2)' following a valuation review in fourth quarter 2017.

Loans – The difference between fair value and carrying value arose predominantly due to an increase in expected default rates and reduction in liquidity as implied from market pricing since initial recognition. These reductions in fair value are offset by an increase in fair value due to interest rate movements on fixed rate instruments.

Long-term debt and trust preferred securities – The difference between fair value and carrying value is due to the effect of changes in the rates at which the Group could issue debt with similar maturity and subordination at the balance sheet date compared to when the instrument was issued.

15 – Financial Assets Available for Sale

in € m.	Dec 31, 2017	Dec 31, 2016
Debt securities:		
German government	8,131	9,405
U.S. Treasury and U.S. government agencies	8,092	7,652
U.S. local (municipal) governments	2,436	3,261
Other foreign governments	19,275	23,779
Corporates	6,775	6,849
Other asset-backed securities	1	84
Mortgage-backed securities, including obligations of U.S. federal agencies	11	17
Other debt securities	359	470
Total debt securities	45,081	51,516
Equity securities:		
Equity shares	897	1,027
Investment certificates and mutual funds	97	122
Total equity securities	994	1,149
Other equity interests	636	804
Loans	2,685	2,759
Total financial assets available for sale	49,397	56,228

Please also refer to Note 7 “Net Gains (Losses) on Financial Assets Available for Sale” of this report.

16 – Financial Instruments Held to Maturity

In the first quarter of 2016, the Group began to use the Held to Maturity category to more appropriately present income and capital volatility in its banking book. In addition to managing the Group’s existing banking book exposure to interest rates, this accounting classification supports certain of the Group’s asset liability management objectives, e.g. maturity transformation.

The Group reclassified € 3.2 billion of securities held Available for Sale to Held to Maturity investments effective January 4, 2016. All reclassified assets are high quality Government, supranational and agency bonds and are managed by Group Treasury as part of the Group’s Strategic Liquidity Reserve.

Carrying values and fair values of financial assets reclassified from Available for Sale to Held to Maturity

	Dec 31, 2017		Dec 31, 2016	
in € m.	Carrying value (CV)	Fair Value (FV)	Carrying value (CV)	Fair Value (FV)
Debt securities reclassified:				
G7 Government bonds	423	434	428	446
Other Government, supranational and agency bonds	2,747	2,804	2,778	2,859
Total financial assets reclassified to Held-to-Maturity	3,170	3,238	3,206	3,305

17 – Equity Method Investments

Investments in associates and jointly controlled entities are accounted for using the equity method of accounting.

The Group holds interests in 77 (2016: 92) associates and 13 (2016: 14) jointly controlled entities. There are no individually material investments in associates and joint ventures.

Aggregated financial information on the Group’s share in associates and joint ventures that are individually immaterial

in € m.	Dec 31, 2017	Dec 31, 2016
Carrying amount of all associates that are individually immaterial to the Group	866	1,027
Aggregated amount of the Group's share of profit (loss) from continuing operations	141	183
Aggregated amount of the Group's share of post-tax profit (loss) from discontinued operations	0	0
Aggregated amount of the Group's share of other comprehensive income	(36)	11
Aggregated amount of the Group's share of total comprehensive income	105	194

18 – Offsetting Financial Assets and Financial Liabilities

The Group is eligible to present certain financial assets and financial liabilities on a net basis on the balance sheet pursuant to criteria described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments”.

The following tables provide information on the impact of offsetting on the consolidated balance sheet, as well as the financial impact of netting for instruments subject to an enforceable master netting arrangement or similar agreement as well as available cash and financial instrument collateral.

Assets

							Dec 31, 2017
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
Central bank funds sold and securities purchased under resale agreements (enforceable)	8,136	(455)	7,681	0	0	(7,675)	7
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	2,290	0	2,290	0	0	(2,239)	51
Securities borrowed (enforceable)	14,987	0	14,987	0	0	(14,093)	894
Securities borrowed (non-enforceable)	1,744	0	1,744	0	0	(1,661)	83
Financial assets at fair value through profit or loss							
Trading assets	185,127	(465)	184,661	0	(81)	(86)	184,495
Positive market values from derivative financial instruments (enforceable)	363,859	(18,237)	345,622	(285,421)	(41,842)	(7,868)	10,490
Positive market values from derivative financial instruments (non-enforceable)	15,410	0	15,410	0	(1,811)	(1,276)	12,323
Financial assets designated at fair value through profit or loss (enforceable)	125,869	(64,003)	61,865	(728)	(773)	(56,410)	3,954
Financial assets designated at fair value through profit or loss (non-enforceable)	29,411	0	29,411	0	0	(20,534)	8,876
Total financial assets at fair value through profit or loss	719,676	(82,706)	636,970	(286,149)	(44,508)	(86,174)	220,138
Loans	401,699	0	401,699	0	(12,642)	(40,775)	348,282
Other assets	112,023	(10,531)	101,491	(29,854)	(569)	(94)	70,975
thereof: Positive market values from derivatives qualifying for hedge accounting (enforceable)	3,859	(706)	3,153	(2,461)	(565)	(94)	33
Remaining assets not subject to netting	307,869	0	307,869	0	(390)	(70)	307,409
Total assets	**1,568,425**	**(93,692)**	**1,474,732**	**(316,003)**	**(58,109)**	**(152,782)**	**947,839**

[1] Excludes real estate and other non-financial instrument collateral.

Liabilities

							Dec 31, 2017
				Amounts not set off on the balance sheet			
in € m.	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral	Net amount
Deposits	580,812	0	580,812	0	0	0	580,812
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	13,318	(455)	12,863	0	0	(12,863)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	5,242	0	5,242	0	0	(4,985)	257
Securities loaned (enforceable)	6,688	0	6,688	0	0	(6,688)	0
Securities loaned (non-enforceable)	0	0	0	0	0	0	0
Financial liabilities at fair value through profit or loss							
Trading liabilities	72,106	(643)	71,462	0	0	0	71,462
Negative market values from derivative financial instruments (enforceable)	347,496	(17,928)	329,568	(286,720)	(25,480)	(6,124)	11,244
Negative market values from derivative financial instruments (non-enforceable)	13,158	0	13,158	0	(1,913)	(615)	10,630
Financial liabilities designated at fair value through profit or loss (enforceable)	104,594	(63,360)	41,234	(728)	0	(40,506)	0
Financial liabilities designated at fair value through profit or loss (non-enforceable)	23,214	0	23,214	0	1,111	(13,646)	10,679
Total financial liabilities at fair value through profit or loss	560,568	(81,932)	478,636	(287,448)	(26,282)	(60,891)	104,015
Other liabilities	143,514	(11,306)	132,208	(44,815)	(31)	(87)	87,275
thereof: Negative market values from derivatives qualifying for hedge accounting (enforceable)	1,841	(547)	1,294	(1,162)	(31)	(87)	15
Remaining liabilities not subject to netting	190,183	0	190,183	0	0	0	190,183
Total liabilities	1,500,326	(93,692)	1,406,633	(332,263)	(26,314)	(85,514)	962,543

Effective November 30, 2017, the Group elected to convert its interest rate swaps (IRS) transacted with the London Clearing House from the previous collateral model to a settlement model. The IRS are now legally settled on a daily basis resulting in derecognition of the associated assets and liabilities. Previously, the Group applied the principles of IAS 32 offsetting to present net the positive (negative) carrying amounts of the IRS and associated variation margin payables (receivables). As a result, Gross amounts of financial assets and financial liabilities and corresponding Gross amounts set off on the balance sheet decreased by € 87.3 billion as of December 31, 2017, with no change to the Net amounts of financial assets and financial liabilities presented on the balance sheet.

Assets

in € m.	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts of financial assets presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral[1]	Net amount
				Amounts not set off on the balance sheet			Dec 31, 2016
Central bank funds sold and securities purchased under resale agreements (enforceable)	17,755	(4,020)	13,735	0	0	(13,719)	16
Central bank funds sold and securities purchased under resale agreements (non-enforceable)	2,552	0	2,552	0	0	(2,225)	327
Securities borrowed (enforceable)	18,470	0	18,470	0	0	(17,637)	832
Securities borrowed (non-enforceable)	1,611	0	1,611	0	0	(1,555)	56
Financial assets at fair value through profit or loss							
Trading assets	171,520	(477)	171,044	0	(101)	(884)	170,059
Positive market values from derivative financial instruments (enforceable)	592,048	(126,523)	465,525	(386,727)	(51,790)	(9,349)	17,658
Positive market values from derivative financial instruments (non-enforceable)	19,625	0	19,625	0	(2,055)	(1,244)	16,327
Financial assets designated at fair value through profit or loss (enforceable)	95,802	(40,998)	54,804	(2,748)	(928)	(46,670)	4,457
Financial assets designated at fair value through profit or loss (non-enforceable)	32,783	0	32,783	0	0	(21,074)	11,709
Total financial assets at fair value through profit or loss	911,778	(167,998)	743,781	(389,475)	(54,874)	(79,221)	220,211
Loans	408,909	0	408,909	0	(13,039)	(47,703)	348,167
Other assets	153,732	(27,686)	126,045	(39,567)	(589)	(104)	85,786
thereof: Positive market values from derivatives qualifying for hedge accounting (enforceable)	8,830	(5,314)	3,516	(2,719)	(589)	(104)	104
Remaining assets not subject to netting	275,442	0	275,442	0	(423)	(307)	274,712
Total assets	1,790,249	(199,704)	1,590,546	(429,042)	(68,925)	(162,473)	930,106

[1] Excludes real estate and other non-financial instrument collateral.

Liabilities

in € m.	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts of financial liabilities presented on the balance sheet	Impact of Master Netting Agreements	Cash collateral	Financial instrument collateral	Net amount
				Amounts not set off on the balance sheet			Dec 31, 2016
Deposits	550,204	0	550,204	0	0	0	550,204
Central bank funds purchased and securities sold under repurchase agreements (enforceable)	21,209	(4,020)	17,189	0	0	(17,189)	0
Central bank funds purchased and securities sold under repurchase agreements (non-enforceable)	8,551	0	8,551	0	0	(8,403)	149
Securities loaned (enforceable)	3,524	0	3,524	0	0	(3,524)	0
Securities loaned (non-enforceable)	75	0	75	0	0	(50)	25
Financial liabilities at fair value through profit or loss							
Trading liabilities	57,902	(873)	57,029	0	0	0	57,029
Negative market values from derivative financial instruments (enforceable)	569,064	(124,325)	444,739	(386,612)	(35,124)	(9,325)	13,678
Negative market values from derivative financial instruments (non-enforceable)	19,119	0	19,119	0	(1,721)	(897)	16,501
Financial liabilities designated at fair value through profit or loss (enforceable)	82,421	(39,031)	43,390	(2,748)	0	(40,642)	0
Financial liabilities designated at fair value through profit or loss (non-enforceable)	17,694	0	17,694	0	(7,910)	(7,664)	2,120
Total financial liabilities at fair value through profit or loss	746,200	(164,228)	581,971	(389,360)	(44,755)	(58,528)	89,328
Other liabilities	186,896	(31,456)	155,440	(56,679)	(1,298)	0	97,463
thereof: Negative market values from derivatives qualifying for hedge accounting (enforceable)	5,793	(1,200)	4,593	(2,834)	(1,297)	0	463
Remaining liabilities not subject to netting	208,773	0	208,773	0	0	0	208,773
Total liabilities	1,725,431	(199,704)	1,525,727	(446,039)	(46,053)	(87,693)	945,942

The column 'Gross amounts set off on the balance sheet' discloses the amounts offset in accordance with all the criteria described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates: Offsetting Financial Instruments".

The column 'Impact of Master Netting Agreements' discloses the amounts that are subject to master netting agreements but were not offset because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only. The amounts presented for other assets and other liabilities include cash margin receivables and payables respectively.

The columns 'Cash collateral' and 'Financial instrument collateral' disclose the cash and financial instrument collateral amounts received or pledged in relation to the total amounts of assets and liabilities, including those that were not offset.

Non-enforceable master netting agreements or similar agreements refer to contracts executed in jurisdictions where the rights of set off may not be upheld under the local bankruptcy laws.

The cash collateral received against the positive market values of derivatives and the cash collateral pledged towards the negative mark-to-market values of derivatives are booked within the 'Other liabilities' and 'Other assets' balances respectively.

The Cash and Financial instrument collateral amounts disclosed reflect their fair values. The rights of set off relating to the cash and financial instrument collateral are conditional upon the default of the counterparty.

19 – Loans

Loans by industry classification

in € m.	Dec 31, 2017	Dec 31, 2016[1]
Financial intermediation	52,204	49,618
Manufacturing	27,478	29,290
thereof:		
Basic metals and fabricated metal products	4,211	4,027
Electrical and optical equipment	3,386	4,680
Transport equipment	3,374	3,655
Chemicals and chemical products	3,623	3,906
Machinery and equipment	3,191	2,461
Food products	2,907	3,214
Households (excluding mortgages)	36,524	37,093
Households – mortgages	150,205	150,776
Public sector	13,711	15,740
Wholesale and retail trade	19,252	16,744
Commercial real estate activities	29,247	27,369
Lease financing	384	561
Fund management activities	18,708	26,129
Other	58,167	60,223
thereof:		
Renting of machinery and other business activities	26,559	22,298
Transport, storage and communication	9,243	12,005
Mining and quarrying of energy-producing materials	2,553	3,365
Electricity, gas and water supply	3,552	4,369
Gross loans	**405,879**	413,544
(Deferred expense)/unearned income	259	88
Loans less (deferred expense)/unearned income	**405,621**	413,455
Less: Allowance for loan losses	**3,921**	4,546
Total loans	**401,699**	408,909

[1] Prior to 2010, the Group reclassified certain financial assets, originally classified as Trading assets and Financial assets available for sale. The carrying value and fair value of Trading assets previously reclassified into loans are € 441 million (2016: € 514 million) and € 342 million (2016: € 414 million) and Financial assets available for sale previously reclassified into loans are € 22 million (2016: € 105 million) and € 22 million (2016: € 105 million) respectively

20 – Allowance for Credit Losses

The allowance for credit losses consists of an allowance for loan losses and an allowance for off-balance sheet positions.

Breakdown of the movements in the Group's allowance for loan losses

			2017			2016			2015
in € m.	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
Allowance, beginning of year	**2,071**	**2,475**	**4,546**	2,252	2,776	5,028	2,364	2,849	5,212
Provision for loan losses	299	253	552	743	604	1,347	334	548	882
Net charge-offs:	(487)	(532)	(1,019)	(894)	(870)	(1,764)	(482)	(612)	(1,094)
Charge-offs	(541)	(605)	(1,146)	(979)	(972)	(1,951)	(538)	(717)	(1,255)
Recoveries	54	73	127	85	101	187	56	105	161
Other Changes	(117)	(41)	(158)	(30)	(35)	(65)	36	(8)	28
Allowance, end of year	**1,766**	**2,155**	**3,921**	2,071	2,475	4,546	2,252	2,776	5,028

Activity in the Group's allowance for off-balance sheet positions (contingent liabilities and lending commitments)

			2017			2016			2015
in € m.	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
Allowance, beginning of year	**162**	**183**	**346**	144	168	312	85	141	226
Provision for off-balance sheet positions	(23)	(4)	(27)	24	12	36	58	16	74
Usage	0	0	0	0	0	0	0	0	0
Other changes	(18)	(16)	(34)	(5)	3	(2)	1	10	11
Allowance, end of year	**122**	**163**	**285**	162	183	346	144	168	312

21 – Transfers of Financial Assets

The Group enters into transactions in which it transfers financial assets held on the balance sheet and as a result may either be eligible to derecognize the transferred asset in its entirety or must continue to recognize the transferred asset to the extent of any continuing involvement, depending on certain criteria. These criteria are discussed in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

Where financial assets are not eligible to be derecognized, the transfers are viewed as secured financing transactions, with any consideration received resulting in a corresponding liability. The Group is not entitled to use these financial assets for any other purposes. The most common transactions of this nature entered into by the Group are repurchase agreements, securities lending agreements and total return swaps, in which the Group retains substantially all of the associated credit, equity price, interest rate and foreign exchange risks and rewards associated with the assets as well as the associated income streams.

Information on asset types and associated transactions that did not qualify for derecognition

in € m.	Dec 31, 2017	Dec 31, 2016[1]
Carrying amount of transferred assets		
Trading securities not derecognized due to the following transactions:		
Repurchase agreements	39,973	34,045
Securities lending agreements	58,076	64,661
Total return swaps	2,390	2,079
Other	12,661	10,830
Total trading securities	**113,101**	111,615
Other trading assets	71	85
Financial assets available for sale	711	241
Loans	131[2]	191[2]
Total	**114,014**	112,132
Carrying amount of associated liabilities	**48,885**	41,536

[1] Prior year numbers have been restated following reassessments of certain repurchase, securities lending, loans and other transactions.
[2] Loans where the associated liability is recourse only to the transferred assets had a carrying value and fair value of € 108 million at December 31, 2017 and € 123 million at December 31, 2016. The associated liabilities had the same carrying value and fair value which resulted in a net position of 0.

Carrying value of assets transferred in which the Group still accounts for the asset to the extent of its continuing involvement

in € m.	Dec 31, 2017	Dec 31, 2016
Carrying amount of the original assets transferred:		
Financial assets at fair value through profit or loss	291	0
Financial assets available for sale	386	332
Loans	0	40
Carrying amount of the assets continued to be recognized:		
Financial assets at fair value through profit or loss	15	0
Financial assets available for sale	96	263
Loans	0	16
Carrying amount of associated liabilities	54	58

The Group could retain some exposure to the future performance of a transferred asset either through new or existing contractual rights and obligations and still be eligible to derecognize the asset. This on-going involvement will be recognized as a new instrument which may be different from the original financial asset that was transferred. Typical transactions include retaining senior notes of non-consolidated securitizations to which originated loans have been transferred; financing arrangements with structured entities to which the Group has sold a portfolio of assets; or sales of assets with credit-contingent swaps. The Group's exposure to such transactions is not considered to be significant as any substantial retention of risks associated with the transferred asset will commonly result in an initial failure to derecognize. Transactions not considered to result in an on-going involvement include normal warranties on fraudulent activities that could invalidate a transfer in the event of legal action, qualifying pass-through arrangements and standard trustee or administrative fees that are not linked to performance.

The impact on the Group's Balance Sheet of on-going involvement associated with transferred assets derecognized in full

	Dec 31,2017			Dec 31,2016		
in € m.	Carrying value	Fair value	Maximum Exposure to Loss[1]	Carrying value	Fair value	Maximum Exposure to Loss[1]
Loans:						
Securitization notes	270	270	270	3	3	57
Other	13	13	13	12	12	12
Total Loans	284	284	284	15	15	69
Financial assets held at Fair Value through the P&L:						
Non-standard Interest Rate, cross-currency or inflation-linked swap	36	36	36	47[2]	47[2]	47[2]
Total Financial assets held at Fair Value through the P&L	36	36	36	47	47	47
Total financial assets representing on-going involvement	320	320	320	61	61	116
Financial liabilities held at Fair Value through the P&L:						
Non-standard Interest Rate, cross-currency or inflation-linked swap	67	67	0	64	64	0
Total financial liabilities representing on-going involvement	67	67	0	64	64	0

1 The maximum exposure to loss is defined as the carrying value plus the notional value of any undrawn loan commitments not recognized as liabilities.
2 Prior year numbers have been restated to reflect a reassessment of a transaction in 2017.

The impact on the Group's Statement of Income of on-going involvement associated with transferred assets derecognized in full

	Dec 31,2017			Dec 31,2016		
in € m.	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal	Year-to-date P&L	Cumulative P&L	Gain/(loss) on disposal
Securitization notes	3	3	79	0	6	0[1]
Non-standard Interest Rate, cross-currency or inflation-linked swap	46	510	0	122[2]	458[2]	0
Net gains/(losses) recognized from on-going involvement in derecognized assets	49	513	79	123	465	0

1 Typically, sales of assets into securitization vehicles were of assets that were classified as Fair Value through P&L, therefore any gain or loss on disposal is immaterial.
2 Prior year numbers have been restated to reflect a reassessment of a transaction in 2017.

22 – Assets Pledged and Received as Collateral

The Group pledges assets primarily as collateral against secured funding and for repurchase agreements, securities borrowing agreements as well as other borrowing arrangements and for margining purposes on OTC derivative liabilities. Pledges are generally conducted under terms that are usual and customary for standard securitized borrowing contracts and other transactions described.

Carrying value of the Group's assets pledged as collateral for liabilities or contingent liabilities[1]

in € m.	Dec 31, 2017	Dec 31, 2016[2]
Financial assets at fair value through profit or loss	51,082	40,684
Financial assets available for sale	6,469	16,081
Loans	71,404	73,649
Other	417	376
Total	**129,372**	130,790

1 Excludes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities.
2 Prior period results have been restated due to a refined approach to determine assets pledged

Total assets pledged to creditors available for sale or repledged[1]

in € m.	Dec 31, 2017	Dec 31, 2016[2]
Financial assets at fair value through profit or loss	55,882	51,397
Financial assets available for sale	0	13,814
Total	**55,882**	65,211

1 Includes assets pledged as collateral from transactions that do not result in liabilities or contingent liabilities.
2 Prior period results have been restated due to a refined approach to determine assets pledged

The Group receives collateral primarily in reverse repurchase agreements, securities lending agreements, derivatives transactions, customer margin loans and other transactions. These transactions are generally conducted under terms that are usual and customary for standard secured lending activities and the other transactions described. The Group, as the secured party, has the right to sell or re-pledge such collateral, subject to the Group returning equivalent securities upon completion of the transaction. This right is used primarily to cover short sales, securities loaned and securities sold under repurchase agreements.

Fair Value of collateral received

in € m.	Dec 31, 2017	Dec 31, 2016[1]
Securities and other financial assets accepted as collateral	365,492	310,272
thereof:		
collateral sold or repledged	307,224	252,758

1 Prior period results have been restated due to a refined approach to determine collateral received and collateral re-pledged

23 – Property and Equipment

in € m.	Owner occupied properties	Furniture and equipment	Leasehold improvements	Construction-in-progress	Total
Cost of acquisition:					
Balance as of January 1, 2016	1,432	3,060	2,662	130	7,284
Changes in the group of consolidated companies	(0)	24	(1)	0	23
Additions	134	199	111	281	725
Transfers	35	(4)	144	(171)	4
Reclassifications (to)/from “held for sale”	(17)	0	0	(0)	(17)
Disposals	67	908	117	(0)	1,092
Exchange rate changes	(1)	34	21	1	55
Balance as of December 31, 2016	1,516	2,406	2,820	240	6,982
Changes in the group of consolidated companies	0	(8)	(1)	0	(9)
Additions	12	165	117	191	485
Transfers	18	75	191	(288)	(4)
Reclassifications (to)/from “held for sale”	(61)	0	0	0	(61)
Disposals	96	97	291	0	484
Exchange rate changes	(3)	(67)	(92)	(4)	(166)
Balance as of December 31, 2017	1,387	2,473	2,743	139	6,743
Accumulated depreciation and impairment:					
Balance as of January 1, 2016	464	2,257	1,716	0	4,438
Changes in the group of consolidated companies	(0)	19	(6)	0	12
Depreciation	28	226	191	0	445
Impairment losses	87	6	0	0	93
Reversals of impairment losses	0	(0)	0	0	0
Transfers	39	(14)	6	(0)	30
Reclassifications (to)/from “held for sale”	(0)	(1)	(1)	0	(2)
Disposals	46	803	42	0	891
Exchange rate changes	(2)	31	23	0	52
Balance as of December 31, 2016	572	1,720	1,886	0	4,178
Changes in the group of consolidated companies	0	(8)	(1)	0	(9)
Depreciation	37	211	193	0	441
Impairment losses	15	3	2	0	19
Reversals of impairment losses	0	(1)	0	0	(1)
Transfers	1	17	(22)	0	(4)
Reclassifications (to)/from “held for sale”	(0)	0	0	0	(0)
Disposals	44	90	284	0	418
Exchange rate changes	(1)	(54)	(72)	0	(128)
Balance as of December 31, 2017	579	1,800	1,702	0	4,080
Carrying amount:					
Balance as of December 31, 2016	944	685	934	240	2,804
Balance as of December 31, 2017	809	673	1,041	139	2,663

Impairment losses on property and equipment are recorded within general and administrative expenses for the income statement.

The carrying value of items of property and equipment on which there is a restriction on sale was € 40 million as of December 31, 2017.

Commitments for the acquisition of property and equipment were € 41 million at year-end 2017.

24 – Leases

The Group is lessee under lease arrangements covering property and equipment.

Finance Lease Commitments

Most of the Group's finance lease arrangements are made under usual terms and conditions.

Net Carrying Value of Leasing Assets Held under finance leases

in € m.	Dec 31, 2017	Dec 31, 2016
Land and buildings	14	12
Furniture and equipment	4	2
Other	0	0
Net carrying value	**18**	14

Future Minimum Lease Payments Required under the Group's Finance Leases

in € m.	Dec 31, 2017	Dec 31, 2016
Future minimum lease payments:		
Not later than one year	8	6
Later than one year and not later than five years	20	18
Later than five years	70	67
Total future minimum lease payments	**98**	91
Less: Future interest charges	70	63
Present value of finance lease commitments	**28**	28
Future minimum lease payments to be received	**0**	3
Contingent rent recognized in the income statement[1]	**0**	0

[1] The contingent rent is based on market interest rates, such as three months EURIBOR; below a certain rate the Group receives a rebate.

Operating Lease Commitments

The Group leases the majority of its offices and branches under long-term agreements. Most of the lease contracts are made under usual terms and conditions, which means they include options to extend the lease by a defined amount of time, price adjustment clauses and escalation clauses in line with general office rental market conditions. However, the lease agreements do not include any clauses that impose any restriction on the Group's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements. The Group has one significant lease contract which contains five options to extend the lease each for a period of five years and there is no purchase option in this specific lease.

Future Minimum Lease Payments Required under the Group's Operating Leases

in € m.	Dec 31, 2017	Dec 31, 2016
Future minimum rental payments:		
Not later than one year	684	707
Later than one year and not later than five years	1,979	2,092
Later than five years	1,901	1,093
Total future minimum rental payments	**4,564**	3,893
Less: Future minimum rentals to be received	**58**	89
Net future minimum rental payments	**4,506**	3,804

As of December 31, 2017, the total future minimum rental payments included € 305 million for the Group headquarters in Frankfurt am Main that was sold and leased back on December 1, 2011. The Group entered into a 181 months leaseback arrangement for the entire facility in connection with the transaction.

In 2017, the rental payments for lease and sublease agreements amounted to € 790 million. This included charges of € 800 million for minimum lease payments and € 6 million for contingent rents as well as € 15 million related to sublease rentals received.

25 – Goodwill and Other Intangible Assets

Goodwill

Changes in Goodwill

The changes in the carrying amount of goodwill, as well as gross amounts and accumulated impairment losses of goodwill, for the years ended December 31, 2017, and December 31, 2016, are shown below by cash-generating units ("CGU"). As of January 1, 2016, the structure of the primary CGUs had been changed as a result of the reorganization of business operations under an amended segment structure. In the second quarter of 2017 and in accordance with the strategy announcement made on March 5, 2017, the Group's business operations were reorganized under a new divisional structure, which also reconfigured the existing Global Markets, Corporate Finance and Global Transaction Banking businesses into a single division, Corporate & Investment Bank (CIB). A review of CIB confirmed the previous assessment of two separate CGUs. Consequently, the former primary CGUs "Global Markets" and "Corporate & Investment Banking" have been grouped as "Sales & Trading" (S&T) and "Global Transaction Banking, Global Capital Markets & Corporate Finance" (GTB, GCM & CF). Please also refer to Note 4, "Business Segments and Related Information" for more information regarding changes in the presentation of segment disclosures.

Goodwill allocated to cash-generating units

in € m.	Sales & Trading	Global Transaction Banking, Global Capital Markets & Corporate Finance	Private and Commercial Clients	Wealth Management	Postbank	Deutsche Asset Management	Non-Core Operations Unit[1]	Others	Total
Balance as of January 1, 2016	0	519	0	530	0	3,839	0	1	**4,890**
Goodwill acquired during the year	0	0	0	0	0	0	0	0	0
Purchase accounting adjustments	0	0	0	0	0	0	0	0	0
Transfers	285	0	0	0	0	(285)	0	0	0
Reclassification from (to) "held for sale"	0	0	0	0	0	(12)	0	0	(12)
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	0	0	0	0	0	0
Impairment losses[2]	(285)	0	0	0	0	(500)	0	0	(785)
Exchange rate changes/other	0	13	0	33	0	(37)	0	0	10
Balance as of December 31, 2016	0	532	0	564	0	3,006	0	1	**4,103**
Gross amount of goodwill	2,953	1,553	998	564	1,763	3,506	669	1	**12,007**
Accumulated impairment losses	(2,953)	(1,021)	(998)	0	(1,763)	(500)	(669)	0	**(7,904)**
Balance as of January 1, 2017	0	532	0	564	0	3,006	0	1	**4,103**
Goodwill acquired during the year	0	0	0	0	0	0	0	0	0
Purchase accounting adjustments	0	0	0	0	0	0	0	0	0
Transfers	6	(6)	0	0	0	0	0	0	0
Reclassification from (to) "held for sale"	0	(3)	0	0	0	0	0	0	(3)
Goodwill related to dispositions without being classified as "held for sale"	0	0	0	0	0	(6)	0	0	(6)
Impairment losses[2]	(6)	0	0	0	0	0	0	0	(6)
Exchange rate changes/other	0	(52)	0	(22)	0	(231)	0	0	(306)
Balance as of December 31, 2017	0	471	0	541	0	2,768	0	1	**3,782**
Gross amount of goodwill	2,780	1,485	1,077	541	2,086	3,232	0	1	**11,203**
Accumulated impairment losses	(2,780)	(1,014)	(1,077)	0	(2,086)	(464)	0	0	**(7,422)**

[1] Includes primary CGUs NCOU Wholesale Assets and NCOU Operating Assets. From 2017 onwards, the NCOU ceased to exist as a standalone division. Accordingly, in 2017 the gross balances for goodwill and accumulated impairments of the former NCOU CGUs have been allocated among other primary CGUs.
[2] Impairment losses of goodwill are recorded as impairment of goodwill and other intangible assets in the income statement.

In addition to the primary CGUs, the segment CIB includes goodwill resulting from the acquisition of a nonintegrated investment which is not allocated to the respective segment' primary CGU. Such goodwill is summarized as "Others" in the table above.

In 2017, changes in goodwill mainly reflected exchange rate fluctuations, predominantly related to the translation of goodwill held in USD.

In 2016, changes in goodwill mainly included impairments of € 785 million in Sales & Trading (S&T) (€ 285 million) and Deutsche AM (€ 500 million). The impairment in S&T was the result of a transfer of certain businesses from Deutsche AM to S&T in the second quarter 2016. The transfer resulted in the reassignment of € 285 million of goodwill from Deutsche AM based on relative values in accordance with IFRS. The subsequent impairment review of S&T led to an impairment loss of € 285 million of the reassigned goodwill. The goodwill impairment in Deutsche AM was recorded in the fourth quarter 2016 in relation to the sale of the Abbey Life business and the formation of a disposal group held for sale. Immediately before its initial classification as a disposal group, the carrying amounts of all assets and liabilities included in the Abbey Life disposal group were measured and recognized in accordance with applicable IFRS. With the sale of Abbey Life to close for an amount lower than its carrying amount, the proportion of Deutsche AM CGU goodwill attributable to the Abbey Life business was not expected to be recovered upon sale of the disposal group. Accordingly, the allocated goodwill amount of € 500 million as well as other intangible assets (value of business acquired, VOBA) of € 515 million included in the disposal group were considered impaired and written-off through Impairment of goodwill and other intangible assets.

In 2015, changes in goodwill (other than those related to exchange rate changes) mainly included impairments of € 4,933 million recorded in the third quarter 2015. These were reported in the former CGUs CB&S (€ 2,168 million) and PBC (€ 2,765 million). Following the re-segmentation of the Group in the first quarter 2016, the impairment amounts were restated to the amended segments/CGUs GM/CIB and PW&CC/Postbank, based on the goodwill balances related to these business units prior to the third quarter 2015 impairment. Accordingly, of the impairment amount of € 4,933 million, € 1,568 million were allocated to former CGU GM, € 600 million to former CGU CIB, € 1,002 million to PCC and € 1,763 million to Postbank. These charges had been the result of the goodwill impairment test conducted in the third quarter 2015. The test was triggered by the further substantiation of our strategy in the third quarter 2015, largely driven by the impact of the then expected higher regulatory capital requirements for both former segments CB&S and PBC as well as the disposal expectations in PBC. In connection with the sale of the Canadian port operations of Maher Terminals, goodwill of € 138 million was allocated to the disposal group classified as held for sale in the first quarter 2015.

Goodwill Impairment Test

For the purposes of impairment testing, goodwill acquired in a business combination is allocated to CGUs. On the basis as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates", the Group's primary CGUs are as outlined above. "Other" goodwill is tested individually for impairment on the level of each of the nonintegrated investments. Goodwill is tested for impairment annually in the fourth quarter by comparing the recoverable amount of each goodwill-carrying CGU with its carrying amount. In addition, in accordance with IAS 36, the Group tests goodwill whenever a triggering event is identified. The recoverable amount is the higher of a CGU's fair value less costs of disposal and its value in use.

The annual goodwill impairment tests conducted in 2017 and 2016 did not result in an impairment loss on the Group's primary goodwill-carrying CGUs as the recoverable amounts of these CGUs were higher than the respective carrying amounts.

A review of the Group's strategy or certain political or global risks for the banking industry such as a return of the European sovereign debt crisis, uncertainties regarding the implementation of already adopted regulation and the introduction of legislation that is already under discussion as well as a slowdown of GDP growth may negatively impact the performance forecasts of certain of the Group's CGUs and, thus, could result in an impairment of goodwill in the future.

Carrying Amount

The carrying amount of a primary CGU is derived using a capital allocation model based on the Shareholders' Equity Allocation Framework of the Group (please refer to Note 4, "Business Segments and Related Information" for more details). The allocation uses the Group's total equity at the date of valuation, including Additional Tier 1 Notes ("AT1 Notes"), which constitute unsecured and subordinated notes of Deutsche Bank and which are classified as Additional equity components in accordance with IFRS. Total equity is adjusted for specific effects related to nonintegrated investments, which are tested separately for impairment as outlined above, and for an add-on adjustment for goodwill attributable to noncontrolling interests.

Recoverable Amount

The Group determines the recoverable amounts of its primary CGUs on the basis of fair value less costs of disposal (Level 3 of the fair value hierarchy) and employs a discounted cash flow (DCF) model, which reflects the specifics of the banking business and its regulatory environment. The model calculates the present value of the estimated future earnings that are distributable to shareholders after fulfilling the respective regulatory capital requirements. The recoverable amounts also include the fair value of the AT1 Notes, allocated to the primary CGUs consistent to their treatment in the carrying amount.

The DCF model uses earnings projections and respective capitalization assumptions based on five-year financial plans as well as longer term expectations on the impact of regulatory developments, which are discounted to their present value. Estimating future earnings and capital requirements involves judgment and the consideration of past and current performances as well as expected developments in the respective markets, and in the overall macroeconomic and regulatory environments. Earnings projections beyond the initial five-year period are, where applicable, adjusted to derive a sustainable level and the cash flow to equity is assumed to increase by or converge towards a constant long-term growth rate of up to 3.2 % (2016: 2.8 %). This is based on projected revenue forecasts of the CGUs as well as expectations for the development of gross domestic product and inflation, and is captured in the terminal value.

Key Assumptions and Sensitivities

Key Assumptions: The DCF value of a CGU is sensitive to the earnings projections, to the discount rate (cost of equity) applied and, to a much lesser extent, to the long-term growth rate. The discount rates applied have been determined based on the capital asset pricing model and comprise a risk-free interest rate, a market risk premium and a factor covering the systematic market risk (beta factor). The values for the risk-free interest rate, the market risk premium and the beta factors are determined using external sources of information. CGU-specific beta factors are determined based on a respective group of peer companies. Variations in all of these components might impact the discount rates.

Primary goodwill-carrying cash-generating units

	Discount rate (post-tax)	
	2017	2016
Global Transaction Banking, Global Capital Markets & Corporate Finance	8.8 %	8.8 %
Wealth Management	9.1 %	8.4 %
Deutsche Asset Management	10.0 %	9.9 %

Management determined the values for the key assumptions in the following table based on a combination of internal and external analysis. Estimates for efficiency and the cost reduction program are based on progress made to date and scheduled future projects and initiatives.

Primary goodwill-carrying cash-generating unit	Description of key assumptions	Uncertainty associated with key assumptions and potential events/circumstances that could have a negative effect
Wealth Management	- Strategy continuously informed by market trends and developments, including global wealth creation and concentration, digitalization, aging population, transfer to next generation, product trends as well as competitor activity and benchmarking - Focus shifting from protect and transform agenda increasingly towards growth (e.g. aspiration to hire >100 FTE front-office) - Continued focus on expanding business with high net worth and ultra-high net worth clients with strong coverage in selected developed and emerging markets - Building out of global discretionary portfolio management and investment advisory solutions as well as increasing revenues from collaboration between divisions (esp. CIB) - Continue to deploy balance sheet for WM lending proposition - Extend home market leadership in Germany combined with strong organic growth strategy in Asia/Pacific, selected EMEA markets (e.g. UK, MEA) and Americas - Ambition to increased market share in the fragmented competitive landscape - Benefiting from cost savings coming through from operating platform optimization and transformation measures - Targeted investment in further platform enhancements, investment solutions and building out digital capabilities	- Major industry threats, i.e., market and exchange rate volatility, sovereign debt burden, increasing costs from compliance of upcoming regulations, technological developments - Continued low interest rate environment - Investors continue to hold assets out of the markets, retreat to cash or simpler, lower fee products, and reduce trading activity - Business/execution risks, i.e., under achievement of net new money targets from market uncertainty, franchise instability, DB reputation, loss of high quality relationship managers - Difficulties in executing organic growth strategies through certain restrictions, e.g., unable to hire relationship managers, longer product development cycle - Cost savings following efficiency gains and expected IT/process improvements are not realized to the extent planned
Deutsche Asset Management	- Deliver strong investment product performance - Expand product suite in growth areas (e.g., alternatives, multi-asset, passive, ESG investment schemes) while rationalizing non-core strategies - Consistent net flows leveraging market share leadership in Germany and the rest of Europe and continued growth in Asia/Pacific and Americas - Diversification of intermediary coverage toward high growth channels and deployment of digital solutions to serve new channels - Further efficiency through improved core operating processes, platform optimization and product rationalization - Anticipated margin compression from regulation (MIFID II)	- Challenging market environment and volatility unfavorable to our investment strategies - Unfavorable margin development and adverse competition levels in key markets and products beyond expected levels - Business/execution risks, e.g., under achievement of net flow targets from market uncertainty, loss of high quality client facing employees, lower than expected efficiency gains - Uncertainty around regulation and its potential implications not yet anticipated
Global Transaction Banking, Global Capital Markets and Corporate Finance	- Maximizing client driven franchise offering suite of investment banking products in Debt and Equity Origination as well as Advisory combined with Trade, Cash, and Trust, Agency and Security Services in transaction banking - Macroeconomic outlook is positive with key economies in Europe supporting trade growth and interest rate increase, supporting the growth in Cash and Trade businesses - Advisory assumes rebuilding sector gaps in Coverage teams, improving in sell-side mix and increasing coverage of cross border M&A deals - Debt and Equity Origination fee pool expected to remain elevated. Equity markets valuation, positive macro outlook and particularly in Debt where a refinancing maturity wall is expected through the medium term - Mitigate regulatory driven Capital increases through portfolio management and re-investing to enhance return through chosen client segments and relationships - Recalibrating incentive model structure to drive revenues with clients that generate higher returns through greater product density - Continued investment into technology improvements and platform enhancements; self-funded through internal cost efficiencies	- Macro environment remains challenging, particularly in Europe - Risk from the exit process of the U.K. from the European Union - Initiatives to optimize the portfolio through resource re-allocation may not generate the expected revenue growth and reductions in the client, country and product perimeter may have a greater than expected impact on revenues - Further potential margin compression - Decline in costs expected from strategic initiatives does not materialize in the planned time frame - Potential adverse macroeconomic and geopolitical developments impacting trade volumes, interest rates and foreign exchange movements - Resource constraints in the form of capital, headcount and technology investment, impacting the potential to generate expected level of returns

Sensitivities: In order to test the resilience of the recoverable amount, key assumptions used in the DCF model (for example, the discount rate and the earnings projections) are sensitized. Management believes that reasonable possible changes in key assumptions could cause impairment losses in GTB, GCM & CF and WM, for which the recoverable amounts exceeded the respective carrying amounts by 18 % or € 2.5 billion (GTB, GCM & CF) and 18 % or € 0.5 billion (WM).

Change in certain key assumptions to cause the recoverable amount to equal the carrying amount

Change in Key Assumptions	GTB, GCM & CF	WM
Discount rate (post tax) increase from/to	8.8 %/10.4 %	9.1 %/9.9 %
Projected future earnings in each period	(14) %	(9) %
Long term growth rates	N/M	0.6 %

N/M – Not meaningful, as a rate of 0 % would still lead to a recoverable amount in excess of the carrying amount.

Other Intangible Assets

Changes of other intangible assets by asset classes for the years ended December 31, 2017, and December 31, 2016

	Purchased intangible assets								Internally generated intangible assets	Total other intangible assets
	Unamortized			Amortized					Amortized	
in € m.	Retail investment management agreements	Other	Total unamortized purchased intangible assets	Customer-related intangible assets	Value of business acquired	Contract-based intangible assets	Software and other	Total amortized purchased intangible assets	Software	
Cost of acquisition/manufacture:										
Balance as of January 1, 2016	1,061	440	1,501	1,559	941	795	1,112	4,407	4,846	10,755
Additions	0	0	0	27	0	0	49	76	1,499	1,575
Changes in the group of consolidated companies	0	0	0	(155)	(806)	0	(13)	(974)	0	(975)
Disposals	0	0	0	1	0	0	148	149	123	272
Reclassifications from (to) "held for sale"	0	0	0	0	0	(747)	(203)	(950)	0	(950)
Transfers	0	0	0	0	0	0	65	65	(29)	36
Exchange rate changes	33	0	33	1	(135)	22	9	(103)	42	(28)
Balance as of December 31, 2016	1,094	440	1,534	1,431	0	70	871	2,372	6,235	10,140
Additions	0	0	0	15	0	0	48	63	1,360	1,423
Changes in the group of consolidated companies	0	0	0	0	0	0	(35)	(35)	(171)	(206)
Disposals	0	0	0	0	0	0	21	21	121	142
Reclassifications from (to) "held for sale"	0	0	0	(6)	0	0	0	(6)	0	(6)
Transfers	0	(0)	(0)	1	0	0	50	51	(42)	9
Exchange rate changes	(131)	(1)	(132)	(77)	0	0	(12)	(89)	(237)	(457)
Balance as of December 31, 2017	963	439	1,402	1,364	0	70	901	2,335	7,024	10,761
Accumulated amortization and impairment:										
Balance as of January 1, 2016	268	418	686	1,476	300	429	893	3,098	1,782	5,567
Amortization for the year	0	0	0	39	37	24	36	136	679	815[1]
Changes in the group of consolidated companies	0	0	0	(155)	(808)	0	(15)	(978)	(10)	(988)
Disposals	0	0	0	1	0	0	146	147	99	246
Reclassifications from (to) "held for sale"	0	0	0	0	0	(359)	(94)	(453)	0	(453)
Impairment losses	0	6	6	0	515	0	0	515	60	580[2]
Reversals of impairment losses	0	0	0	0	0	39	10	49	0	49[3]
Transfers	0	0	0	3	0	0	45	48	(20)	28
Exchange rate changes	8	0	8	1	(43)	10	6	(26)	26	7
Balance as of December 31, 2016	276	424	700	1,363	0	65	715	2,143	2,418	5,261
Amortization for the year	0	0	0	34	0	4	27	65	870	935[4]
Changes in the group of consolidated companies	0	0	0	0	0	0	(35)	(35)	(171)	(206)
Disposals	0	0	0	0	0	0	18	18	81	99
Reclassifications from (to) "held for sale"	0	0	0	(4)	0	0	0	(4)	0	(4)
Impairment losses	0	15	15	0	0	0	0	0	42	57[5]
Reversals of impairment losses	0	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	41	41	(35)	6
Exchange rate changes	(33)	0	(33)	(72)	0	0	(12)	(84)	(129)	(246)
Balance as of December 31, 2017	243	439	682	1,321	0	69	718	2,108	2,914	5,704
Carrying amount:										
As of December 31, 2016	818	15	833	68	0	5	156	229	3,817	4,879
As of December 31, 2017	719	1	720	43	0	1	183	227	4,110	5,057

1 The € 815 million were included in general and administrative expenses.
2 Of which € 521 million were included in impairment of goodwill and other intangible assets, consisting of impairments of an unamortized trademark intangible asset (€ 6 million) as well as the write-off of the Value of business acquired (VOBA; € 515 million). Furthermore, € 60 million of impairments related to self-developed software, which were recorded in general and administrative expenses.
3 € 49 million were recorded as reversal of a prior year's impairment related to the sale of Maher Terminals LLC (NCOU) and are included under impairment of goodwill and other intangible assets.
4 The € 935 million were included in general and administrative expenses.
5 Of which € 42 million were related to the impairment of self-developed software, recorded in general and administrative expenses, and € 15 million referring to the impairment of a non-amortizing trade-mark intangible asset which is included under impairment of goodwill and other intangible assets.

Amortizing Intangible Assets

In 2017, amortizing other intangible assets increased by a net € 291 million. This was mainly driven by additions to internally generated intangible assets of € 1.4 billion, representing the capitalization of expenses incurred in conjunction with the Group's development of own-used software. Offsetting were amortization expenses of € 935 million, in particular for the scheduled consumption of capitalized software (€ 897 million). The reassessment of current platform software as well as software under construction led to the impairment of self-developed software (€ 42 million). Furthermore, the strengthening of the Euro accounted for negative exchange rate changes of € 113 million reducing the net book value of amortizing intangible assets.

In 2016, amortizing other intangible assets decreased by a net € 327 million. Main components of this development included increases due to additions to internally generated intangible assets of € 1.5 billion, which represent the capitalization of expenses incurred in conjunction with the Group's development of own-used software. These were offset by amortization expenses of € 815 million, mostly related to the scheduled asset consumption of self-developed software (€ 679 million), and impairment charges of € 580 million, mainly reflecting the write-off of the value of business acquired (VOBA; € 515 million) as a consequence of the Abbey Life disposal (Deutsche AM). Furthermore, the reassessment of current platform software as well as software under construction, led to the write-down of self-developed software (€ 60 million). In advance of the sale of the NCOU legacy investment in Maher Terminals' Port Elizabeth operation in the fourth quarter 2016, its reclassification to the held-for-sale category in the third quarter 2016 had led to a net reduction of € 497 million in contract-based and trade name other intangible assets.

During 2015, the main changes in amortizing other intangible assets included additions to internally generated intangible assets of € 1.2 billion, which represent the capitalization of expenses incurred in conjunction with the Group's activities related to the development of own-used software. On the other hand and as a result of the reassessment of current platform software as well as software under construction, the Group recorded impairments of self-developed software of € 191 million. On April 27, 2015, Deutsche Bank had announced its new strategic roadmap, in which the sale of Postbank was an integral part. The Group's further updating of its new Strategy constituted a triggering event upon which goodwill and all other non-financial assets included in the former CGU PBC had to be tested for impairment. The valuation performed in the third quarter 2015 on the new strategic plan resulted in an impairment of the former CGU PBC. After allocation of the impairment to fully write-off the former PBC goodwill (€ 2.8 billion), an impairment loss of € 837 million related to other intangible assets within the former CGU PBC was recognized (of which € 834 million related to the Postbank CGU), reflecting the change in strategic intent and the then expected deconsolidation of Postbank. The impairment was based on a fair value less costs of disposal model (Level 3 of the fair value hierarchy). Of that impairment amount, € 427 million related to amortizing intangible assets, mainly comprising write-offs of customer-related intangible assets (€ 397 million), BHW trademark intangibles (€ 16 million) and contract-based intangible assets (€ 14 million). The remainder was allocated to write-off the unamortizing Postbank trademark intangible asset (€ 410 million; see below).

Other intangible assets with finite useful lives are generally amortized over their useful lives based on the straight-line method.

Useful lives of other amortized intangible assets by asset class

	Useful lives in years
Internally generated intangible assets:	
Software	up to 10
Purchased intangible assets:	
Customer-related intangible assets	up to 20
Contract-based intangible assets	up to 8
Other	up to 80

Unamortized Intangible Assets

Within this asset class, the Group recognizes certain contract-based and marketing-related intangible assets, which are deemed to have an indefinite useful life.

In particular, the asset class comprises the below detailed investment management agreements related to retail mutual funds and certain trademarks. Due to the specific nature of these intangible assets, market prices are ordinarily not observable and, therefore, the Group values such assets based on the income approach, using a post-tax DCF-methodology.

Retail investment management agreements: These assets, amounting to € 719 million, relate to the Group's U.S. retail mutual fund business and are allocated to the Deutsche AM CGU. Retail investment management agreements are contracts that give DWS Investments the exclusive right to manage a variety of mutual funds for a specified period. Since these contracts are easily renewable, the cost of renewal is minimal, and they have a long history of renewal, these agreements are not expected to have a foreseeable limit on the contract period. Therefore, the rights to manage the associated assets under management are expected to generate cash flows for an indefinite period of time. This intangible asset was recorded at fair value based upon a valuation provided by a third party at the date of the Group's acquisition of Zurich Scudder Investments, Inc. in 2002.

The recoverable amount of the asset of € 719 million was calculated as fair value less costs of disposal using the multi-period excess earnings method and the fair value measurement was categorized as Level 3 in the fair value hierarchy. The key assumptions in determining the fair value less costs of disposal include the asset mix, the flows forecast and the effective fee rate. The discount rates (cost of equity) applied in the calculation were 10.5 % in 2017 and 10.7 % in 2016. The reviews of the valuation for the years 2017, 2016 and 2015 neither resulted in any impairment nor a reversal of prior impairments.

Trademarks: The other unamortized intangible assets had included the Postbank (allocated to CGU Postbank) and the Sal. Oppenheim (allocated to CGU WM) trademarks, which were both acquired in 2010. The Postbank trademark was initially recognized in 2010 at € 382 million. In finalizing the purchase price allocation in 2011, the fair value of the Postbank trademark increased to € 410 million. The Sal. Oppenheim trademark was recognized at € 27 million. Since both trademarks were expected to generate cash flows for an indefinite period of time, they were classified as unamortized intangible assets. Both trademarks were recorded at fair value at the acquisition date, based on third party valuations. The recoverable amounts were calculated as the fair value less costs of disposal of the trademarks based on the income approach using the relief-from-royalty method. Reflecting the change in strategic intent and the expected deconsolidation of Postbank, the Postbank trademark (€ 410 million) was fully written off in the third quarter 2015. Following a review of the valuation model for the Sal. Oppenheim trademark, a write-down of € 6 million was recorded in the fourth quarter 2015. The discontinuation of its use outside the German market led to a further write-down of € 6 million recorded in the fourth quarter 2016. As the Group had announced on October 26, 2017 its intention to integrate the Sal. Oppenheim franchise into Deutsche Bank during 2018 and to no longer maintain the Sal. Oppenheim brand, the book value of the trademark (€ 15 million) was considered impaired and fully written off in the fourth quarter 2017.

26 – Non-Current Assets and Disposal Groups Held for Sale

Within the balance sheet, non-current assets and disposal groups held for sale are included in other assets and other liabilities.

in € m.	Dec 31, 2017	Dec 31, 2016
Cash, due and deposits with banks, Central bank funds sold and securities purchased under resale agreements	0	243
Trading assets, Derivatives, Financial assets designated at fair value through P&L	0	30
Financial assets available for sale	4	29
Loans	0	46
Property and equipment	15	174
Other assets	26	42
Total assets classified as held for sale	45	563
Deposits, Central bank funds purchased and securities sold under resale agreements	0	570
Trading liabilities, Derivatives, Financial liabilities designated at fair value through P&L	0	29
Long-term debt	0	0
Other liabilities	16	102
Total liabilities classified as held for sale	16	701

As of December 31, 2017 and December 31, 2016, no unrealized gains (losses) relating to non-current assets classified as held for sale were recognized directly in accumulated other comprehensive income (loss) (net of tax).

Sale of Argentine subsidiary Deutsche Bank S.A.

On June 5, 2017, the Group announced the completion of the sale of its Argentine subsidiary Deutsche Bank S.A. to Banco Comafi S.A. With outstanding substantial regulatory approvals received in May 2017, the entity had been classified as a disposal group held for sale prior to its disposal in June 2017. The disposal resulted in a pre-tax loss on sale of € 190 million, including the realization of a currency translation adjustment, which was recorded in the second quarter 2017 and mainly included in C&A.

Disposals in 2017

Division	Disposal	Financial impact[1]	Date of the disposal
Deutsche Asset Management	In the fourth quarter 2016, the Group had classified its fund administration and custody business of Sal. Oppenheim Luxembourg as a disposal group held for sale. The transaction was subject to customary closing conditions and regulatory approvals and was completed on December 1, 2017.	Up until its disposal, the revaluation of the unit resulted in an additional impairment loss of € 5 million recorded in Other income of 2017.	Fourth quarter 2017

[1] Impairment losses and reversals of impairment losses are included in Other income.

Non-Current Assets and Disposal Groups Held for Sale as of December 31, 2016

Division	Non-current assets and disposal groups held for sale	Financial impact[1]	Additional information
Deutsche Asset Management	On December 22, 2016, Deutsche Bank announced that it had reached an agreement to sell its fund administration and custody business of Sal. Oppenheim Luxembourg to private bank Hauck & Aufhäuser. Accordingly, the balance sheet of the related business was classified as a disposal group held for sale. The completion of the transaction, which comprises the sale of two Luxembourg entities and its staff, is subject to customary closing conditions and regulatory approvals and is expected to close within twelve months.	The revaluation of the disposal group resulted in an impairment loss of € 34 million recorded in Other income of the fourth quarter 2016.	Disposed of in fourth quarter 2017

[1] Impairment losses and reversals of impairment losses are included in Other income.

Disposals in 2016

Division	Disposal	Financial impact[1]	Date of the disposal
Non-Core Operations Unit	On April 15, 2016, the Group announced that it had reached an agreement with Macquarie Infrastructure Partners III ("MIP III"), a fund managed by Macquarie Infrastructure and Real Assets ("MIRA"), to sell Maher Terminals USA, LLC ("Maher Terminals"), a multi-user container terminal in Port Elizabeth, New Jersey. Under the transaction, MIP III agreed to acquire 100 % of Maher Terminals, subject to regulatory approvals. Following on from further progress made in the third quarter 2016, as of September 30, 2016, Maher Terminals had been classified as a disposal group held for sale. The reclassification did not result in an impairment loss. Prior to its reclassification, Maher Terminals had been accounted for as a consolidated legacy investment held within the NCOU. The sale was successfully completed on November 16, 2016.	None	Fourth quarter 2016
Deutsche Asset Management	On September 28, 2016, Deutsche Bank announced that it had reached an agreement with Phoenix Life Holdings Limited ("Phoenix Life"), a subsidiary of Phoenix Group Holdings ("Phoenix Group"), to sell its Abbey Life business (Abbey Life Assurance Company Limited, Abbey Life Trustee Services Limited and Abbey Life Trust Securities Limited) which were held within Deutsche AM. Under the terms of the transaction, Phoenix Life agreed to acquire 100 % of the Abbey Life business for a purchase price, net of certain adjustments, of GBP 933 million (€ 1,087 million, based on year-end exchange rate) and an indemnity protection for up to GBP 175 million covering for a period of up to 8 years for potential outcomes in relation to an impending review by the Financial Conduct Authority (FCA). The transaction was subject to regulatory approvals including that of the Prudential Regulatory Authority (PRA), as well as to a vote of the shareholders of Phoenix Group and the completion of a rights issue by Phoenix Group to fund the transaction. With Phoenix Group shareholders voting to approve the transaction on October 24, 2016 and the rights issue completed on November 8, 2016, Phoenix Group announced on December 13, 2016 that the PRA had given its consent to the acquisition of Abbey Life. Closing of the transaction has occurred on December 30, 2016. Accordingly, the Abbey Life entities were deconsolidated from the Group's balance sheet at year-end 2016.	With all requirements fulfilled and prior to the closing date of the transaction, the Abbey Life entities became subject to the held-for-sale accounting rules. Therefore and immediately before its initial classification as held-for-sale, the disposal group, which also contained intangible assets of € 1,015 million (comprised of goodwill of € 500 million allocated from the disposing cash-generating unit Deutsche AM as well as the VOBA of € 515 million (value of business acquired), was initially measured and recognized in accordance with applicable accounting rules. A comparison of the fair value less costs to sell and net assets of the disposal group resulted in an initial impairment of € 1,015 million recorded in Deutsche AM's segment P&L of the fourth quarter 2016 as an impairment of goodwill and other intangible assets. Upon closing of the sale, cumulative losses of € 500 million stemming from the termination of the Abbey Life business' cash flow hedge program, which were previously a component of other comprehensive income, were released to profit or loss. This was offset by other income items leading to € 515 million of net positive revenues as a result of the sale. Together with the € 1,015 million intangibles impairment already recognized, in the fourth quarter 2016, the Group recorded an overall pre-tax loss on the transaction of € 1,015 million.	Fourth quarter 2016

Division	Disposal	Financial impact[1]	Date of the disposal
Private & Commercial Bank	On December 28, 2015, Deutsche Bank agreed to sell its entire 19.99 % stake in Hua Xia Bank Company Limited (“Hua Xia”) to PICC Property and Casualty Company Limited (“PICC Property & Casualty”). Accordingly and as of year-end 2015, the equity method investment in Hua Xia of € 3.3 billion was reclassified to the held-for-sale category. The completion of the transaction was subject to customary closing conditions and regulatory approvals, including that of the China Banking Regulatory Commission, which granted its approval for PICC Property and Casualty in the fourth quarter 2016 to acquire Deutsche Bank’s stake in Hua Xia.	Due to revaluation of the held-for-sale investment and up until its disposal in the fourth quarter 2016, the Group recorded revaluation losses of € 122 million during 2016 on the non-current asset, marking it down to € 3.1 billion. The revaluation losses recorded in other income were largely a result of the decline in the share price of Hua Xia and an adverse exchange rate development. Due to the agreed consideration for the Hua Xia stake, other transaction-related effects partly compensated the decline in the share price. In addition, accumulated other comprehensive income of € 662 million related to the investment was reclassified to the income statement. The overall transaction related net gain in 2016 amounted to € 624 million.	Fourth quarter 2016
Private & Commercial Bank	Deutsche Bank completed the previously announced definitive agreement to sell its U.S. Private Client Services (PCS) business to Raymond James Financial, Inc. as of September 6, 2016.	None	Third quarter 2016
Deutsche Asset Management	In August 2015, Deutsche Bank had announced that it had entered into an agreement to sell its Indian asset management business to Pramerica Asset Managers Pvt. Ltd. In March 2016, all regulatory approvals have been obtained and the sale was completed.	None	First quarter 2016

1 Impairment losses and reversals of impairment losses are included in Other income.

27 – Other Assets and Other Liabilities

in € m.	Dec 31, 2017	Dec 31, 2016
Other assets:		
Brokerage and securities related receivables		
Cash/margin receivables	46,519	57,924
Receivables from prime brokerage	12,638	9,859
Pending securities transactions past settlement date	3,929	6,409
Receivables from unsettled regular way trades	19,930	30,908
Total brokerage and securities related receivables	83,015	105,100
Accrued interest receivable	2,374	2,433
Assets held for sale	45	563
Other	16,057	17,950
Total other assets	**101,491**	126,045

in € m.	Dec 31, 2017	Dec 31, 2016
Other liabilities:		
Brokerage and securities related payables		
Cash/margin payables	58,865	70,706
Payables from prime brokerage	25,042	20,155
Pending securities transactions past settlement date	2,562	2,668
Payables from unsettled regular way trades	20,274	28,490
Total brokerage and securities related payables	106,742	122,019
Accrued interest payable	2,623	2,712
Liabilities held for sale	16	701
Other	22,827	30,008
Total other liabilities	**132,208**	155,440

For further details on the assets and liabilities held for sale, please refer to Note 26 “Non-Current Assets and Disposal Groups Held for Sale”.

28 – Deposits

in € m.	Dec 31, 2017	Dec 31, 2016
Noninterest-bearing demand deposits	226,339	200,122
Interest-bearing deposits		
Demand deposits	133,280	129,654
Time deposits	133,952	130,299
Savings deposits	87,241	90,129
Total interest-bearing deposits	354,473	350,082
Total deposits	**580,812**	550,204

29 – Provisions

Movements by Class of Provisions

in € m.	Home Savings Business	Operational Risk	Civil Litigations	Regulatory Enforcement	Re-structuring	Mortgage Repurchase Demands	Other	Total[1]
Balance as of January 1, 2016	1,132	315	1,418	4,048	656	409	922	8,900
Changes in the group of consolidated companies	0	(0)	0	0	(8)	0	(66)	(74)
New provisions	213	123	1,192	1,616	535	25	582	4,286
Amounts used	213	23	403	82	333	273	545	1,872
Unused amounts reversed	37	93	278	34	110	10	131	693
Effects from exchange rate fluctuations/ Unwind of discount	(36)	0	12	84	4	13	5	82
Transfers	0	(13)	72	(24)	(1)	0	(31)	3
Balance as of December 31, 2016	1,059	309	2,014	5,607	741	164	735	10,629
Changes in the group of consolidated companies	0	0	(5)	(0)	(1)	0	5	(1)
New provisions	194	84	745	306	601	0	847	2,778
Amounts used	169	53	1,611	3,576	458	71	688	6,626
Unused amounts reversed	16	49	134	711	182	0	118	1,210
Effects from exchange rate fluctuations/ Unwind of discount	28	(15)	(86)	(575)	(4)	(20)	(18)	(690)
Transfers	14	(2)	193	(153)	(0)	0	3	56
Balance as of December 31, 2017	1,110	275	1,115	897	696	73	766	4,934

[1] For the remaining portion of provisions as disclosed on the consolidated balance sheet, please see Note 20 "Allowance for Credit Losses", in which allowances for credit related off-balance sheet positions are disclosed.

Classes of Provisions

Home Savings provisions arise out of the home savings business of Deutsche Postbank Group and Deutsche Bank Bauspar-Aktiengesellschaft. In home savings, a customer enters into a building loan agreement, whereby the customer becomes entitled to borrow on a building loan once the customer has on deposit with the lending bank a targeted amount of money. In connection with the building loan agreement, arrangement fees are charged and interest is paid on deposited amounts at a rate that is typically lower than that paid on other bank deposits. In the event the customer determines not to make the borrowing, the customer becomes entitled to a retroactive interest bonus, reflecting the difference between the low contract savings interest rate and a fixed interest rate, currently substantially above market rate. The home savings provision relates to the potential interest bonus and arrangement fee reimbursement liability. The model for the calculation of the potential interest bonus liability includes parameters for the percentage of customer base impacted, applicable bonus rate, customer status and timing of payment. Other factors impacting the provision are available statistical data relating to customer behavior and the general environment likely to affect the business in the future.

Operational provisions arise out of operational risk and exclude civil litigation and regulatory enforcement provisions, which are presented as separate classes of provisions.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The definition used for the purposes of determining operational provisions differs from the risk management definition, as it excludes risk of loss resulting from civil litigation and regulatory enforcement matters. For risk management purposes, operational risk includes legal risk, as payments to customers, counterparties and regulatory bodies in civil litigations or regulatory enforcement matters constitute loss events for operational shortcomings, but excludes business and reputational risk.

Civil Litigation provisions arise out of current or potential claims or proceedings alleging non-compliance with contractual or other legal or regulatory responsibilities, which have resulted or may result in demands from customers, counterparties or other parties in civil litigations.

Regulatory Enforcement provisions arise out of current or potential claims or proceedings alleging non-compliance with legal or regulatory responsibilities, which have resulted or may result in an assessment of fines or penalties by governmental regulatory agencies, self-regulatory organizations or other enforcement authorities.

Restructuring provisions arise out of restructuring activities. The Group aims to enhance its long-term competitiveness through major reductions in costs, duplication and complexity in the years ahead. For details see Note 10 "Restructuring".

Mortgage Repurchase Demands provisions arise out of Deutsche Bank's U.S. residential mortgage loan business. From 2005 through 2008, as part of Deutsche Bank's U.S. residential mortgage loan business, Deutsche Bank sold approximately U.S.$ 84 billion of private label securities and U.S.$ 71 billion of loans through whole loan sales. Deutsche Bank has been presented with demands to repurchase loans from purchasers, investors and financial insurers based on alleged material breaches of representations and warranties or to indemnify such persons with respect to losses allegedly caused thereby. Deutsche Bank's general practice is to process valid repurchase demands that are presented in compliance with contractual rights.

As of December 31, 2017, Deutsche Bank has approximately U.S.$ 485 million of mortgage repurchase demands outstanding and not subject to agreements to rescind (based on original principal balance of the loans). These demands consist primarily of demands made in respect of private label securitizations by the trustees or servicers thereof. Against these outstanding demands, Deutsche Bank recorded provisions of U.S.$ 88 million (€ 73 million) as of December 31, 2017. Deutsche Bank is the beneficiary of indemnity agreements from the originators or sellers of certain of the mortgage loans subject to these demands, with respect to which Deutsche Bank has recognized receivables of U.S.$ 64 million (€ 53 million) as of December 31, 2017. The net provisions against these demands following deduction of such receivables were U.S.$ 24 million (€ 20 million) as of December 31, 2017.

As of December 31, 2017, Deutsche Bank has completed repurchases, obtained agreements to rescind, settled or rejected as untimely claims on loans with an original principal balance of approximately U.S.$ 9.2 billion. In connection with those repurchases, agreements and settlements, Deutsche Bank has obtained releases for potential claims on approximately U.S.$ 98.4 billion of loans sold by Deutsche Bank as described above.

Additional mortgage repurchase demands may be made in respect of mortgage loans that Deutsche Bank has sold, but Deutsche Bank cannot reliably estimate their timing or amount. On June 11, 2015, the New York State Court of Appeals issued a ruling affirming dismissal of mortgage repurchase claims asserted in litigation relating to a residential mortgage-backed security issued by Deutsche Bank on the grounds that the action was not timely commenced. The court held that the repurchase claims, which alleged breaches of contractual representations and warranties pertaining to the loans at issue, accrued as of the closing date of the securitization and, thus, were time-barred under New York's six-year statute of limitations. This and related decisions could impact the extent to which future repurchase demands are made to Deutsche Bank and the likelihood of success of any such claims.

Deutsche Bank did not act as servicer for the loans sold to third parties as whole loans (which constitute almost half of all U.S. residential mortgage loans sold from 2005 through 2008) and, once sold, Deutsche Bank ceased to have access to information about their performance. While loan performance is publicly available on the mortgage loans that Deutsche Bank securitized, no direct correlation has been observed between their performance and repurchase demands received. Demands have been received on loans that have defaulted, as well as loans that are current and loans that have been repaid in full.

Other provisions include several specific items arising from a variety of different circumstances, including the provision for the reimbursement of loan processing fees, deferred sales commissions and provisions for bank levies.

Provisions and Contingent Liabilities

The Group recognizes a provision for potential loss only when there is a present obligation arising from a past event that is probable to result in an economic outflow that can be reliably estimated. Where a reliable estimate cannot be made for such an obligation, no provision is recognized and the obligation is deemed a contingent liability. Contingent liabilities also include possible obligations for which the possibility of future economic outflow is more than remote but less than probable. Where a provision has been taken for a particular claim, no contingent liability is recorded; for matters or sets of matters consisting of more than one claim, however, provisions may be recorded for some claims, and contingent liabilities (or neither a provision nor a contingent liability) may be recorded for others.

The Group operates in a legal and regulatory environment that exposes it to significant litigation risks. As a result, the Group is involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. In recent years, regulation and supervision in a number of areas have increased, and regulators, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations and enforcement actions which are often followed by civil litigation. This trend has accelerated markedly as a result of the global financial crisis.

In determining for which of the claims the possibility of a loss is probable, or less than probable but more than remote, and then estimating the possible loss for those claims, the Group takes into consideration a number of factors, including but not limited to the nature of the claim and its underlying facts, the procedural posture and litigation history of each case, rulings by the courts or tribunals, the Group's experience and the experience of others in similar cases (to the extent this is known to the Group), prior settlement discussions, settlements by others in similar cases (to the extent this is known to the Group), available indemnities and the opinions and views of legal counsel and other experts.

The provisions the Group has recognized for civil litigation and regulatory enforcement matters as of December 31, 2017 and December 31, 2016 are set forth in the table above. For some matters for which the Group believes an outflow of funds is probable, no provisions were recognized as the Group could not reliably estimate the amount of the potential outflow.

For the matters for which a reliable estimate can be made, the Group currently estimates that, as of December 31, 2017, the aggregate future loss of which the possibility is more than remote but less than probable is approximately € 2.4 billion for civil litigation matters (December 31, 2016: € 1.5 billion) and € 0.3 billion for regulatory enforcement matters (December 31, 2016: € 0.8 billion). These figures include matters where the Group's potential liability is joint and several and where the Group expects any such liability to be paid by a third party. For other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is more than remote but less than probable but the amount is not reliably estimable, and accordingly such matters are not included in the contingent liability estimates. For still other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is remote and therefore has neither recognized a provision nor included them in the contingent liability estimates.

This estimated possible loss, as well as any provisions taken, is based upon currently available information and is subject to significant judgment and a variety of assumptions, variables and known and unknown uncertainties. These uncertainties may include inaccuracies in or incompleteness of the information available to the Group, particularly at the preliminary stages of matters, and assumptions by the Group as to future rulings of courts or other tribunals or the likely actions or positions taken by regulators or adversaries may prove incorrect. Moreover, estimates of possible loss for these matters are often not amenable to the use of statistical or other quantitative analytical tools frequently used in making judgments and estimates, and are subject to even greater degrees of uncertainty than in many other areas where the Group must exercise judgment and make estimates. The estimated possible loss, as well as any provisions taken, can be and often are substantially less than the amount initially requested by regulators or adversaries or the maximum potential loss that could be incurred were the matters to result in a final adjudication adverse to the Group. Moreover, in several regions in which the Group operates, an adversary often is not required to set forth the amount it is seeking, and where it is, the amount may not be subject to the same requirements that generally apply to pleading factual allegations or legal claims.

The matters for which the Group determines that the possibility of a future loss is more than remote will change from time to time, as will the matters as to which a reliable estimate can be made and the estimated possible loss for such matters. Actual results may prove to be significantly higher or lower than the estimate of possible loss in those matters where such an estimate was made. In addition, loss may be incurred in matters with respect to which the Group believed the likelihood of loss was remote. In particular, the estimated aggregate possible loss does not represent the Group's potential maximum loss exposure for those matters.

The Group may settle litigation or regulatory proceedings or investigations prior to a final judgment or determination of liability. It may do so to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when the Group believes it has valid defenses to liability. It may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, the Group may, for similar reasons, reimburse counterparties for their losses even in situations where it does not believe that it is legally compelled to do so.

Current Individual Proceedings

Set forth below are descriptions of civil litigation and regulatory enforcement matters or groups of matters for which the Group has taken material provisions, or for which there are material contingent liabilities that are more than remote, or for which there is the possibility of material business or reputational risk; similar matters are grouped together and some matters consist of a number of proceedings or claims. The disclosed matters include matters for which the possibility of a loss is more than remote but for which the Group cannot reliably estimate the possible loss.

Esch Funds Litigation. Sal. Oppenheim jr. & Cie. AG & Co. KGaA ("Sal. Oppenheim") was prior to its acquisition by Deutsche Bank in 2010 involved in the marketing and financing of participations in closed end real estate funds. These funds were structured as Civil Law Partnerships under German law. Usually, Josef Esch Fonds-Projekt GmbH performed the planning and project development. Sal. Oppenheim held an indirect interest in this company via a joint-venture. In relation to this business a number of civil claims have been filed against Sal. Oppenheim. Some but not all of these claims are also directed against former managing partners of Sal. Oppenheim and other individuals. The claims brought against Sal. Oppenheim relate to investments of originally approximately € 1.1 billion. After certain claims have either been dismissed or settled, claims relating to investments of originally approximately € 140 million are still pending. Currently, the aggregate amounts claimed in the pending proceedings are approximately € 190 million. The investors are seeking to unwind their fund participation and to be indemnified against potential losses and debt related to the investment. The claims are based in part on an alleged failure of Sal. Oppenheim to provide adequate information on related risks and other material aspects important for the investors' investment decision. Based on the facts of the individual cases, some courts have decided in favor and some against Sal. Oppenheim. Appeals are pending. The Group has recorded provisions and contingent liabilities with respect to these cases but has not disclosed the amounts thereof because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

FX Investigations and Litigations. Deutsche Bank has received requests for information from certain regulatory and law enforcement agencies globally who investigated trading in, and various other aspects of, the foreign exchange market. Deutsche Bank cooperated with these investigations. Relatedly, Deutsche Bank has conducted its own internal global review of foreign exchange trading and other aspects of its foreign exchange business.

On October 19, 2016, the U.S. Commodity Futures Trading Commission (CFTC), Division of Enforcement issued a letter ("CFTC Letter") notifying Deutsche Bank that the CFTC "is not taking any further action at this time and has closed the foreign exchange investigation of Deutsche Bank." As is customary, the CFTC Letter states that the CFTC "maintains the discretion to decide to reopen the investigation at any time in the future." The CFTC Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices, which remain pending.

On December 7, 2016, it was announced that Deutsche Bank reached an agreement with CADE, the Brazilian antitrust enforcement agency, to settle an investigation into conduct by a former Brazil-based Deutsche Bank trader. As part of that settlement, Deutsche Bank paid a fine of BRL 51 million and agreed to continue to comply with the CADE's administrative process until it is concluded. This resolves CADE's administrative process as it relates to Deutsche Bank, subject to Deutsche Bank's continued compliance with the settlement terms.

On February 13, 2017, the U.S. Department of Justice (DOJ), Criminal Division, Fraud Section, issued a letter ("DOJ Letter") notifying Deutsche Bank that the DOJ has closed its criminal inquiry "concerning possible violations of federal criminal law in connection with the foreign exchange markets." As is customary, the DOJ Letter states that the DOJ may reopen its inquiry if it obtains additional information or evidence regarding the inquiry. The DOJ Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices, which remain pending.

On April 20, 2017, it was announced that Deutsche Bank AG, DB USA Corporation and Deutsche Bank AG New York Branch reached an agreement with the Board of Governors of the Federal Reserve System to settle an investigation into Deutsche Bank's foreign exchange trading and practices. Under the terms of the settlement, Deutsche Bank entered into a cease-and-desist order, and agreed to pay a civil monetary penalty of U.S.$ 137 million. In addition, the Federal Reserve ordered Deutsche Bank to "continue to implement additional improvements in its oversight, internal controls, compliance, risk management and audit programs" for its foreign exchange business and other similar products, and to periodically report to the Federal Reserve on its progress.

Investigations conducted by certain other regulatory agencies are ongoing, and Deutsche Bank has cooperated with these investigations.

Additionally, there are currently four U.S. putative class actions pending against Deutsche Bank. The first pending action is a consolidated action brought on behalf of a putative class of over-the-counter traders and a putative class of central-exchange traders, who are domiciled in or traded in the United States or its territories, and alleges illegal agreements to restrain competition with respect to and to manipulate both benchmark rates and spot rates, particularly the spreads quoted on those spot rates; the complaint further alleges that those supposed conspiracies, in turn, resulted in artificial prices on centralized exchanges for foreign exchange futures and options. On September 29, 2017, plaintiffs filed a motion seeking preliminary approval of a settlement with Deutsche Bank in the amount of U.S.$190 million, which the court preliminarily approved on the same day. A final fairness hearing for all settlements in this action, including Deutsche Bank's, is currently scheduled for May 23, 2018. A second action tracks the allegations in the consolidated action and asserts that such purported conduct gave rise to, and resulted in a breach of, defendants' fiduciary duties under the U.S. Employment Retirement Income Security Act of 1974. On August 24, 2016, the court granted defendants' motion to dismiss. Plaintiffs in that action have filed a notice of appeal in the U.S. Court of Appeals for the Second Circuit, which is pending. The third putative class action was filed in the same court on December 21, 2015, by Axiom Investment Advisors, LLC alleging that Deutsche Bank rejected FX orders placed over electronic trading platforms through the application of a function referred to as "Last Look" and that these orders were later filled at prices less favorable to putative class members. Plaintiffs have asserted claims for breach of contract, quasi-contractual claims, and claims under New York statutory law. On February 13, 2017, Deutsche Bank's motion to dismiss was granted in part and denied in part. Plaintiffs filed a motion for class certification on January 15, 2018, which Deutsche Bank will oppose. This matter remains pending. The fourth putative class action (the "Indirect Purchasers" action), which was filed on September 26, 2016, amended on March 24, 2017, and later consolidated with a similar action that was filed on April 28, 2017, tracks the allegations in the consolidated action and asserts that such purported conduct injured "indirect purchasers" of FX instruments. These claims are brought pursuant to the Sherman Act and various states' consumer protection statutes. Deutsche Bank's motion to dismiss this action is pending. Discovery has not yet commenced in the Indirect Purchasers action.

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

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Interbank Offered Rates Matters. Regulatory and Law Enforcement Matters. Deutsche Bank has received requests for information from various regulatory and law enforcement agencies, in connection with industry-wide investigations concerning the setting of the London Interbank Offered Rate (LIBOR), Euro Interbank Offered Rate (EURIBOR), Tokyo Interbank Offered Rate (TIBOR) and other interbank offered rates. Deutsche Bank is cooperating with these investigations.

As previously reported, Deutsche Bank reached a settlement with the European Commission on December 4, 2013 as part of a collective settlement to resolve the European Commission's investigations in relation to anticompetitive conduct in the trading of Euro interest rate derivatives and Yen interest rate derivatives. Under the terms of the settlement agreement, Deutsche Bank agreed to pay € 725 million in total. This fine has been paid in full and does not form part of the Bank's provisions.

Also as previously reported, on April 23, 2015, Deutsche Bank entered into separate settlements with the DOJ, the CFTC, the UK Financial Conduct Authority (FCA), and the New York State Department of Financial Services (DFS) to resolve investigations into misconduct concerning the setting of LIBOR, EURIBOR, and TIBOR. Under the terms of these agreements, Deutsche Bank agreed to pay penalties of U.S.$ 2.175 billion to the DOJ, CFTC and DFS and GBP 226.8 million to the FCA. As part of the resolution with the DOJ, DB Group Services (UK) Ltd. (an indirectly-held, wholly-owned subsidiary of Deutsche Bank) pled guilty to one count of wire fraud in the U.S. District Court for the District of Connecticut and Deutsche Bank entered into a Deferred Prosecution Agreement with a three year term pursuant to which it agreed (among other things) to the filing of an Information in the U.S. District Court for the District of Connecticut charging Deutsche Bank with one count of wire fraud and one count of price fixing in violation of the Sherman Act. The fines referred to above, which include a U.S.$ 150 million fine paid in April 2017 following the March 28, 2017 sentencing of DB Group Services (UK) Ltd., have been paid in full and do not form part of the Bank's provisions.

On November 29, 2016, the U.S. Securities and Exchange Commission staff informed Deutsche Bank that it has concluded its IBOR investigation and that it does not intend to recommend an enforcement action by the Commission.

On December 21, 2016, the Swiss Competition Commission, WEKO, formally announced its IBOR-related settlement decisions addressing various banks, including Deutsche Bank AG, relating to EURIBOR and Yen LIBOR. On March 20, 2017, Deutsche Bank paid a fine of CHF 5.0 million with respect to Yen LIBOR and approximately CHF 0.4 million for WEKO's fees. Deutsche Bank received full immunity from fines for EURIBOR in return for being the first party to notify such conduct to WEKO. The settlement amount was already fully reflected in the existing litigation provisions.

On October 25, 2017, Deutsche Bank entered into a settlement with a working group of U.S. state attorneys general resolving their interbank offered rate investigation. Among other conditions, Deutsche Bank agreed to make a settlement payment of U.S.$ 220 million. The settlement amount has been paid in full and does not form part of the Bank's provisions.

Other investigations of Deutsche Bank concerning the setting of various interbank offered rates remain ongoing, and Deutsche Bank remains exposed to further action.

The Group has not disclosed whether it has established a provision or contingent liability with respect to the remaining investigations because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Overview of Civil Litigations. Deutsche Bank is party to 43 U.S. civil actions concerning alleged manipulation relating to the setting of various Interbank Offered Rates which are described in the following paragraphs, as well as one action pending in the UK. Most of the civil actions, including putative class actions, are pending in the U.S. District Court for the Southern District of New York (SDNY), against Deutsche Bank and numerous other defendants. All but four of the U.S. civil actions were filed on behalf of parties who allege losses as a result of manipulation relating to the setting of U.S. dollar LIBOR. The four civil actions pending against Deutsche Bank that do not relate to U.S. dollar LIBOR are also pending in the SDNY, and include one action concerning EURIBOR, one consolidated action concerning Pound Sterling (GBP) LIBOR, one action concerning Swiss franc (CHF) LIBOR, and one action concerning two Singapore Dollar (SGD) benchmark rates, the Singapore Interbank Offered Rate (SIBOR) and the Swap Offer Rate (SOR).

Claims for damages for all 43 of the U.S. civil actions discussed have been asserted under various legal theories, including violations of the U.S. Commodity Exchange Act, federal and state antitrust laws, the U.S. Racketeer Influenced and Corrupt Organizations Act, and other federal and state laws. In all but five cases, the amount of damages has not been formally articulated by the plaintiffs. The five cases that allege a specific amount of damages are individual actions consolidated in the U.S. dollar LIBOR multidistrict litigation and seek a minimum of more than U.S.$ 1.25 billion in damages in the aggregate from all defendants including Deutsche Bank. The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

U.S. dollar LIBOR. With one exception, all of the U.S. civil actions concerning U.S. dollar LIBOR are being coordinated as part of a multidistrict litigation (the "U.S. dollar LIBOR MDL") in the SDNY. In light of the large number of individual cases pending against Deutsche Bank and their similarity, the civil actions included in the U.S. dollar LIBOR MDL are now subsumed under the following general description of the litigation pertaining to all such actions, without disclosure of individual actions except when the circumstances or the resolution of an individual case is material to Deutsche Bank.

Following a series of decisions in the U.S. dollar LIBOR MDL between March 2013 and December 2016 narrowing their claims, plaintiffs are currently asserting antitrust claims, claims under the U.S. Commodity Exchange Act and state law fraud, contract, unjust enrichment and other tort claims. The court has also issued decisions dismissing certain plaintiffs' claims for lack of personal jurisdiction and on statute of limitations grounds.

On December 20, 2016, the district court issued a ruling dismissing certain antitrust claims while allowing others to proceed. Multiple plaintiffs have filed appeals of the district court's December 20, 2016 ruling to the U.S. Court of Appeals for the Second Circuit, and those appeals are proceeding in parallel with the ongoing proceedings in the district court. On November 13, 2017, plaintiffs filed their opening briefs.

Discovery is underway in several of the cases. Motions for class certification were fully briefed on November 10, 2017, and the court heard oral argument on January 18, 2018. On February 28, 2018, the court issued its decision on plaintiffs' motions for class certification. The court denied motions to certify (i) a class of purchasers of Eurodollar futures and options traded on the Chicago Mercantile Exchange (*Metzler Investment GmbH v. Credit Suisse Group AG*) and (ii) a class of lending institutions that originated, held, purchased, or sold loans tied to U.S. dollar LIBOR (*Berkshire Bank v. Bank of America Corp.*). The court granted a motion to certify a class of plaintiffs that transacted in U.S. dollar LIBOR-linked financial instruments purchased over the counter directly from LIBOR panel banks with respect to those plaintiffs' remaining antitrust claims against two domestic-bank defendants (*Mayor & City Council of Baltimore* v. *Credit Suisse AG*), but denied a motion to certify a class with respect to those same plaintiffs' state-law contract and unjust enrichment claims.

On July 13, 2017, Deutsche Bank executed a settlement agreement in the amount of U.S.$ 80 million with plaintiffs to resolve a putative class action pending as part of the U.S. dollar LIBOR MDL asserting claims based on alleged transactions in Eurodollar futures and options traded on the Chicago Mercantile Exchange (*Metzler Investment GmbH* v. *Credit Suisse Group AG*). The settlement agreement was submitted to the court for preliminary approval on October 11, 2017. The settlement amount is already fully reflected in existing litigation provisions and no additional provisions have been taken for this settlement. The settlement agreement is subject to further review and approval by the court.

On February 6, 2018, Deutsche Bank executed a settlement agreement in the amount of U.S.$ 240 million with plaintiffs to resolve a putative class action pending as part of the U.S. dollar LIBOR MDL asserting claims based on alleged transactions in U.S. dollar LIBOR-linked financial instruments purchased over the counter directly from LIBOR panel banks (*Mayor & City Council of Baltimore* v. *Credit Suisse AG*). The settlement agreement was submitted to the court for preliminary approval on February 27, 2018. The settlement amount is already fully reflected in existing litigation provisions and no additional provisions have been taken for this settlement. The settlement agreement is subject to further review and approval by the court.

Finally, one of the actions in the U.S. dollar LIBOR MDL has been dismissed in its entirety, including (as to Deutsche Bank and other foreign defendants) on personal jurisdiction and merits grounds, and plaintiffs have filed an appeal to the U.S. Court of Appeals for the Second Circuit. The appeal was fully briefed, and oral argument was held on September 25, 2017. On February 23, 2018, the Second Circuit affirmed in part and vacated in part the district court's decision. Among other things, the Court held that plaintiffs had established a prima facie case of personal jurisdiction with respect to Deutsche Bank and another foreign defendant for certain state law claims concerning direct transactions with plaintiffs and granted plaintiffs leave to amend their allegations concerning several other defendants and their agency and conspiracy theories of jurisdiction. The Second Circuit otherwise affirmed the district court's decision on personal jurisdiction. The Second Circuit also affirmed the district court's dismissal on the merits of plaintiffs' claims concerning fixed-rate instruments, but reversed the district court's dismissal of certain of plaintiffs' claims under the U.S. Securities Exchange Act of 1934 and for unjust enrichment.

Plaintiffs in the non-MDL case proceeding in the SDNY have moved to amend their complaint following a dismissal of their claims, and a decision on that motion to amend is pending.

There is a further UK civil action regarding U.S. dollar LIBOR, in which a claim for damages has been asserted pursuant to Article 101 of The Treaty on the Functioning of the European Union, Section 2 of Chapter 1 of the UK Competition Act 1998 and U.S. state laws. Deutsche Bank is defending this action.

Yen LIBOR and Euroyen TIBOR. On July 21, 2017, Deutsche Bank executed a settlement agreement in the amount of U.S.$ 77 million with plaintiffs to resolve two putative class actions pending in the SDNY alleging manipulation of Yen LIBOR and Euroyen TIBOR (*Laydon* v. *Mizuho Bank, Ltd.* and *Sonterra Capital Master Fund Ltd.* v. *UBS AG*). The agreement was submitted to the court for approval, and the court granted final approval of the settlement on December 7, 2017. Accordingly, these two actions are not included in the total number of actions above. The settlement amount, which Deutsche Bank paid on August 1, 2017, is no longer reflected in Deutsche Bank's litigation provisions.

EURIBOR. On May 10, 2017, Deutsche Bank executed a settlement agreement in the amount of U.S.$ 170 million with plaintiffs to resolve a putative class action pending in the SDNY alleging manipulation of EURIBOR (*Sullivan* v. *Barclays PLC*). The agreement was submitted to the court for preliminary approval on June 12, 2017. The court granted preliminary approval on July 7, 2017. The settlement agreement is subject to further review and final approval by the court. Under the terms of the settlement, Deutsche Bank has paid U.S.$170 million, and is no longer reflecting that amount in its litigation provisions.

GBP LIBOR. A putative class action alleging manipulation of the Pound Sterling (GBP) LIBOR remains pending in the SDNY. It is the subject of a fully briefed motion to dismiss. The court held argument on August 4, 2017.

CHF LIBOR. On September 25, 2017, the court in the SDNY dismissed the plaintiffs' putative class action alleging manipulation of the Swiss Franc (CHF) LIBOR in full, but gave plaintiffs an opportunity to file an amended complaint. Plaintiffs filed that amended complaint on November 6, 2017. Defendants moved to dismiss the amended complaint on February 7, 2018.

SIBOR and SOR. On August 18, 2017, the court in the SDNY dismissed the plaintiffs' putative class action alleging manipulation of the Singapore Interbank Offered Rate (SIBOR) and Swap Offer Rate (SOR) in part, but gave plaintiffs an opportunity to file an amended complaint. Plaintiffs filed their amended complaint on September 18, 2017, and it is the subject of a fully briefed motion to dismiss.

Investigations Into Referral Hiring Practices and Certain Business Relationships. Certain regulators and law enforcement authorities in various jurisdictions, including the U.S. Securities and Exchange Commission and the DOJ, are investigating, among other things, Deutsche Bank's compliance with the U.S. Foreign Corrupt Practices Act and other laws with respect to the Bank's hiring practices related to candidates referred by clients, potential clients and government officials, and the Bank's engagement of finders and consultants. Deutsche Bank is responding to and continuing to cooperate with these investigations. Certain regulators in other jurisdictions have also been briefed on these investigations. The Group has recorded a provision with respect to certain of these regulatory investigations. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these regulatory investigations. Based on the facts currently known, it is not practicable at this time for the Bank to predict the timing of a resolution.

Kirch. The public prosecutor's office in Munich (Staatsanwaltschaft München I) has conducted and is currently conducting criminal investigations in connection with the Kirch case inter alia with regard to former Deutsche Bank Management Board members. The Kirch case involved several civil proceedings between Deutsche Bank AG and Dr. Leo Kirch as well as media companies controlled by him. The key issue was whether an interview given by Dr. Rolf Breuer, then Spokesman of Deutsche Bank's Management Board, in 2002 with Bloomberg television, during which Dr. Breuer commented on Dr. Kirch's (and his companies') inability to obtain financing, caused the insolvency of the Kirch companies. In February 2014, Deutsche Bank and the Kirch heirs reached a comprehensive settlement, which has ended all legal disputes between them.

The allegations of the public prosecutor are that the relevant former Management Board members failed to correct in a timely manner factual statements made by Deutsche Bank's litigation counsel in submissions filed in one of the civil cases between Kirch and Deutsche Bank AG before the Munich Higher Regional Court and the Federal Court of Justice, after allegedly having become aware that such statements were not correct, and/or made incorrect statements in such proceedings, respectively.

On April 25, 2016, following the trial before the Munich District Court regarding the main investigation involving Jürgen Fitschen and four other former Management Board members, the Munich District Court acquitted all of the accused, as well as the Bank, which was a secondary participant in such proceedings. On April 26, 2016, the public prosecutor filed an appeal. An appeal is limited to a review of legal errors rather than facts. On October 18, 2016, a few weeks after the written judgment was served, the public prosecutor provided notice that it will uphold its appeal only with respect to former Management Board members Jürgen Fitschen, Dr. Rolf Breuer and Dr. Josef Ackermann and that it will withdraw its appeal with respect to former Management Board members Dr. Clemens Börsig and Dr. Tessen von Heydebreck for whom the acquittal thereby becomes binding. On January 24, 2018, the Attorney General's Office applied to convene an oral hearing before the Federal Supreme Court to decide about the Munich public prosecutor's appeal.

The other investigations by the public prosecutor (which also deal with attempted litigation fraud in the Kirch civil proceedings) are ongoing. Deutsche Bank is fully cooperating with the Munich public prosecutor's office.

The Group does not expect these proceedings to have significant economic consequences for it and has not recorded a provision or contingent liability with respect thereto.

KOSPI Index Unwind Matters. Following the decline of the Korea Composite Stock Price Index 200 (the "KOSPI 200") in the closing auction on November 11, 2010 by approximately 2.7 %, the Korean Financial Supervisory Service ("FSS") commenced an investigation and expressed concerns that the fall in the KOSPI 200 was attributable to a sale by Deutsche Bank of a basket of stocks, worth approximately € 1.6 billion, that was held as part of an index arbitrage position on the KOSPI 200. On February 23, 2011, the Korean Financial Services Commission, which oversees the work of the FSS, reviewed the FSS' findings and recommendations and resolved to take the following actions: (i) to file a criminal complaint to the Korean Prosecutor's Office for alleged market manipulation against five employees of the Deutsche Bank group and Deutsche Bank's subsidiary Deutsche Securities Korea Co. (DSK) for vicarious corporate criminal liability; and (ii) to impose a suspension of six months, commencing April 1, 2011 and ending September 30, 2011, of DSK's business for proprietary trading of cash equities and listed derivatives and DMA (direct market access) cash equities trading, and the requirement that DSK suspend the employment of one named employee for six months. There was an exemption to the business suspension which permitted DSK to continue acting as liquidity provider for existing derivatives linked securities. On August 19, 2011, the Korean Prosecutor's Office announced its decision to indict DSK and four employees of the Deutsche Bank group on charges of spot/futures linked market manipulation. The criminal trial commenced in January 2012. On January 25, 2016, the Seoul Central District Court rendered a guilty verdict against a DSK trader and a guilty verdict against DSK. A criminal fine of KRW 1.5 billion (less than € 2.0 million) was imposed on DSK. The Court also ordered forfeiture of the profits generated on the underlying trading activity. The Group disgorged the profits on the underlying trading activity in 2011. The criminal trial verdict has been appealed by both the prosecutor and the defendants.

In addition, a number of civil actions have been filed in Korean courts against Deutsche Bank and DSK by certain parties who allege they incurred losses as a consequence of the fall in the KOSPI 200 on November 11, 2010. First instance court decisions were rendered against the Bank and DSK in some of these cases starting in the fourth quarter of 2015. The outstanding known claims have an aggregate claim amount of less than € 50 million (at present exchange rates). The Group has recorded a provision with respect to these outstanding civil matters. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these matters.

Mortgage-Related and Asset-Backed Securities Matters and Investigation. Regulatory and Governmental Matters. Deutsche Bank, along with certain affiliates (collectively referred in these paragraphs to as “Deutsche Bank”), have received subpoenas and requests for information from certain regulators and government entities, including members of the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force, concerning its activities regarding the origination, purchase, securitization, sale, valuation and/or trading of mortgage loans, residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), collateralized debt obligations (CDOs), other asset-backed securities and credit derivatives. Deutsche Bank is cooperating fully in response to those subpoenas and requests for information.

On December 23, 2016, Deutsche Bank announced that it reached a settlement-in-principle with the DOJ to resolve potential claims related to its RMBS business conducted from 2005 to 2007. The settlement became final and was announced by the DOJ on January 17, 2017. Under the settlement, Deutsche Bank paid a civil monetary penalty of U.S.$ 3.1 billion and agreed to provide U.S.$ 4.1 billion in consumer relief.

In September 2016, Deutsche Bank received administrative subpoenas from the Maryland Attorney General seeking information concerning Deutsche Bank’s RMBS and CDO businesses from 2002 to 2009. On June 1, 2017, Deutsche Bank and the Maryland Attorney General reached a settlement to resolve the matter for U.S.$ 15 million in cash and U.S.$ 80 million in consumer relief (to be allocated from the overall U.S.$ 4.1 billion consumer relief obligation agreed to as part of Deutsche Bank’s settlement with the DOJ).

The Group has recorded provisions with respect to some of the outstanding regulatory investigations but not others, a portion of which relates to the consumer relief being provided under the DOJ settlement. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to prejudice seriously the resolution of these matters.

Issuer and Underwriter Civil Litigation. Deutsche Bank has been named as defendant in numerous civil litigations brought by private parties in connection with its various roles, including issuer or underwriter, in offerings of RMBS and other asset-backed securities. These cases, described below, allege that the offering documents contained material misrepresentations and omissions, including with regard to the underwriting standards pursuant to which the underlying mortgage loans were issued, or assert that various representations or warranties relating to the loans were breached at the time of origination. The Group has recorded provisions with respect to several of these civil cases, but has not recorded provisions with respect to all of these matters. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to prejudice seriously the resolution of these matters.

Deutsche Bank is a defendant in a class action relating to its role as one of the underwriters of six RMBS offerings issued by Novastar Mortgage Corporation. No specific damages are alleged in the complaint. The lawsuit was brought by plaintiffs representing a class of investors who purchased certificates in those offerings. The parties reached a settlement to resolve the matter for a total of U.S.$ 165 million, a portion of which was paid by the Bank. The settlement is subject to final court approval. On August 30, 2017, FHFA/Freddie Mac filed an objection to the settlement.

Deutsche Bank is a defendant in three actions related to RMBS offerings brought by the Federal Deposit Insurance Corporation (FDIC) as receiver for: (a) Colonial Bank (alleging no less than U.S.$ 189 million in damages against all defendants), (b) Guaranty Bank (alleging no less than U.S.$ 901 million in damages against all defendants), and (c) Citizens National Bank and Strategic Capital Bank (alleging no less than U.S.$ 66 million in damages against all defendants). In each of these actions, the appellate courts have reinstated claims previously dismissed on statute of limitations grounds. In the case concerning Colonial Bank, petitions for rehearing and certiorari to the U.S. Supreme Court were denied, and on June 21, 2017, the FDIC filed a second amended complaint, which defendants moved to dismiss on September 7, 2017. In the case concerning Guaranty Bank, petitions for rehearing and certiorari to the U.S. Supreme Court were denied, fact discovery is almost complete, and expert work is ongoing. Also, on September 14, 2017, the court granted in part Deutsche Bank’s motion for summary judgment regarding the proper method of calculating pre-judgment interest. In the case concerning Citizens National Bank and Strategic Capital Bank, petitions for rehearing and certiorari to the U.S. Supreme Court were denied, and on July 31, 2017, the FDIC filed a second amended complaint, which defendants moved to dismiss on September 14, 2017.

On November 3, 2016, Deutsche Bank reached a settlement to resolve claims brought by the Federal Home Loan Bank of San Francisco on two resecuritizations of RMBS certificates for an amount not material to the Bank. Following this settlement and two other previous partial settlements of claims, Deutsche Bank remained a defendant with respect to one RMBS offering, for which Deutsche Bank, as an underwriter, was provided contractual indemnification. On January 23, 2017, a settlement agreement was executed to resolve the claims relating to that RMBS offering, and the matter has been dismissed.

Deutsche Bank is a defendant in an action brought by Royal Park Investments (as purported assignee of claims of a special-purpose vehicle created to acquire certain assets of Fortis Bank) alleging common law claims related to the purchase of RMBS. The complaint did not specify the amount of damages sought. On April 17, 2017, the court dismissed the complaint, and on February 13, 2018, the plaintiff filed its appeal.

In June 2014, HSBC, as trustee, brought an action in New York state court against Deutsche Bank to revive a prior action, alleging that Deutsche Bank failed to repurchase mortgage loans in the ACE Securities Corp. 2006-SL2 RMBS offering. The revival action was stayed during the pendency of an appeal of the dismissal of a separate action wherein HSBC, as trustee, brought an action against Deutsche Bank alleging breaches of representations and warranties made by Deutsche Bank concerning the mortgage loans in the same offering. On March 29, 2016, the court dismissed the revival action, and on April 29, 2016, plaintiff filed a notice of appeal. Plaintiff’s appeal has been adjourned in light of a case pending in the New York Court of Appeals involving similar legal issues.

On February 3, 2016, Lehman Brothers Holding, Inc. (Lehman) instituted an adversary proceeding in United States Bankruptcy Court for the Southern District of New York against, among others, MortgageIT, Inc. (MIT) and Deutsche Bank AG, as alleged successor to MIT, asserting breaches of representations and warranties set forth in certain 2003 and 2004 loan purchase agreements concerning 63 mortgage loans that MIT sold to Lehman, which Lehman in turn sold to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). The complaint seeks indemnification for losses incurred by Lehman in connection with settlements entered into with Fannie Mae and Freddie Mac as part of the Lehman bankruptcy proceedings to resolve claims concerning those loans. On January 31, 2018, the parties reached a settlement to resolve the litigation. On February 6, 2018, the court ordered a voluntary stipulation of dismissal.

In the actions against Deutsche Bank solely as an underwriter of other issuers’ RMBS offerings, Deutsche Bank has contractual rights to indemnification from the issuers, but those indemnity rights may in whole or in part prove effectively unenforceable where the issuers are now or may in the future be in bankruptcy or otherwise defunct.

Trustee Civil Litigation. Deutsche Bank is a defendant in eight separate civil lawsuits brought by various groups of investors concerning its role as trustee of certain RMBS trusts. The actions generally allege claims for breach of contract, breach of fiduciary duty, breach of the duty to avoid conflicts of interest, negligence and/or violations of the U.S. Trust Indenture Act of 1939, based on the trustees’ alleged failure to perform adequately certain obligations and/or duties as trustee for the trusts. The eight actions include two putative class actions brought by a group of investors, including funds managed by BlackRock Advisors, LLC, PIMCO-Advisors, L.P., and others (the “BlackRock Class Actions”), two putative class actions brought by Royal Park Investments SA/NV, and four individual lawsuits. One of the BlackRock Class Actions is pending in the U.S. District Court for the Southern District of New York in relation to 62 trusts, which allegedly suffered total realized collateral losses of U.S.$ 9.8 billion, although the complaint does not specify a damage amount. On January 23, 2017, the court granted in part and denied in part the trustees’ motion to dismiss. On February 3, 2017, the court entered an order dismissing plaintiffs’ representations and warranties claims as to 21 trusts whose originators or sponsors had entered bankruptcy. The only claims that remain are for violation of the U.S. Trust Indenture Act of 1939 and breach of contract. On March 27, 2017, the trustees filed an answer to the complaint. On January 26, 2018, BlackRock filed a motion for class certification. Discovery is ongoing. The second BlackRock Class Action is pending in the Superior Court of California in relation to 465 trusts, which allegedly suffered total realized collateral losses of U.S.$ 75.7 billion, although the complaint does not specify a damage amount. The trustees filed a demurrer seeking to dismiss the tort claims asserted by plaintiffs and a motion to strike certain elements of the breach of contract claim, and on October 18, 2016, the court sustained the trustees’ demurrer, dismissing the tort claims, but denied the motion to strike. On December 19, 2016, the trustees filed an answer to the complaint. On January 17, 2018, BlackRock filed a motion for class certification. Discovery is ongoing. The putative class action brought by Royal Park Investments SA/NV is pending in the U.S. District Court for the Southern District of New York and concerns ten trusts, which allegedly suffered total realized collateral losses of more than U.S.$ 3.1 billion, although the complaint does not specify a damage amount. Royal Park filed a renewed motion for class certification on May 1, 2017, and the motion is pending. Discovery is ongoing. On August 4, 2017, Royal Park filed a separate, additional class action complaint against the trustee in the same court asserting claims for breach of contract, unjust enrichment, conversion, breach of trust, equitable accounting and declaratory and injunctive relief arising out of the payment from trust funds of the trustee's legal fees and expenses in the other, ongoing Royal Park litigation. On October 10, 2017, the trustee filed a motion to dismiss that complaint.

The four individual lawsuits include actions by (a) the National Credit Union Administration Board ("NCUA"), as an investor in 97 trusts, which allegedly suffered total realized collateral losses of U.S.$ 17.2 billion, although the complaint does not specify a damage amount; (b) certain CDOs (collectively, "Phoenix Light") that hold RMBS certificates issued by 43 RMBS trusts, and seeking "hundreds of millions of dollars in damages"; (c) Commerzbank AG, as an investor in 50 RMBS trusts, seeking recovery for alleged "hundreds of millions of dollars in losses;" and (d) IKB International, S.A. in Liquidation and IKB Deutsche Industriebank AG (collectively, "IKB"), as an investor in 30 RMBS trusts, seeking more than U.S.$ 268 million of damages. In the NCUA case, the trustee's motion to dismiss for failure to state a claim is pending and discovery is stayed. In the Phoenix Light case, the plaintiffs filed an amended complaint on September 27, 2017, and the trustees filed an answer to the complaint on November 13, 2017; discovery is ongoing. In the Commerzbank case, the plaintiff filed an amended complaint on November 30, 2017, and the trustees filed an answer to the complaint on January 29, 2018; discovery is ongoing. In the IKB case, the court heard oral argument on the trustee's motion to dismiss on May 3, 2017, but has not yet issued a decision. On June 20, 2017, the IKB plaintiffs stipulated to the dismissal with prejudice of all claims asserted against Deutsche Bank concerning four trusts. Discovery is ongoing. Deutsche Bank was also a defendant in a lawsuit brought by the Western and Southern Life Insurance Company and five related entities, but on September 28, 2017, plaintiffs filed a notice of voluntary dismissal of their claims, without prejudice.

The Group believes a contingent liability exists with respect to these eight cases, but at present the amount of the contingent liability is not reliably estimable.

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

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

The Cologne District Court dismissed the claim in 2011 and the Cologne appellate court dismissed the appeal in 2012. The Federal Court set aside the Cologne appellate court's judgment and referred the case back to the appellate court. In its judgment, the Federal Court stated that the appellate court had not sufficiently considered the plaintiff's allegation that Deutsche Bank AG and Deutsche Post AG "acted in concert" in 2009.

Starting in 2014, additional former shareholders of Postbank, who accepted the 2010 tender offer, brought similar claims as Effecten-Spiegel AG against Deutsche Bank which are pending with the Cologne District Court and the Higher Regional Court of Cologne, respectively. On October 20, 2017, the Cologne District Court handed down a decision granting the claims in a total of 14 cases which were combined in one proceeding. The Cologne District Court took the view that Deutsche Bank was obliged to make a mandatory takeover offer already in 2008 so that the appropriate consideration to be offered in the takeover offer should have been € 57.25 per share. Taking the consideration paid into account, the additional consideration per share owed to shareholders which have accepted the takeover offer would thus amount to € 32.25. Deutsche Bank appealed this decision and the appeal has been assigned to the 13th Senate of the Higher Regional Court of Cologne, which also is hearing the appeal of Effecten-Spiegel AG.

On November 8, 2017, a hearing took place before the Higher Regional Court of Cologne in the Effecten-Spiegel case. In that hearing, the Higher Regional Court indicated that it disagreed with the conclusions of the Cologne District Court and took the preliminary view that Deutsche Bank was not obliged to make a mandatory takeover offer in 2008 or 2009. Initially the Higher Regional Court resolved to announce a decision on December 13, 2017. However, this was postponed to February 2018 because the plaintiff challenged the three members of the 13th Senate of the Higher Regional Court of Cologne for alleged prejudice. The challenge was rejected by the Higher Regional Court of Cologne at the end of January 2018. In February 2018, the court granted a motion by Effecten-Spiegel AG to re-open the hearing and scheduled a further hearing for June 29, 2018.

Deutsche Bank has been served with a material number of additional lawsuits filed against Deutsche Bank shortly before the end of the year 2017 and these claims are now pending with the District Court of Cologne. Some of the new plaintiffs allege that the consideration offered by Deutsche Bank AG for the shares in Postbank in the 2010 voluntary takeover should be raised to € 64.25 per share.

The claims for payment against Deutsche Bank in relation to these matters total almost € 700 million (excluding interest). In February 2018, a law firm representing some plaintiffs in the above-mentioned civil actions also filed a criminal complaint with the public prosecutor in Frankfurt am Main against certain Deutsche Bank personnel alleging that they engaged in fraudulent conduct in connection with the takeover offer.

The Group has established a contingent liability with respect to these matters but the Group has not disclosed the amount of this contingent liability because it has concluded that such disclosure can be expected to prejudice seriously the outcome of these matters.

Further Proceedings Relating to the Postbank Takeover. In September 2015, former shareholders of Postbank filed in the Cologne District Court shareholder actions against Postbank to set aside the squeeze-out resolution taken in the shareholders meeting of Postbank in August 2015. Among other things, the plaintiffs allege that Deutsche Bank was subject to a suspension of voting rights with respect to its shares in Postbank based on the allegation that Deutsche Bank failed to make a mandatory takeover offer at a higher price in 2009. The squeeze out is final and the proceeding itself has no reversal effect, but may result in damage payments. The claimants in this proceeding refer to legal arguments similar to those asserted in the Effecten-Spiegel proceeding described above. In a decision on October 20, 2017, the Cologne District Court declared the squeeze-out resolution to be void. The court, however, did not rely on a suspension of voting rights due to an alleged failure of Deutsche Bank to make a mandatory takeover offer, but argued that Postbank violated information rights of Postbank shareholders in Postbank's shareholders meeting in August 2015. Postbank has appealed this decision.

The legal question whether Deutsche Bank had been obliged to make a mandatory takeover offer for all Postbank shares prior to its 2010 voluntary takeover may also impact two pending appraisal proceedings (Spruchverfahren). These proceedings were initiated by former Postbank shareholders with the aim to increase the cash compensation offered in connection with the squeeze-out of Postbank shareholders in 2015 and the cash compensation offered and annual guaranteed dividend paid in connection with the execution of a domination and profit and loss transfer agreement (Beherrschungs- und Gewinnabführungsvertrag) between DB Finanz-Holding AG (now DB Beteiligungs-Holding GmbH) and Postbank in 2012. The Cologne District Court issued resolutions indicating that it is inclined to consider a potential obligation of Deutsche Bank to make a mandatory takeover offer for Postbank at an offer price of € 57.25 when determining the adequate cash compensation in the appraisal proceedings. The cash compensation paid in connection with the domination and profit and loss transfer agreement was € 25.18 and was accepted for approximately 0.5 million shares. The squeeze-out compensation paid in 2015 was € 35.05 and approximately 7 million shares were squeezed-out.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

Russia/UK Equities Trading Investigation. Deutsche Bank has investigated the circumstances around equity trades entered into by certain clients with Deutsche Bank in Moscow and London that offset one another. The total volume of transactions reviewed is significant. Deutsche Bank's internal investigation of potential violations of law, regulation and policy and into the related internal control environment has concluded, and Deutsche Bank is assessing the findings identified during the investigation; to date it has identified certain violations of Deutsche Bank’s policies and deficiencies in Deutsche Bank's control environment. Deutsche Bank has advised regulators and law enforcement authorities in several jurisdictions (including Germany, Russia, the UK and U.S.) of this investigation. Deutsche Bank has taken disciplinary measures with regards to certain individuals in this matter and will continue to do so with respect to others as warranted.

On January 30 and 31, 2017, the DFS and the FCA announced settlements with the Bank related to their investigations into this matter. The settlements conclude the DFS and the FCA’s investigations into the Bank’s anti-money laundering (AML) control function in its investment banking division, including in relation to the equity trading described above. Under the terms of the settlement agreement with the DFS, Deutsche Bank entered into a consent order, and agreed to pay civil monetary penalties of U.S.$ 425 million and to engage an independent monitor for a term of up to two years. Under the terms of the settlement agreement with the FCA, Deutsche Bank agreed to pay civil monetary penalties of approximately GBP 163 million. On May 30, 2017, the Federal Reserve announced its settlement with the Bank resolving this matter as well as additional AML issues identified by the Federal Reserve. Deutsche Bank paid a penalty of U.S. $ 41 million. Deutsche Bank also agreed to retain independent third parties to assess its Bank Secrecy Act/AML program and review certain foreign correspondent banking activity of its subsidiary Deutsche Bank Trust Company Americas. The Bank is also required to submit written remediation plans and programs. The DFS, FCA and Federal Reserve settlement amounts were already materially reflected in existing litigation provisions.

Deutsche Bank continues to cooperate with regulators and law enforcement authorities, including the DOJ, which has its own ongoing investigation into these securities trades. The Group has recorded a provision with respect to the remaining investigation. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to prejudice seriously the outcome of this matter.

Sovereign, Supranational and Agency Bonds (SSA) Investigations and Litigations. Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to SSA bond trading. Deutsche Bank is cooperating with these investigations.

Deutsche Bank is a defendant in several putative class action complaints filed in the U.S. District Court for the Southern District of New York alleging violations of U.S. antitrust law and common law related to alleged manipulation of the secondary trading market for SSA bonds. Deutsche Bank has reached an agreement to settle the actions for the amount of U.S.$48.5 million. The settlement remains subject to court approval.

Deutsche Bank is also a defendant in a putative class action complaint filed on November 7, 2017 in the Ontario Superior Court of Justice alleging violations of Canadian and foreign anti-trust law, and commons law. The complaint relies on allegations similar to those in the U.S. class actions, and seeks punitive damages. The case is in its early stages.

The Group has not disclosed whether it has established provisions with respect to other matters referred to above or contingent liability with respect to those matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

Trust Preferred Securities Litigation. Deutsche Bank and certain of its affiliates and former officers are the subject of a consolidated putative class action, filed in the United States District Court for the Southern District of New York, asserting claims under the federal securities laws on behalf of persons who purchased certain trust preferred securities issued by Deutsche Bank and its affiliates between October 2006 and May 2008. In a series of opinions, the court dismissed all claims as to four of the six offerings at issue, but allowed certain alleged omissions claims relating to the November 2007 and February 2008 offerings to proceed. On November 17, 2016, plaintiffs moved for class certification as to the November 2007 offering. On January 20, 2017, plaintiffs amended their motion for class certification to include the February 2008 offering and seek to add an additional individual as a proposed class representative. The court stayed all proceedings pending a decision by the Supreme Court of the United States in California Public Employees' Retirement System v. ANZ Securities in which the Supreme Court was expected to consider whether the filing of a putative class action serves to toll the three-year time limitation in Section 13 of the Securities Act with respect to the claims of putative class members. This related to claims relating to the February 2008 offering. On June 26, 2017, the Supreme Court issued its opinion, holding that the three year provision in Section 13 is a statute of repose and is not subject to equitable tolling. On October 16, 2017, the court struck plaintiffs' motion for class action certification, holding that claims by the additional individual proposed as a class representative were barred by the statute of repose. The court also ruled that the original plaintiffs had standing to prosecute claims on both the November 2007 and February 2008 offerings. Class action certification and merits discovery is ongoing. On February 21, 2018, defendants moved for an order denying class certification as to both offerings.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

U.S. Embargoes-Related Matters. Deutsche Bank has received requests for information from certain U.S. regulatory and law enforcement agencies concerning its historical processing of U.S. dollar payment orders through U.S. financial institutions for parties from countries subject to U.S. embargo laws in connection with investigations into whether such processing complied with U.S. federal and state laws. In 2006, Deutsche Bank voluntarily decided that it would not engage in new U.S. dollar business with counterparties in Iran, Sudan, North Korea and Cuba and with certain Syrian banks, and to exit existing U.S. dollar business with such counterparties to the extent legally possible. In 2007, Deutsche Bank decided that it would not engage in any new business, in any currency, with counterparties in Iran, Syria, Sudan and North Korea and to exit existing business, in any currency, with such counterparties to the extent legally possible; it also decided to limit its non-U.S. dollar business with counterparties in Cuba. On November 3, 2015, Deutsche Bank entered into agreements with the New York State Department of Financial Services and the Federal Reserve Bank of New York to resolve their investigations of Deutsche Bank. Deutsche Bank paid the two agencies U.S.$ 200 million and U.S.$ 58 million, respectively, and agreed not to rehire certain former employees. In addition, the New York State Department of Financial Services ordered Deutsche Bank to terminate certain employees and Deutsche Bank agreed to retain an independent monitor for one year, and the Federal Reserve Bank of New York ordered certain remedial measures including ensuring an effective OFAC compliance program and an annual review of such program by an independent party until the Federal Reserve Bank of New York is satisfied as to its effectiveness.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to prejudice seriously its outcome.

U.S. Treasury Securities Investigations and Litigations. Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to U.S. Treasuries auctions, trading, and related market activity. Deutsche Bank is cooperating with these investigations.

Deutsche Bank's subsidiary Deutsche Bank Securities Inc. (DBSI) was a defendant in several putative class actions alleging violations of U.S. antitrust law, the U.S. Commodity Exchange Act and common law related to the alleged manipulation of the U.S. Treasury securities market. These cases have been consolidated in the Southern District of New York. On November 16, 2017, plaintiffs filed a consolidated amended complaint, which did not name DBSI as a defendant. On December 11, 2017, the court dismissed DBSI from the class action without prejudice.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to prejudice seriously their outcome.

30 – Credit related Commitments and Contingent Liabilities

Irrevocable lending commitments and lending related contingent liabilities

In the normal course of business the Group regularly enters into irrevocable lending commitments, including fronting commitments as well as contingent liabilities consisting of financial and performance guarantees, standby letters of credit and indemnity agreements on behalf of its customers. Under these contracts the Group is required to perform under an obligation agreement or to make payments to the beneficiary based on third party's failure to meet its obligations. For these instruments it is not known to the Group in detail if, when and to what extent claims will be made. In the event that the Group has to pay out cash in respect of its fronting commitments, the Group would immediately seek reimbursement from the other syndicate lenders. The Group considers all the above instruments in monitoring the credit exposure and may require collateral to mitigate inherent credit risk. If the credit risk monitoring provides sufficient perception about a loss from an expected claim, a provision is established and recorded on the balance sheet.

The following table shows the Group's irrevocable lending commitments and lending related contingent liabilities without considering collateral or provisions. It shows the maximum potential utilization of the Group in case all these liabilities entered into must be fulfilled. The table therefore does not show the expected future cash flows from these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

Irrevocable lending commitments and lending related contingent liabilities

in € m.	Dec 31, 2017	Dec 31, 2016
Irrevocable lending commitments	158,253	166,063
Contingent liabilities	48,212	52,341
Total	**206,464**	218,404

Government Assistance

In the course of its business, the Group regularly applies for and receives government support by means of Export Credit Agency ("ECA") guarantees covering transfer and default risks for the financing of exports and investments into Emerging Markets and to a lesser extent, developed markets for Structured Trade & Export Finance and short- and medium-term Trade Finance business. Almost all export-oriented states have established such ECAs to support their domestic exporters. The ECAs act in the name and on behalf of the government of their respective country and are either constituted directly as governmental departments or organized as private companies vested with the official mandate of the government to act on its behalf. Terms and conditions of such ECA guarantees are broadly similar due to the fact that most of the ECAs act within the scope of the Organization for Economic Cooperation and Development ("OECD") consensus rules. The OECD consensus rules, an intergovernmental agreement of the OECD member states, define benchmarks intended to ensure that a fair competition between different exporting nations will take place.

In some countries dedicated funding programs with governmental support are offered for ECA-covered financings. The Group makes use of such programs to assist its clients in the financing of exported goods and services. In certain financings, the Group also receives government guarantees from national and international governmental institutions as collateral to support financings in the interest of the respective governments. The majority of such ECA guarantees received by the Group were issued either by the Euler-Hermes Kreditversicherungs-AG acting on behalf of the Federal Republic of Germany, by the Korean Export Credit Agencies (Korea Trade Insurance Corporation and The Export-Import Bank of Korea) acting on behalf of the Republic of Korea or by Chinese Export Credit Agency (China Export & Insurance Corporation (Sinosure)) acting on behalf of the People's Republic of China.

Irrevocable payment commitments with regard to levies

Irrevocable payment commitments related to bank levy according to Bank Recovery and Resolution Directive (BRRD), the Single Resolution Fund (SRF) and the German statutory deposit protection amounted to € 412.3 million as of December 31, 2017, and to € 280.4 million as of December 31, 2016.

31 – Other Short-Term Borrowings

in € m.	Dec 31, 2017	Dec 31, 2016
Other short-term borrowings:		
Commercial paper	5,274	3,219
Other	13,137	14,076
Total other short-term borrowings	**18,411**	17,295

32 – Long-Term Debt and Trust Preferred Securities

Long-Term Debt by Earliest Contractual Maturity

in € m.	Due in 2018	Due in 2019	Due in 2020	Due in 2021	Due in 2022	Due after 2022	Total Dec 31, 2017	Total Dec 31, 2016
Senior debt:								
Bonds and notes:								
Fixed rate	12,259	10,843	9,691	12,939	10,045	20,509	76,285	84,924
Floating rate	5,321	8,549	4,156	4,282	4,433	6,469	33,210	37,082
Subordinated debt:								
Bonds and notes:								
Fixed rate	257	28	1,096	0	0	4,112	5,493	4,882
Floating rate	277	20	0	0	0	1,441	1,738	1,906
Other	28,289	1,778	1,836	738	706	9,641	**42,988**	43,523
Total long-term debt	46,403	21,218	16,779	17,958	15,185	42,172	**159,715**	172,316

The Group did not have any defaults of principal, interest or other breaches with respect to its liabilities in 2017 and 2016.

Trust Preferred Securities[1]

in € m.	Dec 31, 2017	Dec 31, 2016
Fixed rate	4,462	5,302
Floating rate	1,030	1,071
Total trust preferred securities	**5,491**	6,373

[1] Perpetual instruments, redeemable at specific future dates at the Group's option.

33 – Maturity Analysis of the earliest contractual undiscounted cash flows of Financial Liabilities

					Dec 31, 2017
in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	226,339	0	0	0	0
Interest bearing deposits	133,378	146,145	45,633	18,699	12,166
Trading liabilities[1]	71,457	0	0	0	0
Negative market values from derivative financial instruments[1]	342,726	0	0	0	0
Financial liabilities designated at fair value through profit or loss	29,207	29,360	4,847	2,599	5,951
Investment contract liabilities[2]	0	0	574	0	0
Negative market values from derivative financial instruments qualifying for hedge accounting[3]	0	69	336	672	218
Central bank funds purchased	174	83	0	0	0
Securities sold under repurchase agreements	14,152	2,525	1,348	491	23
Securities loaned	6,684	3	0	0	1
Other short-term borrowings	11,859	2,326	3,600	0	0
Long-term debt	4	7,409	41,820	78,063	41,926
Trust preferred securities	0	1,710	3,328	688	0
Other financial liabilities	112,961	3,483	554	373	4
Off-balance sheet loan commitments	153,700	0	0	0	0
Financial guarantees	19,883	0	0	0	0
Total[4]	1,122,525	193,113	102,040	101,585	60,287

[1] Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within “on demand” which Group’s management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods.
[2] These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 “Insurance and Investment Contracts” for more detail on these contracts.
[3] Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate.
[4] The balances in the table do not agree to the numbers in the Group’s balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote.

					Dec 31, 2016
in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
Noninterest bearing deposits	200,122	0	0	0	0
Interest bearing deposits	129,704	147,531	46,176	17,027	11,247
Trading liabilities[1]	57,029	0	0	0	0
Negative market values from derivative financial instruments[1]	463,858	0	0	0	0
Financial liabilities designated at fair value through profit or loss	18,949	38,641	4,343	2,676	6,460
Investment contract liabilities[2]	0	0	592	0	0
Negative market values from derivative financial instruments qualifying for hedge accounting[3]	0	573	737	2,427	856
Central bank funds purchased	353	0	0	0	0
Securities sold under repurchase agreements	19,980	2,401	2,386	715	0
Securities loaned	4,168	11	0	0	0
Other short-term borrowings	13,322	1,995	1,802	0	0
Long-term debt	6	7,462	24,440	118,607	46,812
Trust preferred securities	0	78	2,539	4,361	0
Other financial liabilities	128,400	2,642	583	407	3,246
Off-balance sheet loan commitments	160,099	0	0	0	0
Financial guarantees	20,966	0	0	0	0
Total[4]	1,216,955	201,334	83,599	146,219	68,621

[1] Trading liabilities and derivatives not qualifying for hedge accounting balances are recorded at fair value. The Group believes that this best represents the cash flow that would have to be paid if these positions had to be closed out. Trading liabilities and derivatives not qualifying for hedge accounting balances are shown within “on demand” which Group’s management believes most accurately reflects the short-term nature of trading activities. The contractual maturity of the instruments may however extend over significantly longer periods. .
[2] These are investment contracts where the policy terms and conditions result in their redemption value equaling fair value. See Note 42 “Insurance and Investment Contracts” for more detail on these contracts.
[3] Derivatives designated for hedge accounting are recorded at fair value and are shown in the time bucket at which the hedged relationship is expected to terminate.
[4] The balances in the table do not agree to the numbers in the Group’s balance sheet as the cash flows included in the table are undiscounted. This analysis represents the worst case scenario for the Group if the Group was required to repay all liabilities earlier than expected. The Group believes that the likelihood of such an event occurring is remote.

Additional Notes

34 – Common Shares

Common Shares

Deutsche Bank's share capital consists of common shares issued in registered form without par value. Under German law, each share represents an equal stake in the subscribed capital. Therefore, each share has a nominal value of € 2.56, derived by dividing the total amount of share capital by the number of shares.

Number of shares	Issued and fully paid	Treasury shares	Outstanding
Common shares, January 1, 2016	1,379,273,131	(374,864)	1,378,898,267
Shares issued under share-based compensation plans	0	0	0
Capital increase	0	0	0
Shares purchased for treasury	0	(355,069,462)	(355,069,462)
Shares sold or distributed from treasury	0	355,240,884	355,240,884
Common shares, December 31, 2016	1,379,273,131	(203,442)	1,379,069,689
Shares issued under share-based compensation plans	0	0	0
Capital increase	687,500,000	0	687,500,000
Shares purchased for treasury	0	(490,690,358)	(490,690,358)
Shares sold or distributed from treasury	0	490,522,710	490,522,710
Common shares, December 31, 2017	2,066,773,131	(371,090)	2,066,402,041

There are no issued ordinary shares that have not been fully paid.

Shares purchased for treasury mainly consist of shares purchased with the intention of being resold in the short-term as well as held by the Group for a period of time. In addition, the Group has bought back shares for equity compensation purposes. All such transactions were recorded in shareholders' equity and no revenues and expenses were recorded in connection with these activities. Treasury stock held as of year-end will mainly be used for future share-based compensation.

On April 7, 2017, Deutsche Bank AG completed a capital increase from authorized capital against cash contributions through a public offering with subscription rights. In total, 687.5 million new common shares were issued, resulting in total proceeds of € 8.0 billion. The new shares were issued with the same dividend rights as the existing shares. 98.92 % of the subscription rights were exercised and thus 680.1 million new shares were issued at the subscription price of € 11.65 per share. The remaining 7.4 million new shares were sold in the market at an average price of € 15.50 per share.

The transaction costs related to the capital increase that were directly recorded in equity amounted to € 0.1 billion after tax.

Authorized Capital

The Management Board is authorized to increase the share capital by issuing new shares for cash consideration. As of December 31, 2017, Deutsche Bank AG had authorized but unissued capital of € 2,560,000,000 which may be issued in whole or in part until April 30, 2022. Further details are governed by Section 4 of the Articles of Association.

Authorized capital	Consideration	Pre-emptive rights	Expiration date
€ 512,000,000	Cash	May be excluded pursuant to Section 186 (3) sentence 4 of the Stock Corporation Act and may be excluded insofar as it is necessary to grant pre-emptive rights to the holders of option rights, convertible bonds and convertible participatory rights	April 30, 2022
€ 2,048,000,000	Cash	May be excluded insofar as it is necessary to grant pre-emptive rights to the holders of option rights, convertible bonds and convertible participatory rights.	April 30, 2022

Conditional Capital

The Management Board is authorized to issue once or more than once, participatory notes that are linked with conversion rights or option rights and/or convertible bonds and/or bonds with warrants. The participatory notes, convertible bonds or bonds with warrants may also be issued by affiliated companies of Deutsche Bank AG. For this purpose share capital was increased conditionally upon exercise of these conversion and/or exchange rights or upon mandatory conversion.

Conditional capital	Purpose of conditional capital	Expiration date
€ 512,000,000	May be used if holders of conversion or option rights that are linked with participatory notes or convertible bonds or bonds with warrants make use of their conversion or option rights or holders with conversion obligations of convertible participatory notes or convertible bonds fulfill their obligation to convert.	April 30, 2022
€ 51,200,000	May be used to fulfill options that are awarded on or before the expiration date and will only be used to the extent that holders of issued options make use of their right to receive shares and shares are not delivered out of treasury shares	April 30, 2022

Dividends

The following table presents the amount of dividends proposed or declared for the years ended December 31, 2017, 2016 and 2015, respectively.

	2017 (proposed)[1]	2016[2]	2015[2]
Cash dividends declared (in € m.)	227	227	165
Cash dividends declared per common share (in €)	0.11	0.11	0.08

1 Cash dividend for 2017 is based on the number of shares issued as of December 31, 2017.
2 Dividends for 2016 and 2015 were approved by the annual general meeting in 2017 and were paid simultaneously in 2017.

No dividends have been declared since the balance sheet date.

35 – Employee Benefits

Share-Based Compensation Plans

The Group made grants of share-based compensation under the DB Equity Plan. This plan represents a contingent right to receive Deutsche Bank common shares after a specified period of time. The award recipient is not entitled to receive dividends during the vesting period of the award.

The share awards granted under the terms and conditions of the DB Equity Plan may be forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period. Vesting usually continues after termination of employment in cases such as redundancy or retirement.

In countries where legal or other restrictions hinder the delivery of shares, a cash plan variant of the DB Equity Plan was used for granting awards.

The following table sets forth the basic terms of these share plans.

Grant year(s)	Deutsche Bank Equity Plan	Vesting schedule	Early retirement provisions	Eligibility
2017	Annual Award[1]	1/4: 12 months[2] 1/4: 24 months[2] 1/4: 36 months[2] 1/4: 48 months[2]	Yes	Select employees as annual performance-based compensation
		Or cliff vesting after 54 months[2]	Yes[3]	Members of Management Board or of Senior Leadership Cadre
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant[4]	No	Regulated employees
	Key Retention Plan (KRP)[5]	1/2: 50 months[6] 1/2: 62 months[6]	Yes	Material Risk Takers (MRTs)
		Cliff vesting after 43 months	Yes	Non-Material Risk Takers (non-MRTs)
2016	Annual Award	1/4: 12 months[2] 1/4: 24 months[2] 1/4: 36 months[2] 1/4: 48 months[2]	Yes	Select employees as annual performance-based compensation
		Or cliff vesting after 54 months[2]	Yes[3]	Members of Management Board or of Senior Leadership Cadre
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant[4]	No	Regulated employees
	Key Position Award (KPA)[7]	Cliff-vesting after 4 years[4]	Yes	Select employees as annual retention
2015/ 2014/ 2013	Annual Award	1/3: 12 months[2] 1/3: 24 months[2] 1/3: 36 months[2]	Yes	Select employees as annual performance-based compensation
		Or cliff vesting after 54 months[2]	Yes[3]	Members of Management Board or of Senior Management Group
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant[8]	No	Regulated employees
2012	Annual Award	1/3: 12 months[9] 1/3: 24 months[9] 1/3: 36 months[9]	Yes	Select employees as annual performance-based compensation
	Retention/New Hire	Individual specification	Yes	Select employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant[8]	No	Regulated employees

1 For employees of certain legal entities, deferred equity is replaced with restricted shares due to local regulatory requirements.
2 For members of the Management Board or of the Senior Leadership Cadre and all other regulated employees a further retention period of six months applies.
3 Early retirement provisions do not apply to members of the Management Board.
4 For all regulated employees share delivery takes place after a further retention period of twelve months.
5 The Key Retention Plan (KRP) is referenced as the "Retention Award Program" in the Bank's Compensation Report. Equity-based awards granted under this program in January 2017 are subject to an additional share price hurdle, meaning this award proportion only vests in the event that the Bank's share price reaches a certain share target price prior to vesting.
6 For Material Risk Takers (MRTs) share delivery takes place after a further retention period of twelve months.
7 A predefined proportion of the individual's KPA is subject to an additional share price hurdle, meaning this award proportion only vests in the event that the Bank's share price reaches a certain share target price prior to vesting.
8 For members of the Management Board share delivery takes place after a retention period of three years. For all other regulated employees share delivery takes place after a retention period of six months.
9 For members of the Management Board a different schedule applies. For all other regulated employees share delivery takes place after a further retention period of six months.

Furthermore, the Group offers a broad-based employee share ownership plan entitled Global Share Purchase Plan ("GSPP"). The GSPP offers employees in specific countries the opportunity to purchase Deutsche Bank shares in monthly installments over one year. At the end of the purchase cycle, the bank matches the acquired stock in a ratio of one to one up to a maximum of ten free shares, provided that the employee remains at Deutsche Bank Group for another year. In total, about 14,500 staff from 20 countries enrolled in the ninth cycle that began in November 2017.

The Group has other local share-based compensation plans, none of which, individually or in the aggregate, are material to the consolidated financial statements.

The following table shows the outstanding share award units as of the respective dates, which represent a contingent right to receive Deutsche Bank common shares after a specified period of time. It also includes the grants under the cash plan variant of the DB Equity Plan.

	Share units (in thousands)	Weighted-average grant date fair value per unit
Balance as of December 31, 2015	53,651	€ 28.18
Balance as of December 31, 2016	90,292	€ 20.22
Balance as of December 31, 2017	137,541	€ 14.78

Share-based payment transactions resulting in a cash payment give rise to a liability, which amounted to approximately € 23 million, € 15 million and € 19 million for the years ended December 31, 2017, 2016 and 2015, respectively.

As of December 31, 2017, the grant volume of outstanding share awards was approximately € 1.8 billion. Thereof, € 1.1 billion had been recognized as compensation expense in the reporting year or prior to that. Hence, compensation expense for deferred share-based compensation not yet recognized amounted to € 0.7 billion as of December 31, 2017.

In addition to the amounts shown in the table above, approximately 5.7 and 3.7 million shares were issued to plan participants in February and March 2018, resulting from the vesting of DB Equity Plan awards granted in prior years (thereof 0.16 million units for February and 0.04 million units for March 2018 vesting cycles under the cash plan variant of this DB Equity Plan).

Post-employment Benefit Plans

Nature of Plans

The Group sponsors a number of post-employment benefit plans on behalf of its employees, both defined contribution plans and defined benefit plans. The Group's plans are accounted for based on the nature and substance of the plan. Generally, for defined benefit plans the value of a participant's accrued benefit is based on each employee's remuneration and length of service; contributions to defined contribution plans are typically based on a percentage of each employee's remuneration. The rest of this note focuses predominantly on the Group's defined benefit plans.

The Group's defined benefit plans are primarily described on a geographical basis, reflecting differences in the nature and risks of benefits, as well as in the respective regulatory environments. In particular, the requirements set by local regulators can vary significantly and determine the design and financing of the benefit plans to a certain extent. Key information is also shown based on participant status, which provides a broad indication of the maturity of the Group's obligations.

					Dec 31, 2017
in € m.	Germany	UK	U.S.	Other	Total
Defined benefit obligation related to					
Active plan participants	4,823	688	363	640	6,514
Participants in deferred status	2,196	2,583	536	93	5,408
Participants in payment status	5,071	905	502	246	6,724
Total defined benefit obligation	12,090	4,176	1,401	979	18,646
Fair value of plan assets	11,003	5,202	1,091	915	18,211
Funding ratio (in %)	91	125	78	93	98

					Dec 31, 2016
in € m.	Germany	UK	U.S.	Other	Total
Defined benefit obligation related to					
Active plan participants	4,884	791	443	741	6,859
Participants in deferred status	2,139	2,559	560	99	5,357
Participants in payment status	4,955	1,146	545	251	6,897
Total defined benefit obligation	11,978	4,496	1,548	1,091	19,113
Fair value of plan assets	10,975	5,352	1,219	973	18,519
Funding ratio (in %)	92	119	79	89	97

The majority of the Group's defined benefit plan obligations relate to Germany, the United Kingdom and the United States. Within the other countries, the largest obligations relate to Switzerland, Channel Islands and Belgium. In Germany and some continental European countries, post-employment benefits are usually agreed on a collective basis with respective employee works councils or their equivalent. The Group's main pension plans are governed by boards of trustees, fiduciaries or their equivalent.

Post-employment benefits can form an important part of an employee's total remuneration. The Group's approach is that their design shall be attractive to employees in the respective market, but sustainable for the Group to provide over the longer term.

At the same time, the Group tries to limit its risks related to provision of such benefits. Consequently the Group has moved to offer defined contribution plans in many locations over recent years.

In the past the Group typically offered pension plans based on final pay prior to retirement. These types of benefits still form a significant part of the pension obligations for participants in deferred and payment status. Currently, in Germany and the United States, the main defined benefit pension plans for active staff are cash account type plans where the Group credits an annual amount to individual accounts based on an employee's current salary. Dependent on the plan rules, the accounts increase either at a fixed interest rate or participate in market movements of certain underlying investments to limit the investment risk for the Group. Sometimes, in particular in Germany, there is a guaranteed benefit amount within the plan rules, e.g. payment of at least the amounts contributed. Upon retirement, beneficiaries may usually opt for a lump sum or for conversion of the accumulated account balance into an annuity. This conversion is often based on market conditions and mortality assumptions at retirement. In the United Kingdom, the main defined benefit pension plan was redesigned in 2011 for active employees still eligible to the plan to reduce the overall long-term risk exposure to the Group. In the Netherlands, the Group converted the defined benefit plan into a collective defined contribution plan during 2016.

The Group also sponsors retirement and termination indemnity plans in several countries, as well as some post-employment medical plans for a number of current and retired employees, mainly in the United States. The post-employment medical plans typically pay fixed percentages of medical expenses of eligible retirees after a set deductible has been met. In the United States, once a retiree is eligible for Medicare, the Group contributes to a Health Reimbursement Account and the retiree is no longer eligible for the Group's medical program. The Group's total defined benefit obligation for post-employment medical plans was € 196 million and € 201 million at December 31, 2017 and December 31, 2016, respectively. In combination with the benefit structure, these plans represent limited risk for the Group, given the nature and size of the post-retirement medical plan liabilities of € 196 million versus the size of the Group's balance sheet at year end 2017.

The following amounts of expected benefit payments from the Group's defined benefit plans include benefits attributable to employees' past and estimated future service, and include both amounts paid from the Group's external pension trusts and paid directly by the Group in respect of unfunded plans.

in € m.	Germany	UK	U.S.	Other	Total
Actual benefit payments 2017	413	245	99	83	840
Benefits expected to be paid 2018	423	71	71	61	626
Benefits expected to be paid 2019	436	77	77	64	654
Benefits expected to be paid 2020	453	86	73	58	670
Benefits expected to be paid 2021	469	93	77	57	696
Benefits expected to be paid 2022	489	100	78	60	727
Benefits expected to be paid 2023 – 2027	2,736	638	423	306	4,103
Weighted average duration of defined benefit obligation (in years)	14	22	12	12	16

2017 saw many members of UK pension plans transfer their entitlements to external pension schemes in order to take advantage of recent legislation changes, which allow more flexibility over their pension benefit entitlements. Projected benefit payments for future periods do not allow for such discretionary transfers.

Multi-employer Plans

In Germany, the Group is a member of the BVV Versicherungsverein des Bankgewerbes a.G. (BVV) together with other financial institutions. The BVV offers retirement benefits to eligible employees in Germany as a complement to post-employment benefit promises of the Group. Both employers and employees contribute on a regular basis to the BVV. The BVV provides annuities of a fixed amount to individuals on retirement and increases these fixed amounts if surplus assets arise within the plan. According to legislation in Germany, the employer is ultimately liable for providing the benefits to its employees. An increase in benefits may also arise due to additional obligations to retirees for the effects of inflation. BVV is a multi-employer defined benefit plan. However, in line with industry practice, the Group accounts for it as a defined contribution plan since insufficient information is available to identify assets and liabilities relating to the Group's current and former employees, primarily because the BVV does not fully allocate plan assets to beneficiaries nor to member companies. According to the BVV's disclosures, there is no current deficit in the plan that may affect the amount of future Group contributions. Furthermore, any plan surplus emerging in the future will be distributed to the plan members, hence it cannot reduce future Group contributions. In June 2016, the BVV's Annual General Meeting approved a reduction in benefits from future contributions for certain groups of employees. Similar to other participating companies, the Group committed to make up for reduced benefit levels by increasing contributions to the BVV from January 1, 2017. A corresponding labor agreement has been signed with the German works council.

The Group's expenses for defined contribution plans also include annual contributions by Deutsche Postbank AG to the pension fund for postal civil servants in Germany. Responsibility for the liability for these benefits lies with the German government.

Governance and Risk

The Group maintains a Pensions Risk Committee to oversee its pension and related risks on a global basis. This Committee meets quarterly, reports directly to the Senior Executive Compensation Committee and is supported by the Pensions Operating Committee.

Within this context, the Group develops and maintains guidelines for governance and risk management, including funding, asset allocation and actuarial assumption setting. In this regard, risk management means the management and control of risks for the Group related to market developments (e.g., interest rate, credit spread, price inflation), asset investment, regulatory or legislative requirements, as well as monitoring demographic changes (e.g., longevity). Especially during and after acquisitions or changes in the external environment (e.g., legislation, taxation), topics such as the general plan design or potential plan amendments are considered. Any plan changes follow a process requiring approval by Group Human Resources. To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk.

In the Group's key pension countries, the Group's largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation and longevity, although these have been partially mitigated through the investment strategy adopted.

Overall, the Group seeks to minimize the impact of pensions on the Group's financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements. The Group measures its pension risk exposures on a regular basis using specific metrics developed by the Group for this purpose.

Funding

The Group maintains various external pension trusts to fund the majority of its defined benefit plan obligations. The Group's funding policy is to maintain coverage of the defined benefit obligation by plan assets within a range of 90 % to 100 % of the obligation, subject to meeting any local statutory requirements. The Group has also determined that certain plans should remain unfunded, although their funding approach is subject to periodic review, e.g. when local regulations or practices change. Obligations for the Group's unfunded plans are accrued on the balance sheet.

For most of the externally funded defined benefit plans there are local minimum funding requirements. The Group can decide on any additional plan contributions, with reference to the Group's funding policy. There are some locations, e.g. the United Kingdom, where the trustees and the Bank jointly agree contribution levels. In most countries the Group expects to receive an economic benefit from any plan surpluses of plan assets compared to defined benefit obligations, typically by way of reduced future contributions. Given the broadly fully funded position and the investment strategy adopted in the Group's key funded defined benefit plans, any minimum funding requirements that may apply are not expected to place the Group under any material adverse cash strain in the short term. With reference to the Group's funding policy, the Group considers not re-claiming benefits paid from the Group's assets as an equivalent to making cash contributions into the external pension trusts during the year.

For post-retirement medical plans, the Group accrues for obligations over the period of employment and pays the benefits from Group assets when the benefits become due.

Actuarial Methodology and Assumptions

December 31 is the measurement date for all plans. All plans are valued by independent qualified actuaries using the projected unit credit method. A Group policy provides guidance to local actuaries to ensure consistency globally on setting actuarial assumptions which are finally determined by the Group's Pensions Operating Committee.

The key actuarial assumptions applied in determining the defined benefit obligations at December 31 are presented below in the form of weighted averages.

	Dec 31, 2017				Dec 31, 2016			
	Germany	UK	U.S.[1]	Other	Germany	UK	U.S.[1]	Other
Discount rate (in %)	1.7	2.5	3.5	2.5	1.7	2.6	4.0	2.3
Rate of price inflation (in %)	1.8	3.5	2.2	2.0	1.7	3.6	2.2	2.0
Rate of nominal increase in future compensation levels (in %)	2.3	4.5	2.3	3.1	2.1	4.6	2.3	2.8
Rate of nominal increase for pensions in payment (in %)	1.7	3.3	2.2	1.1	1.6	3.5	2.2	1.1
Assumed life expectancy at age 65								
For a male aged 65 at measurement date	19.3	23.6	22.2	21.7	19.1	23.4	22.4	22.0
For a female aged 65 at measurement date	23.3	25.4	23.7	24.1	23.2	25.5	23.9	24.5
For a male aged 45 at measurement date	21.9	24.9	23.8	23.1	21.8	25.1	23.9	23.7
For a female aged 45 at measurement date	25.8	26.9	25.2	25.6	25.7	27.4	25.4	26.1
Mortality tables applied	Richttafeln Heubeck 2005G	SAPS (S2) Light with CMI 2016 projections	RP2014 White-collar with MP2017 projections	Country specific tables	Richttafeln Heubeck 2005G	SAPS (S1) Light with CMI 2015 projections	RP2014 Aggregate with MP 2016 projections	Country specific tables

[1] Cash balance interest crediting rate in line with the 30-year US government bond yield.

For the Group’s most significant plans in the key countries, the discount rate used at each measurement date is set based on a high quality corporate bond yield curve – derived based on bond universe information sourced from reputable third-party index and data providers and rating agencies – reflecting the timing, amount and currency of the future expected benefit payments for the respective plan. For longer durations where limited bond information is available, reasonable yield curve extrapolation methods are applied using respective actual swap rates and credit spread assumptions. Consistent discount rates are used across all plans in each currency zone, based on the assumption applicable for the Group’s largest plan(s) in that zone. For plans in the other countries, the discount rate is based on high quality corporate or government bond yields applicable in the respective currency, as appropriate at each measurement date with a duration broadly consistent with the respective plan’s obligations.

In 2017 the Group moved to a more standardized, simpler approach to set its discount rate used to value its defined benefit plans in the Eurozone; similar approaches are generally accepted and are already used for the Group’s other major pension plans in the United Kingdom and the United States. The refinement resulted in no change in the discount rate and so no effect on the Group’s Consolidated Statement of Comprehensive Income in 2017.

The price inflation assumptions in the Eurozone and the United Kingdom are set with reference to market measures of inflation based on inflation swap rates in those markets at each measurement date. For other countries, the price inflation assumptions are typically based on long term forecasts by Consensus Economics Inc.

The assumptions for the increases in future compensation levels and for increases to pensions in payment are developed separately for each plan, where relevant. Each is set based on the price inflation assumption and reflecting the Group’s reward structure or policies in each market, as well as relevant local statutory and plan-specific requirements.

Among other assumptions, mortality assumptions can be significant in measuring the Group’s obligations under its defined benefit plans. These assumptions have been set in accordance with current best practice in the respective countries. Future potential improvements in longevity have been considered and included where appropriate.

Reconciliation in Movement of Liabilities and Assets – Impact on Financial Statements

					2017
in € m.	Germany	UK	U.S.	Other	Total
Change in the present value of the defined benefit obligation:					
Balance, beginning of year	11,978	4,496	1,548	1,091	19,113
Defined benefit cost recognized in Profit & Loss					
Current service cost	213	34	21	50	318
Interest cost	202	114	56	25	397
Past service cost and gain or loss arising from settlements	34	4	0	(11)	27
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	76	(43)	65	3	101
Actuarial gain or loss arising from changes in demographic assumptions	0	(16)	(6)	(11)	(33)
Actuarial gain or loss arising from experience	(3)	(17)	5	(9)	(24)
Cash flow and other changes					
Contributions by plan participants	3	0	0	15	18
Benefits paid	(413)	(245)	(99)	(83)	(840)
Payments in respect to settlements	0	0	0	(26)	(26)
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	(151)	(189)	(63)	(403)
Other	0	0	0	(2)	(2)
Balance, end of year	12,090	4,176	1,401	979	18,646
thereof:					
Unfunded	2	12	195	116	325
Funded	12,088	4,164	1,206	863	18,321
Change in fair value of plan assets:					
Balance, beginning of year	10,975	5,352	1,219	973	18,519
Defined benefit cost recognized in Profit & Loss					
Interest income	187	135	44	22	388
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	(187)	144	32	32	21
Cash flow and other changes					
Contributions by plan participants	3	0	0	15	18
Contributions by the employer	438	0	31	22	491
Benefits paid[1]	(413)	(244)	(86)	(63)	(806)
Payments in respect to settlements	0	0	0	(26)	(26)
Acquisitions/Divestitures	0	0	0	0	0
Exchange rate changes	0	(183)	(147)	(58)	(388)
Other	0	0	0	(1)	(1)
Plan administration costs	0	(2)	(2)	(1)	(5)
Balance, end of year	11,003	5,202	1,091	915	18,211
Funded status, end of year	(1,087)	1,026	(310)	(64)	(435)
Change in irrecoverable surplus (asset ceiling)					
Balance, beginning of year	0	0	0	0	0
Interest cost	0	0	0	0	0
Changes in irrecoverable surplus	0	0	0	(46)	(46)
Exchange rate changes	0	0	0	2	2
Balance, end of year	0	0	0	(44)	(44)
Net asset (liability) recognized	(1,087)	1,026	(310)	(108)	(479)[2]

[1] For funded plans only.
[2] Thereof € 1,113 million recognized in Other assets and € 1,592 million in Other liabilities.

in € m.	Germany	UK	U.S.	Other	2016 Total
Change in the present value of the defined benefit obligation:					
Balance, beginning of year	10,783	4,323	1,507	1,341	17,954
Defined benefit cost recognized in Profit & Loss					
Current service cost	190	23	21	62	296
Interest cost	256	151	61	35	503
Past service cost and gain or loss arising from settlements[1]	2	5	0	(39)	(32)
Defined benefit cost recognized in Other Comprehensive Income					
Actuarial gain or loss arising from changes in financial assumptions	1,142	1,251	42	141	2,576
Actuarial gain or loss arising from changes in demographic assumptions	0	4	(6)	(3)	(5)
Actuarial gain or loss arising from experience	2	(66)	0	(3)	(67)
Cash flow and other changes					
Contributions by plan participants	3	0	0	19	22
Benefits paid	(403)	(132)	(123)	(76)	(734)
Payments in respect to settlements[1]	0	0	0	(393)	(393)
Acquisitions/Divestitures[2]	0	(402)	0	0	(402)
Exchange rate changes	0	(661)	46	(8)	(623)
Other[3]	3	0	0	15	18
Balance, end of year	11,978	4,496	1,548	1,091	19,113
thereof:					
Unfunded	4	13	206	123	346
Funded	11,974	4,483	1,342	968	18,767
Change in fair value of plan assets:					
Balance, beginning of year	10,371	5,322	1,182	1,210	18,085
Defined benefit cost recognized in Profit & Loss					
Interest income	249	185	48	32	514
Defined benefit cost recognized in Other Comprehensive Income					
Return from plan assets less interest income	484	1,042	10	97	1,633
Cash flow and other changes					
Contributions by plan participants	3	0	0	19	22
Contributions by the employer	271	22	56	73	422
Benefits paid[4]	(402)	(132)	(110)	(56)	(700)
Payments in respect to settlements[1]	0	0	0	(393)	(393)
Acquisitions/Divestitures[2]	0	(282)	0	0	(282)
Exchange rate changes	0	(804)	36	(19)	(787)
Other[3]	(1)	0	0	12	11
Plan administration costs	0	(1)	(3)	(2)	(6)
Balance, end of year	10,975	5,352	1,219	973	18,519
Funded status, end of year	(1,003)	856	(329)	(118)	(594)
Change in irrecoverable surplus (asset ceiling)					
Balance, beginning of year	0	0	0	0	0
Interest cost	0	0	0	0	0
Changes in irrecoverable surplus	0	0	0	0	0
Exchange rate changes	0	0	0	0	0
Balance, end of year	0	0	0	0	0
Net asset (liability) recognized	(1,003)	856	(329)	(118)	(594)[5]

[1] Conversion of defined benefit plan into a collective defined contribution plan in the Netherlands.
[2] Abbey Life.
[3] Includes the opening balance of a plan in Belgium for which defined contribution plan accounting was applied before and other smaller plans.
[4] For funded plans only.
[5] Thereof € 934 million recognized in Other assets and € 1,528 million in Other liabilities.

There are no reimbursement rights for the Group.

Investment Strategy

The Group's investment objective is to protect the Group from adverse impacts of its defined benefit pension plans on key financial metrics. In the past, the primary focus has been on protecting the plans' IFRS funded status in the case of adverse market scenarios. Recently there has been a shift in the investment strategy in selected markets to balance competing key financial metrics. Investment managers manage pension assets in line with investment mandates or guidelines as agreed with the pension plans' trustees and investment committees.

For key defined benefit plans for which the Bank aims to protect the IFRS funded status, the Group applies a liability driven investment (LDI) approach. Risks from mismatches between fluctuations in the present value of the defined benefit obligations and plan assets due to capital market movements are minimized, subject to balancing relevant trade-offs. This is achieved by allocating plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation. Thereby, plan assets broadly reflect the underlying risk profile and currency of the pension obligations. For pension plans where the LDI approach may impact adversely other key financial metrics, the Group deviates from this primary investment strategy. For example, in 2015, the Group started to adjust the investment strategy for the German main pension plan assets by reducing the interest rate and credit spread hedges. The Group closely monitors this divergence from the primary investment strategy and has put in place governance mechanisms to ensure a regular review of the deviation from the LDI approach.

Where the desired hedging level for market risks cannot be achieved with physical instruments (i.e. corporate and government bonds), derivatives are employed. Derivative overlays mainly include interest rate, inflation swaps and credit default swaps. Other instruments are also used, such as interest rate futures and options. In practice, a completely hedged approach is impractical, for instance because of insufficient market depth for ultra-long-term corporate bonds, as well as liquidity and cost considerations. Therefore, plan assets contain further asset categories to create long-term return enhancement and diversification benefits such as equity, real estate, high yield bonds or emerging markets bonds.

Plan asset allocation to key asset classes

The following table shows the asset allocation of the Group's funded defined benefit plans to key asset classes, i.e. exposures include physical securities in discretely managed portfolios and underlying asset allocations of any commingled funds used to invest plan assets.

Asset amounts in the following table include both “quoted” (i.e. Level 1 assets in accordance with IFRS 13 – amounts invested in markets where the fair value can be determined directly from prices which are quoted in active, liquid markets) and “other” (i.e. Level 2 and 3 assets in accordance with IFRS 13) assets.

					Dec 31, 2017					Dec 31, 2016
in € m.	Germany	UK	U.S.	Other	Total	Germany	UK	U.S.	Other	Total
Cash and cash equivalents	1,260	419	26	74	1,779	1,085	115	45	73	1,318
Equity instruments[1]	1,265	582	118	68	2,033	1,129	634	116	87	1,966
Investment-grade bonds[2]										
Government	2,212	1,167	367	161	3,907	2,264	1,898	405	166	4,733
Non-government bonds	5,189	2,447	472	175	8,283	5,627	2,272	521	154	8,574
Non-investment-grade bonds										
Government	177	0	0	14	191	166	0	0	45	211
Non-government bonds	610	70	20	37	737	305	70	15	25	415
Structured products	41	402	51	26	520	38	237	65	22	362
Insurance	0	0	0	27	27	1	0	0	27	28
Alternatives										
Real estate	232	117	0	56	405	222	117	0	37	376
Commodities	48	24	0	0	72	6	13	0	0	19
Private equity	58	0	0	0	58	58	0	0	0	58
Other	788	36	0	274	1,098	667	34	0	330	1,031
Derivatives (Market Value)										
Interest rate	(735)	148	37	(4)	(554)	(614)	133	51	(2)	(432)
Credit	(155)	(1)	0	(1)	(157)	80	(1)	1	1	81
Inflation	0	(210)	0	6	(204)	0	(197)	0	7	(190)
Foreign exchange	10	1	0	2	13	(59)	2	0	0	(57)
Other	3	0	0	0	3	0	25	0	1	26
Total fair value of plan assets	**11,003**	**5,202**	**1,091**	**915**	**18,211**	10,975	5,352	1,219	973	18,519

[1] Allocation of equity exposure is broadly in line with the typical index in the respective market, e.g. the equity portfolio's benchmark of the UK retirement benefit plans is the MSCI All Countries World Index.
[2] Investment-grade means BBB and above. Average credit rating exposure for the Group's main plans is around A.

The following table sets out the Group's funded defined benefit plan assets only invested in “quoted” assets, i.e. Level 1 assets in accordance with IFRS 13.

					Dec 31, 2017					Dec 31, 2016
in € m.	Germany	UK	U.S.	Other	Total	Germany	UK	U.S.	Other	Total
Cash and cash equivalents	1,251	22	24	28	1,325	1,145	115	42	39	1,341
Equity instruments[1]	1,154	582	118	58	1,912	1,066	635	115	78	1,894
Investment-grade bonds[2]										
Government	1,190	1,163	362	73	2,788	723	1,893	404	78	3,098
Non-government bonds	0	0	0	0	0	0	0	0	3	3
Non-investment-grade bonds										
Government	1	0	0	0	1	0	0	0	32	32
Non-government bonds	0	0	0	0	0	0	0	0	0	0
Structured products	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0
Alternatives										
Real estate	0	0	0	0	0	0	0	0	0	0
Commodities	0	0	0	0	0	4	0	0	0	4
Private equity	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	8	0	0	0	8
Derivatives (Market Value)										
Interest rate	1	0	6	0	7	(1)	0	11	0	10
Credit	0	(1)	0	0	(1)	0	(1)	0	1	0
Inflation	0	0	0	0	0	0	0	0	0	0
Foreign exchange	0	1	0	0	1	0	2	0	0	2
Other	3	0	0	0	3	1	0	0	0	1
Total fair value of quoted plan assets	**3,600**	**1,767**	**510**	**159**	**6,036**	2,946	2,644	572	231	6,393

[1] Allocation of equity exposure is broadly in line with the typical index in the respective market, e.g. the equity portfolio's benchmark of the UK retirement benefit plans is the MSCI All Countries World Index.
[2] Investment-grade means BBB and above. Average credit rating exposure for the Group's main plans is around A.

All the remaining assets are invested in “other” assets, the majority of which are invested in Level 2 assets in accordance with IFRS 13, being primarily investment-grade corporate bonds. A relatively small element overall is in Level 3 assets in accordance with IFRS 13, being primarily real estate, insurance policies and derivative contracts.

The following tables show the asset allocation of the “quoted” and “other” defined benefit plan assets by key geography in which they are invested.

							Dec 31, 2017
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	294	126	96	1,204	16	43	1,779
Equity instruments	349	83	802	317	336	146	2,033
Government bonds (investment-grade and above)	1,057	1,087	397	627	253	486	3,907
Government bonds (non-investment-grade)	0	0	0	9	23	159	191
Non-government bonds (investment-grade and above)	575	1,890	2,196	2,607[1]	906	109	8,283
Non-government bonds (non-investment-grade)	4	44	20	640	19	10	737
Structured products	41	422	51	1	5	0	520
Subtotal	2,320	3,652	3,562	5,405	1,558	953	17,450
Share (in %)	13	21	20	31	9	5	100
Other asset categories							761
Fair value of plan assets							18,211

[1] Majority of this amount relates to bonds of French, Italian and Dutch corporate bonds.

							Dec 31, 2016
in € m.	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	(54)	112	144	1,062	20	34	1,318
Equity instruments	279	103	847	279	321	137	1,966
Government bonds (investment-grade and above)	738	1,840	447	975	210	523	4,733
Government bonds (non-investment-grade)	1	18	5	13	7	167	211
Non-government bonds (investment-grade and above)	472	1,819	2,458	2,939[1]	763	123	8,574
Non-government bonds (non-investment-grade)	9	50	186	130	28	12	415
Structured products	36	210	66	7	6	37	362
Subtotal	1,481	4,152	4,153	5,405	1,355	1,033	17,579
Share (in %)	8	24	24	31	8	6	100
Other asset categories							940
Fair value of plan assets							18,519

[1] Majority of this amount relates to bonds of French, Italian and Dutch corporate bonds.

Plan assets at December 31, 2017 include derivative transactions with Group entities with a negative market value of around € 737 million. There is neither a material amount of securities issued by the Group nor other claims on Group assets included in the fair value of plan assets. The plan assets do not include any real estate which is used by the Group.

In addition, the Group estimates and allows for uncertain income tax positions which may have an impact on the Group’s plan assets. Significant judgment is required in making these estimates and the Group’s final net liabilities may ultimately be materially different.

Key Risk Sensitivities

The Group’s defined benefit obligations are sensitive to changes in capital market conditions and actuarial assumptions. Sensitivities to capital market movements and key assumption changes are presented in the following table. Each market risk factor or assumption is changed in isolation. Sensitivities of the defined benefit obligations are approximated using geometric extrapolation methods based on plan durations for the respective assumption. Duration is a risk measure that indicates the broad sensitivity of the obligations to a change in an underlying assumption and provides a reasonable approximation for small to moderate changes in those assumptions.

For example, the discount rate duration is derived from the change in the defined benefit obligation to a change in the discount rate based on information provided by the local actuaries of the respective plans. The resulting duration is used to estimate the remeasurement liability loss or gain from changes in the discount rate. For other assumptions, a similar approach is used to derive the respective sensitivity results.

For defined benefit pension plans, changes in capital market conditions will impact the plan obligations via actuarial assumptions – mainly discount rate and price inflation rate – as well as the plan assets. Where the Group applies a LDI approach, the Bank’s overall exposure to changes is reduced. Consequently, to aid understanding of the Group’s risk exposures related to key capital market movements, the net impact of the change in the defined benefit obligations and plan assets due to a change of the related market risk factor or underlying actuarial assumption is shown; for sensitivities to changes in actuarial assumptions that do not impact the plan assets, only the impact on the defined benefit obligations is shown.

Asset-related sensitivities are derived for the Group's major plans by using risk sensitivity factors determined by the Group's Market Risk Management function. These sensitivities are calculated based on information provided by the plans' investment managers and extrapolated linearly to reflect the approximate change of the plan assets' market value in case of a change in the underlying risk factor.

The sensitivities illustrate plausible variations over time in capital market movements and key actuarial assumptions. The Group is not in a position to provide a view on the likelihood of these capital market or assumption changes. While these sensitivities illustrate the overall impact on the funded status of the changes shown, the significance of the impact and the range of reasonable possible alternative assumptions may differ between the different plans that comprise the aggregated results. Even though plan assets and plan obligations are sensitive to similar risk factors, actual changes in plan assets and obligations may not fully offset each other due to imperfect correlations between market risk factors and actuarial assumptions. Caution should be used when extrapolating these sensitivities due to non-linear effects that changes in capital market conditions and key actuarial assumptions may have on the overall funded status. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in these sensitivities.

	Dec 31, 2017				Dec 31, 2016			
in € m.	Germany	UK	U.S.	Other	Germany	UK	U.S.	Other
Discount rate (–50 bp):								
(Increase) in DBO	(875)	(465)	(40)	(55)	(900)	(500)	(50)	(65)
Expected increase in plan assets[1]	215	505	35	25	600	555	35	25
Expected net impact on funded status (de-) increase	**(660)**	**40**	**(5)**	**(30)**	(300)	55	(15)	(40)
Discount rate (+50 bp):								
Decrease in DBO	810	420	30	50	835	450	40	60
Expected (decrease) in plan assets[1]	(215)	(505)	(35)	(25)	(600)	(555)	(35)	(25)
Expected net impact on funded status (de-) increase	**595**	**(85)**	**(5)**	**25**	235	(105)	5	35
Credit spread (–50 bp):								
(Increase) in DBO	(875)	(465)	(85)	(60)	(900)	(500)	(100)	(70)
Expected increase in plan assets[1]	150	125	20	10	500	115	25	10
Expected net impact on funded status (de-) increase	**(725)**	**(340)**	**(65)**	**(50)**	(400)	(385)	(75)	(60)
Credit spread (+50 bp):								
Decrease in DBO	810	420	80	55	835	450	95	65
Expected (decrease) in plan assets[1]	(150)	(125)	(20)	(10)	(500)	(115)	(25)	(10)
Expected net impact on funded status (de-) increase	**660**	**295**	**60**	**45**	335	335	70	55
Rate of price inflation (–50 bp):[2]								
Decrease in DBO	345	345	0	20	340	395	0	25
Expected (decrease) in plan assets[1]	(180)	(310)	0	(10)	(220)	(350)	0	(15)
Expected net impact on funded status (de-) increase	**165**	**35**	**0**	**10**	120	45	0	10
Rate of price inflation (+50 bp):[2]								
(Increase) in DBO	(360)	(375)	0	(25)	(350)	(435)	0	(30)
Expected increase in plan assets[1]	180	310	0	10	220	350	0	15
Expected net impact on funded status (de-) increase	**(180)**	**(65)**	**0**	**(15)**	(130)	(85)	0	(15)
Rate of real increase in future compensation levels (–50 bp):								
Decrease in DBO, net impact on funded status	70	15	0	15	75	25	0	15
Rate of real increase in future compensation levels (+50 bp):								
(Increase) in DBO, net impact on funded status	(70)	(15)	0	(15)	(75)	(25)	0	(15)
Longevity improvements by 10 %:[3]								
(Increase) in DBO, net impact on funded status	(305)	(130)	(25)	(15)	(305)	(130)	(30)	(15)

[1] Expected changes in the fair value of plan assets contain the simulated impact from the biggest plans in Germany, the UK, the U.S., Channel Islands, Switzerland and Belgium which cover over 99 % of the total fair value of plan assets. The fair value of plan assets for other plans is assumed to be unchanged for this presentation.
[2] Incorporates sensitivity to changes in pension benefits to the extent linked to the price inflation assumption.
[3] Estimated to be equivalent to an increase of around 1 year in overall life expectancy.

Expected cash flows

The following table shows expected cash flows for post-employment benefits in 2018, including contributions to the Group's external pension trusts in respect of funded plans, direct payment to beneficiaries in respect of unfunded plans, as well as contributions to defined contribution plans.

in € m.	2018 Total
Expected contributions to	
Defined benefit plan assets	300
BVV	65
Pension fund for Postbank's postal civil servants	90
Other defined contribution plans	290
Expected benefit payments for unfunded defined benefit plans	30
Expected total cash flow related to post-employment benefits	775

Expense of employee benefits

The following table presents a breakdown of specific expenses according to the requirements of IAS 19 and IFRS 2.

in € m.	2017	2016	2015
Expenses for defined benefit plans:			
Service cost	345	272	326
Net interest cost (income)	9	(11)	(4)
Total expenses defined benefit plans	354	261	322
Expenses for defined contribution plans:			
BVV	66	50	53
Pension fund for Postbank's postal civil servants	93	95	95
Other defined contribution plans	281	284	264
Total expenses for defined contribution plans	440	429	412
Total expenses for post-employment benefit plans	794	690	734
Employer contributions to mandatory German social security pension plan	243	237	231
Expenses for share-based payments, equity settled[1]	535	620	816
Expenses for share-based payments, cash settled[1]	22	3	15
Expenses for cash retention plans[1]	363	487	738
Expenses for severance payments[2]	94	149	184

[1] Including expenses for new hire awards and the acceleration of expenses not yet amortized due to the discontinuation of employment including those amounts which are recognized as part of the Group's restructuring expenses.
[2] Excluding the acceleration of expenses for deferred compensation awards not yet amortized.

36 – Income Taxes

in € m.	2017	2016	2015
Current tax expense (benefit):			
Tax expense (benefit) for current year	874	881	1,385
Adjustments for prior years	(145)	(23)	277
Total current tax expense (benefit)	729	858	1,662
Deferred tax expense (benefit):			
Origination and reversal of temporary difference, unused tax losses and tax credits	(113)	(276)	(378)
Effect of changes in tax law and/or tax rate	1,437	(3)	140
Adjustments for prior years	(90)	(33)	(749)
Total deferred tax expense (benefit)	1,234	(312)	(987)
Total income tax expense (benefit)	1,963	546	675

Income tax expense includes policyholder tax attributable to policyholder earnings, amounting to an income tax expense of € 23 million in 2016 and an income tax benefit of € 0.4 million in 2015.

Total current tax expense includes benefits from previously unrecognized tax losses, tax credits and deductible temporary differences, which reduced the current tax expense by € 5 million in 2017, by € 7 million in 2016 and by € 3 million in 2015.

Total deferred tax expense includes benefits from previously unrecognized tax losses (tax credits/deductible temporary differences) and the reversal of previous write-downs of deferred tax assets and expenses arising from write-downs of deferred tax assets, which increased the deferred tax expense by € 163 million in 2017. In 2016 these effects increased the deferred tax benefit by € 38 million and in 2015 these effects decreased the deferred tax benefit by € 187 million.

Deferred tax assets and liabilities are measured based on the tax rates that are expected to apply in the period that the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date. Accordingly, with the enactment of the new U.S. tax law known as the 'Tax Cuts and Jobs Act" or "TCJA" on December 22, 2017, the Bank recorded a one-time tax charge from the re-measurement of its U.S. deferred tax assets and liabilities to reflect the reduction in the U.S. federal statutory tax rate from 35 % to 21 %. The total charge amounted to € 1,446 million of which € 1,437 million is recorded as income tax expense in net income and € 8 million is recorded directly in other comprehensive income.

Difference between applying German statutory (domestic) income tax rate and actual income tax expense/(benefit)

in € m.	2017	2016	2015
Expected tax expense (benefit) at domestic income tax rate of 31.3% (31.3% for 2016 and 31% for 2015)	**384**	(254)	(1,890)
Foreign rate differential	(37)	(38)	(157)
Tax-exempt gains on securities and other income	(431)	(599)	(345)
Loss (income) on equity method investments	(21)	(19)	(21)
Nondeductible expenses	540	1,074	1,288
Impairments of goodwill	0	250	1,407
Changes in recognition and measurement of deferred tax assets[1]	159	(45)	184
Effect of changes in tax law and/or tax rate	1,437	(3)	140
Effect related to share-based payments	14	66	(5)
Effect of policyholder tax	0	23	0
Other[1]	(82)	91	74
Actual income tax expense (benefit)	**1,963**	546	675

[1] Current and deferred tax expense/(benefit) relating to prior years are mainly reflected in the line items "Changes in recognition and measurement of deferred tax assets" and "Other".

The Group is under continuous examinations by tax authorities in various jurisdictions. In 2015 "Other" in the preceding table mainly includes the effects of these examinations by the tax authorities.

The domestic income tax rate, including corporate tax, solidarity surcharge, and trade tax, used for calculating deferred tax assets and liabilities was 31.3 % for 2017, 31.3 % for 2016 and 31.0 % for 2015.

Income taxes charged or credited to equity (other comprehensive income/additional paid in capital)

in € m.	2017	2016	2015
Actuarial gains/losses related to defined benefit plans	**(23)**	344	(213)
Financial assets available for sale:			
Unrealized net gains/losses arising during the period	4	20	104
Net gains/losses reclassified to profit or loss	99	81	10
Derivatives hedging variability of cash flows:			
Unrealized net gains/losses arising during the period	4	(14)	3
Net gains/losses reclassified to profit or loss	42	1	(6)
Other equity movement:			
Unrealized net gains/losses arising during the period	2	(71)	(90)
Net gains/losses reclassified to profit or loss	(5)	100	(2)
Income taxes (charged) credited to other comprehensive income	**123**	461	(194)
Other income taxes (charged) credited to equity	**73**	93	72

Major components of the Group's gross deferred tax assets and liabilities

in € m.	Dec 31, 2017	Dec 31, 2016
Deferred tax assets:		
Unused tax losses	2,985	3,931
Unused tax credits	387	358
Deductible temporary differences:		
Trading activities	6,725	7,248
Property and equipment	239	458
Other assets	1,391	1,606
Securities valuation	44	80
Allowance for loan losses	816	1,039
Other provisions	899	1,079
Other liabilities	1,246	1,353
Total deferred tax assets pre offsetting	**14,732**	17,152
Deferred tax liabilities:		
Taxable temporary differences:		
Trading activities	6,618	7,128
Property and equipment	45	57
Other assets	574	560
Securities valuation	297	381
Allowance for loan losses	24	29
Other provisions	377	355
Other liabilities	344	462
Total deferred tax liabilities pre offsetting	**8,279**	8,972

Deferred tax assets and liabilities, after offsetting

in € m.	Dec 31, 2017	Dec 31, 2016
Presented as deferred tax assets	6,799	8,666
Presented as deferred tax liabilities	346	486
Net deferred tax assets	**6,453**	8,180

The change in the balance of deferred tax assets and deferred tax liabilities does not equal the deferred tax expense/(benefit). This is due to (1) deferred taxes that are booked directly to equity, (2) the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than euro, (3) the acquisition and disposal of entities as part of ordinary activities and (4) the reclassification of deferred tax assets and liabilities which are presented on the face of the balance sheet as components of other assets and liabilities.

Items for which no deferred tax assets were recognized

in € m.	Dec 31, 2017[1]	Dec 31, 2016[1]
Deductible temporary differences	**(34)**	1
Not expiring	(4,875)	(4,368)
Expiring in subsequent period	(19)	(189)
Expiring after subsequent period	(450)	(746)
Unused tax losses	**(5,344)**	(5,303)
Expiring after subsequent period	(11)	(13)
Unused tax credits	**(12)**	(14)

[1] Amounts in the table refer to deductible temporary differences, unused tax losses and tax credits for federal income tax purposes.

Deferred tax assets were not recognized on these items because it is not probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized.

As of December 31, 2017 and December 31, 2016, the Group recognized deferred tax assets of € 5.9 billion and € 5.8 billion, respectively, that exceed deferred tax liabilities in entities which have suffered a loss in either the current or preceding period. This is based on management's assessment that it is probable that the respective entities will have taxable profits against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized. Generally, in determining the amounts of deferred tax assets to be recognized, management uses historical profitability information and, if relevant, forecast-ed operating results, based upon approved business plans, including a review of the eligible carry-forward periods, tax planning opportunities and other relevant considerations.

As of December 31, 2017 and December 31, 2016, the Group had temporary differences associated with the Group's parent company's investments in subsidiaries, branches and associates and interests in joint ventures of € 72 million and € 67 million respectively, in respect of which no deferred tax liabilities were recognized.

37 – Derivatives

Derivative Financial Instruments and Hedging Activities

Derivative contracts used by the Group include swaps, futures, forwards, options and other similar types of contracts. In the normal course of business, the Group enters into a variety of derivative transactions for sales, market-making and risk management purposes. The Group's objectives in using derivative instruments are to meet customers' risk management needs and to manage the Group's exposure to risks.

In accordance with the Group's accounting policy relating to derivatives and hedge accounting as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates", all derivatives are carried at fair value in the balance sheet regardless of whether they are held for trading or non-trading purposes.

Derivatives held for Sales and Market-Making Purposes

Sales and Market-Making

The majority of the Group's derivatives transactions relate to sales and market-making activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Market-making involves quoting bid and offer prices to other market participants, enabling revenue to be generated based on spreads and volume.

Risk Management

The Group uses derivatives in order to reduce its exposure to market risks as part of its asset and liability management. This is achieved by entering into derivatives that hedge specific portfolios of fixed rate financial instruments and forecast transactions as well as strategic hedging against overall balance sheet exposures. The Group actively manages interest rate risk through, among other things, the use of derivative contracts. Utilization of derivative financial instruments is modified from time to time within prescribed limits in response to changing market conditions, as well as to changes in the characteristics and mix of the related assets and liabilities.

Derivatives qualifying for Hedge Accounting

The Group applies hedge accounting if derivatives meet the specific criteria described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

Fair Value Hedge Accounting

The Group enters into fair value hedges, using primarily interest rate swaps and options, in order to protect itself against movements in the fair value of fixed-rate financial instruments due to movements in market interest rates.

	Dec 31, 2017		Dec 31, 2016	
in € m.	Assets	Liabilities	Assets	Liabilities
Derivatives held as fair value hedges	5,936	562	6,893	1,749

For the years ended December 31, 2017, 2016 and 2015, a loss of € 1.6 billion, a loss of € 0.6 billion and a loss of € 1.1 billion, respectively, were recognized on the hedging instruments. For the same periods, the results on the hedged items, which were attributable to the hedged risk, were a gain of € 1.3 billion, a gain of € 1.0 billion and a gain of € 1.0 billion.

Cash Flow Hedge Accounting

The Group enters into cash flow hedges, using interest rate swaps, in order to protect itself against exposure to variability in interest rates.

in € m.	Dec 31, 2017 Assets	Liabilities	Dec 31, 2016 Assets	Liabilities
Derivatives held as cash flow hedges	37	3	242	0

Periods when hedged cash flows are expected to occur and when they are expected to affect the income statement

in € m.	Within 1 year	1–3 years	3–5 years	Over 5 years
As of December 31, 2017				
Cash inflows from assets	28	18	0	0
Cash outflows from liabilities	0	0	13	0
Net cash flows 2017	28	18	(13)	0
As of December 31, 2016				
Cash inflows from assets	33	34	5	0
Cash outflows from liabilities	0	0	0	0
Net cash flows 2016	33	34	5	0

Cash Flow Hedge Balances

in € m.	Dec 31, 2017	Dec 31, 2016	Dec 31, 2015
Reported in Equity[1]	28	198	138
thereof relates to terminated programs	0	0	(14)
Gains (losses) posted to equity for the year ended	(34)	62	1
Gains (losses) removed from equity for the year ended	136	2	(20)
Ineffectiveness recorded within P&L	0	(17)	(1)

[1] Reported in equity refers to accumulated other comprehensive income as presented in the Consolidated Balance Sheet.

As of December 31, 2017 the longest term cash flow hedge matures in 2022.

Net Investment Hedge Accounting

Using foreign exchange forwards and swaps, the Group enters into hedges of translation adjustments resulting from translating the financial statements of net investments in foreign operations into the reporting currency of the parent at period end spot rates.

in € m.	Dec 31, 2017 Assets	Liabilities	Dec 31, 2016 Assets	Liabilities
Derivatives held as net investment hedges	612	904	286	4,076

For the years ended December 31, 2017, 2016 and 2015, losses of € 348 million, € 437 million and € 425 million, respectively, were recognized due to hedge ineffectiveness which includes the forward points element of the hedging instruments.

38 – Related Party Transactions

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. The Group's related parties include:

– key management personnel, close family members of key management personnel and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members,
– subsidiaries, joint ventures and associates and their respective subsidiaries, and
– post-employment benefit plans for the benefit of Deutsche Bank employees.

Transactions with Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of Deutsche Bank, directly or indirectly. The Group considers the members of the Management Board and of the Supervisory Board of the parent company to constitute key management personnel for purposes of IAS 24.

Compensation expense of key management personnel

in € m.	2017	2016	2015
Short-term employee benefits	39	40	31
Post-employment benefits	10	9	6
Other long-term benefits	7	7	11
Termination benefits	3	0	20
Share-based payment	22	12	15
Total	81	68	83

The above table does not contain compensation that employee representatives and former board members on the Supervisory Board have received. The aggregated compensation paid to such members for their services as employees of Deutsche Bank or status as former employees (retirement, pension and deferred compensation) amounted to € 1.1 million as of December 31, 2017, € 1.1 million as of December 31, 2016 and € 1.1 million as of December 31, 2015.

Among the Group's transactions with key management personnel as of December 31, 2017 were loans and commitments of € 48 million and deposits of € 123 million. As of December 31, 2016, the Group's transactions with key management personnel were loans and commitments of € 49 million and deposits of € 7 million.

In addition, the Group provides banking services, such as payment and account services as well as investment advice, to key management personnel and their close family members.

Transactions with Subsidiaries, Joint Ventures and Associates

Transactions between Deutsche Bank AG and its subsidiaries meet the definition of related party transactions. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Group and its associated companies and joint ventures and their respective subsidiaries also qualify as related party transactions.

Transactions for subsidiaries, joint ventures and associates are presented combined in below table as these are not material individually.

Loans

in € m.	2017	2016
Loans outstanding, beginning of year	**297**	396
Movement in loans during the period[1]	(26)	(86)
Changes in the group of consolidated companies	(1)	0
Exchange rate changes/other	(15)	(13)
Loans outstanding, end of year[2]	**256**	297
Other credit risk related transactions:		
Allowance for loan losses	0	0
Provision for loan losses	0	0
Guarantees and commitments	9	62

[1] Net impact of loans issued and loans repayment during the year is shown as “Movement in loans during the period”.
[2] Loans past due were € 0 million as of December 31, 2017 and € 7 million as of December 31, 2016. For the above loans the Group held collateral of € 14 million and € 22 million as of December 31, 2017 and December 31, 2016, respectively.

Deposits

in € m.	2017	2016
Deposits outstanding, beginning of year	**87**	162
Movement in deposits during the period[1]	(15)	(74)
Changes in the group of consolidated companies	(0)	0
Exchange rate changes/other	(4)	(1)
Deposits outstanding, end of year	**67**	87

[1] Net impact of deposits received and deposits repaid during the year is shown as “Movement in deposits during the period”.

Other Transactions

Trading assets and positive market values from derivative financial transactions with associated companies amounted to € 6 million as of December 31, 2017 and € 8 million as of December 31, 2016. Trading liabilities and negative market values from derivative financial transactions with associated companies amounted to € 0 million as of December 31, 2017 and € 0 million as of December 31, 2016.

Transactions with Pension Plans

Under IFRS, certain post-employment benefit plans are considered related parties. The Group has business relationships with a number of its pension plans pursuant to which it provides financial services to these plans, including investment management services. The Group’s pension funds may hold or trade Deutsche Bank shares or securities.

Transactions with related party pension plans

in € m.	2017	2016
Equity shares issued by the Group held in plan assets	0	0
Other assets	0	0
Fees paid from plan assets to asset managers of the Group	25	22
Market value of derivatives with a counterparty of the Group	(737)	(547)
Notional amount of derivatives with a counterparty of the Group	10,150	8,755

39 – Information on Subsidiaries

Composition of the Group

Deutsche Bank AG is the direct or indirect holding company for the Group's subsidiaries.

The Group consists of 845 (2016: 938) consolidated entities, thereof 305 (2016: 349) consolidated structured entities. 612 (2016: 678) of the entities controlled by the Group are directly or indirectly held by the Group at 100 % of the ownership interests (share of capital). Third parties also hold ownership interests in 233 (2016: 260) of the consolidated entities (noncontrolling interests). As of December 31, 2016 and 2017, the noncontrolling interests are neither individually nor cumulatively material to the Group.

Significant restrictions to access or use the Group's assets

Statutory, contractual or regulatory requirements as well as protective rights of noncontrolling interests might restrict the ability of the Group to access and transfer assets freely to or from other entities within the Group and to settle liabilities of the Group.

Since the Group did not have any material noncontrolling interests at the balance sheet date, any protective rights associated with these did not give rise to significant restrictions.

The following restrictions impact the Group's ability to use assets:

– The Group has pledged assets to collateralize its obligations under repurchase agreements, securities financing transactions, collateralized loan obligations and for margining purposes for OTC derivative liabilities.
– The assets of consolidated structured entities are held for the benefit of the parties that have bought the notes issued by these entities.
– Regulatory and central bank requirements or local corporate laws may restrict the Group's ability to transfer assets to or from other entities within the Group in certain jurisdictions.

Restricted assets

	Dec 31, 2017		Dec 31, 2016	
in € m.	Total assets	Restricted assets	Total assets	Restricted assets
Interest-earning deposits with banks	210,481	772	163,292	1,314
Financial assets at fair value through profit or loss	636,970	58,210	743,781	51,454[1]
Financial assets available for sale	49,397	9,915	56,228	19,870
Loans	401,699	71,971	408,909	74,172
Other	176,186	13,594	218,336	7,693
Total	**1,474,732**	**154,462**	1,590,546	154,503[1]

[1] Prior period results have been restated due to a refined approach to determine assets pledged.

The table above excludes assets that are not encumbered at an individual entity level but which may be subject to restrictions in terms of their transferability within the Group. Such restrictions may be based on local connected lending requirements or similar regulatory restrictions. In this situation, it is not feasible to identify individual balance sheet items that cannot be transferred. This is also the case for regulatory minimum liquidity requirements. The Group identifies the volume of liquidity reserves in excess of local stress liquidity outflows. The aggregate amount of such liquidity reserves that are considered restricted for this purpose is € 23.5 billion as of December 31, 2017 (as of December 31, 2016: € 37.4 billion).

40 – Structured Entities

Nature, purpose and extent of the Group's interests in structured entities

The Group engages in various business activities with structured entities which are designed to achieve a specific business purpose. A structured entity is one that has been set up so that any voting rights or similar rights are not the dominant factor in deciding who controls the entity. An example is when voting rights relate only to administrative tasks and the relevant activities are directed by contractual arrangements.

A structured entity often has some or all of the following features or attributes:

– Restricted activities;
– A narrow and well defined objective;
– Insufficient equity to permit the structured entity to finance its activities without subordinated financial support;
– Financing in the form of multiple contractually linked instruments to investors that create concentrations of credit or other risks (tranches).

The principal uses of structured entities are to provide clients with access to specific portfolios of assets and to provide market liquidity for clients through securitizing financial assets. Structured entities may be established as corporations, trusts or partnerships. Structured entities generally finance the purchase of assets by issuing debt and equity securities that are collateralized by and/or indexed to the assets held by the structured entities. The debt and equity securities issued by structured entities may include tranches with varying levels of subordination.

Structured entities are consolidated when the substance of the relationship between the Group and the structured entities indicate that the structured entities are controlled by the Group, as discussed in Note 1 "Significant Accounting Policies and Critical Accounting Estimates".

Consolidated structured entities

The Group has contractual arrangements which may require it to provide financial support to the following types of consolidated structured entities.

Securitization vehicles

The Group uses securitization vehicles for funding purchase of diversified pool of assets. The Group provides financial support to these entities in the form of liquidity facility. As of December 31, 2017, there were no outstanding loan commitments to these entities compared to € 3 million as of December 31, 2016.

Funds

The Group may provide funding and liquidity facility or guarantees to funds consolidated by the group. As of December 31, 2017 and December 31, 2016, the notional value of the liquidity facilities and guarantees provided by the group to such funds was € 7.2 billion and € 11.3 billion, respectively.

Unconsolidated structured entities

These are entities which are not consolidated because the Group does not control them through voting rights, contract, funding agreements, or other means. The extent of the Group's interests to unconsolidated structured entities will vary depending on the type of structured entities.

Below is a description of the Group's involvements in unconsolidated structured entities by type.

Repackaging and investment entities

Repackaging and investment entities are established to meet clients' investment needs through the combination of securities and derivatives. These entities are not consolidated by the Group because the Group does not have power to influence the returns obtained from the entities. These entities are usually set up to provide a certain investment return pre-agreed with the investor, and the Group is not able to change the investment strategy or return during the life of the transaction.

Third party funding entities

The Group provides funding to structured entities that hold a variety of assets. These entities may take the form of funding entities, trusts and private investment companies. The funding is collateralized by the asset in the structured entities. The group's involvement involves predominantly both lending and loan commitments.

The vehicles used in these transactions are controlled by the borrowers where the borrowers have the ability to decide whether to post additional margin or collateral in respect of the financing. In such cases, where borrowers can decide to continue or terminate the financing, the borrowers will consolidate the vehicle.

Securitization Vehicles

The Group establishes securitization vehicles which purchase diversified pools of assets, including fixed income securities, corporate loans, and asset-backed securities (predominantly commercial and residential mortgage-backed securities and credit card receivables). The vehicles fund these purchases by issuing multiple tranches of debt and equity securities, the repayment of which is linked to the performance of the assets in the vehicles.

The Group often transfers assets to these securitization vehicles and provides financial support to these entities in the form of liquidity facilities.

The Group also invests and provides liquidity facilities to third party sponsored securitization vehicles.

The securitization vehicles that are not consolidated into the Group are those where the Group does not hold the power or ability to unilaterally remove the servicer or special servicer who has been delegated power over the activities of the entity.

Funds

The Group establishes structured entities to accommodate client requirements to hold investments in specific assets. The Group also invests in funds that are sponsored by third parties. A group entity may act as fund manager, custodian or some other capacity and provide funding and liquidity facilities to both group sponsored and third party funds. The funding provided is collateralized by the underlying assets held by the fund.

The Group does not consolidate funds when Deutsche Bank is deemed agent or when another third party investor has the ability to direct the activities of the fund.

Other

These are Deutsche Bank sponsored or third party structured entities that do not fall into any criteria above. These entities are not consolidated by the Group when the Group does not hold power over the decision making of these entities.

Income derived from involvement with structured entities

The Group earns management fees and, occasionally, performance-based fees for its investment management service in relation to funds. Interest income is recognized on the funding provided to structured entities. Any trading revenue as a result of derivatives with structured entities and from the movements in the value of notes held in these entities is recognized in 'Net gains/losses on financial assets/liabilities held at fair value through profit and loss'.

Interests in unconsolidated structured entities

The Group's interests in unconsolidated structured entities refer to contractual and non-contractual involvement that exposes the Group to variability of returns from the performance of the structured entities. Examples of interests in unconsolidated structured entities include debt or equity investments, liquidity facilities, guarantees and certain derivative instruments in which the Group is absorbing variability of returns from the structured entities.

Interests in unconsolidated structured entities exclude instruments which introduce variability of returns into the structured entities. For example, when the Group purchases credit protection from an unconsolidated structured entity whose purpose and design is to pass through credit risk to investors, the Group is providing the variability of returns to the entity rather than absorbing variability. The purchased credit protection is therefore not considered as an interest for the purpose of the table below.

Maximum Exposure to unconsolidated structured entities

The maximum exposure to loss is determined by considering the nature of the interest in the unconsolidated structured entity. The maximum exposure for loans and trading instruments is reflected by their carrying amounts in the consolidated balance sheet. The maximum exposure for derivatives and off balance sheet commitments such as guarantees, liquidity facilities and loan commitments under IFRS 12, as interpreted by the Group, is reflected by the notional amounts. Such amounts or their development do not reflect the economic risks faced by the Group because they do not take into account the effects of collateral or hedges nor the probability of such losses being incurred. At December 31, 2017, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were € 327 billion, € 1,146 billion and € 29 billion respectively. At December 31, 2016, the notional related to the positive and negative replacement values of derivatives and off balance sheet commitments were € 145 billion, € 644 billion and € 27 billion respectively.

Size of structured entities

The Group provides a different measure for size of structured entities depending on their type. The following measures have been considered as appropriate indicators for evaluating the size of structured entities:

– Funds – Net asset value or assets under management where the Group holds fund units and notional of derivatives when the Group's interest comprises of derivatives.
– Securitizations – notional of notes in issue when the Group derives its interests through notes its holds and notional of derivatives when the Group's interests is in the form of derivatives.
– Third party funding entities –Total assets in entities
– Repackaging and investment entities – Fair value of notes in issue

For Third party funding entities, size information is not publicly available, therefore the Group has disclosed the greater of the collateral the Group has received/pledged or the notional of the exposure the Group has to the entity.

The following table shows, by type of structured entity, the carrying amounts of the Group's interests recognized in the consolidated statement of financial position as well as the maximum exposure to loss resulting from these interests. It also provides an indication of the size of the structured entities. The carrying amounts presented below do not reflect the true variability of returns faced by the Group because they do not take into account the effects of collateral or hedges.

Carrying amounts and size relating to Deutsche Bank's interests

					Dec 31, 2017
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
Assets					
Cash and central bank balances	0	0	0	0	0
Interbank balances (w/o central banks)	63	0	0	270	333
Central bank funds sold and securities purchased under resale agreements	105	229	18	1,827	2,178
Securities Borrowed	0	13	0	11,065	11,078
Total financial assets at fair value through profit or loss	569	4,057	5,445	60,057	70,128
Trading assets	349	3,490	5,130	12,380	21,349
Positive market values (derivative financial instruments)	175	553	105	8,670	9,504
Financial assets designated at fair value through profit or loss	44	13	210	39,007	39,275
Financial assets available for sale	0	1,039	384	730	2,153
Loans	146	37,352	18,533	18,050	74,081
Other assets	50	192	173	21,087	21,502
Total assets	934	42,882	24,552	113,085	181,453
Liabilities					
Total financial liabilities at fair value through profit or loss	120	73	41	13,486	13,720
Negative market values (derivative financial instruments)	120	73	41	13,486	13,720
Other short-term borrowings	0	0	0	9,533	9,533
Total liabilities	120	73	41	23,019	23,253
Off-balance sheet exposure	0	10,079	9,256	10,048	29,383
Total	814	52,888	33,767	100,114	187,583
Size of structured entity	6,833	90,664	281,826	2,181,810	

					Dec 31, 2016
in € m.	Repackaging and Investment Entities	Third Party Funding Entities	Securitizations	Funds	Total
Assets					
Cash and central bank balances	0	0	0	0	0
Interbank balances (w/o central banks)	(15)	0	0	345	331
Central bank funds sold and securities purchased under resale agreements	68	87	18	3,113	3,286
Securities Borrowed	0	0	0	11,643	11,643
Total financial assets at fair value through profit or loss	1,231	3,068	6,332	54,943	65,576
Trading assets	659	2,309	6,211	15,031	24,210
Positive market values (derivative financial instruments)	538	262	111	7,587	8,499
Financial assets designated at fair value through profit or loss	34	497	10	32,326	32,867
Financial assets available for sale	62	599	271	1,008	1,940
Loans	157	36,710	20,219	19,604	76,690
Other assets	50	40	181	20,454	20,726
Total assets	1,554	40,504	27,022	111,111	180,192
Liabilities					
Total financial liabilities at fair value through profit or loss	354	36	27	11,036	11,453
Negative market values (derivative financial instruments)	354	36	27	11,036	11,453
Other short-term borrowings	0	0	0	12,666[1]	12,666[1]
Total liabilities	354	36	27	23,702[1]	24,119[1]
Off-balance sheet exposure	0	5,150	10,591	11,448	27,189
Total	1,200	45,619	37,586	98,857[1]	183,262[1]
Size of structured entity	9,487	65,234	454,950	1,888,491	

[1] comparative numbers adjusted to include the 'Other short-term borrowings'

Trading assets –Total trading assets as of December 31, 2017 and December 31, 2016 of € 21.3 billion and € 24.2 billion are comprised primarily of € 5.1 billion and € 6.2 billion in Securitizations and € 12.4 billion and € 15.0 billion in Funds structured entities respectively. The Group's interests in securitizations are collateralized by the assets contained in these entities. Where the Group holds fund units these are typically in regards to market making in funds or otherwise serve as hedges for notes issued to clients. Moreover the credit risk arising from loans made to Third party funding structured entities is mitigated by the collateral received.

Financial assets designated at fair value through profit or loss – Reverse repurchase agreements to Funds comprise the majority of the interests in this category and are collateralized by the underlying securities.

Loans – Loans as of December 31, 2017 and December 31, 2016 consist of € 74.1 billion and € 76.7 billion investment in securitization tranches and financing to Third party funding entities. The Group's financing to Third party funding entities is collateralized by the assets in those structured entities.

Other assets – Other assets as of December 31, 2017 and December 31, 2016 of € 21.5 billion and € 20.7 billion, respectively, consist primarily of prime brokerage receivables and cash margin balances.

Pending Receivables – Pending Receivable balances are not included in this disclosure note due to the fact that these balances arise from typical customer supplier relationships out of e.g. brokerage type activities and their inherent volatility would not provide users of the financial statements with effective information about Deutsche Bank's exposures to structured entities.

Financial Support

Deutsche Bank did not provide non-contractual support during the year to unconsolidated structured entities.

Sponsored Unconsolidated Structured Entities where the Group has no interest as of December 31, 2017 and December 31, 2016.

As a sponsor, the Group is involved in the legal set up and marketing of the entity and supports the entity in different ways, namely:

– transferring assets to the entities
– providing seed capital to the entities
– providing operational support to ensure the entity's continued operation
– providing guarantees of performance to the structured entities.

The Group is also deemed a sponsor for a structured entity if market participants would reasonably associate the entity with the Group. Additionally, the use of the Deutsche Bank name for the structured entity indicates that the Group has acted as a sponsor.

The gross revenues from sponsored entities where the Group did not hold an interest as of December 31, 2017 and December 31, 2016 were € 56.0 million and € (86) million respectively. Instances where the Group does not hold an interest in an unconsolidated sponsored structured entity include cases where any seed capital or funding to the structured entity has already been repaid in full to the Group during the year. This amount does not take into account the impacts of hedges and is recognized in Net gains/losses on financial assets/liabilities at fair value through profit and loss. The aggregated carrying amounts of assets transferred to sponsored unconsolidated structured entities in 2017 were € 2.1 billion for securitization and € 26 million for repackaging and investment entities. In 2016, they were € 5.2 billion for securitization and € 20 million for repackaging and investment entities.

The comparative numbers have been adjusted to reflect the reassessment of one securitization transaction in 2017.

41 – Current and Non-Current Assets and Liabilities

Asset and liability line items by amounts recovered or settled within or after one year

Asset items as of December 31, 2017

	Amounts recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2017
Cash and central bank balances	225,537	118	225,655
Interbank balances (w/o central banks)	8,681	585	9,265
Central bank funds sold and securities purchased under resale agreements	9,216	755	9,971
Securities borrowed	16,710	22	16,732
Financial assets at fair value through profit or loss	623,075	13,895	636,970
Financial assets available for sale	9,882	39,514	49,397
Equity method investments	0	866	866
Loans	113,190	288,510	401,699
Securities held to maturity	0	3,170	3,170
Property and equipment	0	2,663	2,663
Goodwill and other intangible assets	0	8,839	8,839
Other assets	95,383	6,108	101,491
Assets for current tax	840	375	1,215
Total assets before deferred tax assets	1,102,514	365,419	1,467,933
Deferred tax assets			6,799
Total assets			1,474,732

Liability items as of December 31, 2017

	Amounts recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2017
Deposits	550,747	30,065	580,812
Central bank funds purchased and securities sold under repurchase agreements	17,591	515	18,105
Securities loaned	6,688	1	6,688
Financial liabilities at fair value through profit or loss	473,165	5,471	478,636
Other short-term borrowings	18,411	0	18,411
Other liabilities	127,388	4,820	132,208
Provisions	5,219	0	5,219
Liabilities for current tax	366	635	1,001
Long-term debt	46,403	113,313	159,715
Trust preferred securities	4,825	666	5,491
Total liabilities before deferred tax liabilities	1,250,802	155,486	1,406,287
Deferred tax liabilities			346
Total liabilities			1,406,633

Asset items as of December 31, 2016

	Amounts recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2016
Cash and central bank balances	181,364	0	181,364
Interbank balances (w/o central banks)	10,996	610	11,606
Central bank funds sold and securities purchased under resale agreements	15,756	531	16,287
Securities borrowed	20,081	0	20,081
Financial assets at fair value through profit or loss	725,099	18,682	743,781
Financial assets available for sale	9,211	47,016	56,228
Equity method investments	0	1,027	1,027
Loans	115,673	293,236	408,909
Securities held to maturity	0	3,206	3,206
Property and equipment	0	2,804	2,804
Goodwill and other intangible assets	0	8,982	8,982
Other assets	118,246	7,799	126,045
Assets for current tax	1,329	230	1,559
Total assets before deferred tax assets	1,197,755	384,124	1,581,880
Deferred tax assets			8,666
Total assets			1,590,546

Liability items as of December 31, 2016

	Amounts recovered or settled		Total
in € m.	within one year	after one year	Dec 31, 2016
Deposits	522,885	27,319	550,204
Central bank funds purchased and securities sold under repurchase agreements	25,035	705	25,740
Securities loaned	3,598	0	3,598
Financial liabilities at fair value through profit or loss	576,336	5,635	581,971
Other short-term borrowings	17,295	0	17,295
Other liabilities	150,253	5,187	155,440
Provisions	10,973	0	10,973
Liabilities for current tax	723	606	1,329
Long-term debt	28,758	143,558	172,316
Trust preferred securities	2,197	4,716	6,373
Total liabilities before deferred tax liabilities	1,338,054	187,186	1,525,240
Deferred tax liabilities			486
Total liabilities			1,525,727

42 – Events after the Reporting Period

With the publication of the IPO price range for the offering of shares in DWS Group GmbH & Co. KGaA on March 11, 2018, we expect the sale of a portion of DB's stake in DWS Group GmbH & Co. KGaA and the listing of DWS Group GmbH & Co. KGaA's shares on the Frankfurt Stock Exchange to occur in the first quarter of 2018 should market conditions support this. Based on the price range of € 30 to € 36, and assuming a free float of 20 % to 25 %, the impact from the transaction on DB's IFRS shareholders' equity including Noncontrolling interests will be between € 1.1 billion and € 1.7 billion (pro forma December 31, 2017).

43 – Supplementary Information to the Consolidated Financial Statements according to Sections 297 (1a) / 315a HGB and the return on assets according to Article 26a of the German Banking Act

Staff Costs

in € m.	2017	2016
Staff costs:		
Wages and salaries	10,108	9,819
Social security costs	2,145	2,055
thereof: those relating to pensions	749	671
Total	12,253	11,874

Staff

The average number of effective staff employed in 2017 was 97,733 (2016: 101,182) of whom 42,910 (2016: 44,660) were women. Part-time staff is included in these figures proportionately. An average of 54,214 (2016: 55,557) staff members worked outside Germany.

Management Board and Supervisory Board Remuneration

The total compensation of the Management Board (in accordance with the German Accounting Standard No. 17) was € 37,665,535 and € 26,691,178 for the years ended December 31, 2017 and 2016, respectively, thereof € 5,862,015 for variable components in 2017 and € 0 in 2016.

Former members of the Management Board of Deutsche Bank AG or their surviving dependents received € 27,694,325 and € 35,305,889 for the years ended December 31, 2017 and 2016, respectively.

The compensation principles for Supervisory Board members are set forth in our Articles of Association. The compensation provisions, which were newly conceived in 2013, were last amended by resolution of the Annual General Meeting on May 18, 2017 and became effective on October 5, 2017. The members of the Supervisory Board receive fixed annual compensation. The annual base compensation amounts to € 100,000 for each Supervisory Board member. The Supervisory Board Chairman receives twice that amount and the Deputy Chairperson one and a half times that amount. Members and chairs of the committees of the Supervisory Board are paid additional fixed annual compensation. 75 % of the compensation determined is disbursed to each Supervisory Board member after submitting invoices within the first three month of the following year. The other 25 % is converted by the company at the same time into company shares (notional shares) according to the provisions of the Articles of Association. The share value of this number of shares is paid to the respective Supervisory Board member in February of the year following his departure from the Supervisory Board or the expiration of his term of office according to the provisions of the Articles of Association, provided that the member does not leave the Supervisory Board due to important cause which would have justified dismissal. In case of a change in Supervisory Board membership during the year, compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months. For the year of departure, the entire compensation is paid in cash; a forfeiture regulation applies to 25 % of the compensation for that financial year. The members of the Supervisory Board received for the financial year 2017 a total remuneration of € 5,150,000 (2016: € 5,016,667), of which € 3,987,500 will be paid out in spring 2018 (February 2017: € 3,904,167) according to the provisions of the Articles of Association.

Provisions for pension obligations to former members of the Management Board and their surviving dependents amounted to € 214,154,039 and € 222,953,147 at December 31, 2017 and 2016, respectively.

Loans and advances granted and contingent liabilities assumed for members of the Management Board amounted to € 12,337,886 and € 8,433,662 and for members of the Supervisory Board amounted to € 35,210,035 and € 40,005,403 for the years ended December 31, 2017 and 2016, respectively. Members of the Supervisory Board repaid € 4,497,534 loans in 2017.

Return on Assets

Article 26a of the German Banking Act defines the return on assets as net profit divided by average total assets. According to this definition the return on assets was -0.05 % and -0.08 % for the years ended December 31, 2017 and 2016, respectively.

Information on the parent company

Deutsche Bank Aktiengesellschaft is the parent company of Deutsche Bank Group. It is incorporated in Frankfurt am Main and is registered in the Commercial Register of the District Court Frankfurt am Main under registration number HRB 30000.

Corporate Governance

Deutsche Bank AG has approved the Declaration of Conformity in accordance with section 161 of the German Corporation Act (AktG). The declaration is published on Deutsche Bank's website (www.db.com/ir/en/documents.htm).

Principal Accountant Fees and Services

Breakdown of the fees charged by the Group's auditor

Fee category in € m.	2017	2016
Audit fees	51	49
thereof to KPMG AG	23	18
Audit-related fees	18	26
thereof to KPMG AG	13	16
Tax-related fees	4	6
thereof to KPMG AG	2	3
All other fees	0	1
thereof to KPMG AG	0	1
Total fees	73	82

The Audit fees include fees for professional services for the audit of Deutsche Bank AG's annual financial statements and consolidated financial statements and do not include the audit fees for Postbank and its subsidiaries, as they are not audited by KPMG. The Audit-related fees include fees for other assurance services required by law or regulations, in particular for financial service specific attestation, for quarterly reviews, for spin-off audits and for merger audits, as well as fees for voluntary assurance services, like voluntary audits for internal management purposes and the issuance of comfort letters. Tax-related fees include fees for services relating to the preparation and review of tax returns and related compliance assistance and advice, tax consultation and advice relating to Group tax planning strategies and initiatives and assistance with assessing compliance with tax regulations.

44 – Country by Country Reporting

§ 26a KWG requires annual disclosure of certain information by country. The disclosed information is derived from the IFRS Group accounts of Deutsche Bank. It is however not reconcilable to other financial information in this report because of specific requirements published by Bundesbank on December 16, 2014 which include the requirement to present the country information prior to elimination of cross-border intra group transactions. In line with these Bundesbank requirements, intra group transactions within the same country are eliminated. These eliminations are identical to the eliminations applied for internal management reporting on countries and consist mostly of dividends paid.

The geographical location of subsidiaries and branches considers the country of incorporation or residence as well as the relevant tax jurisdiction. For the names, nature of activity and geographical location of subsidiaries and branches, please refer to Note 45 "Shareholdings". In addition, Deutsche Bank AG and its subsidiaries have German and foreign branches, for example in London, New York and Singapore. The net revenues are composed of net interest revenues and non-interest revenues.

in € m. (unless stated otherwise)	Net revenues (Turnover)	Employees (full-time equivalent)	Income (loss) before income taxes	Dec 31, 2017 Income tax (expense)/ benefit
Argentina	16	0	11	(4)
Australia	345	501	71	11
Austria	25	105	(11)	(4)
Barbados	0	0	(0)	0
Belgium	177	651	0	(3)
Brazil	102	193	49	(11)
Canada	16	16	7	(9)
Cayman Islands	18	31	4	0
Chile	2	0	1	11
China	167	497	59	(14)
Colombia	0	0	(1)	0
Czech Republic	10	44	2	(0)
France	71	229	0	(1)
Germany[1]	11,192	42,628	1,897	(206)
Great Britain	4,736	8,505	(354)	(203)
Greece	0	9	0	(0)
Guernsey	7	30	(3)	0
Hong Kong	726	1,294	83	(2)
Hungary	15	59	3	(0)
India	525	12,443	305	(138)
Indonesia	117	298	61	(21)
Ireland	40	686	(4)	0
Israel	1	10	2	2
Italy	878	3,750	(34)	15
Japan	455	650	95	(32)
Jersey	15	88	(7)	0
Latvia	1	0	0	0
Luxembourg[1]	1,595	430	1,285	(138)
Malaysia	88	240	53	(13)
Malta	116	0	116	0
Mauritius	92	207	83	(5)
Mexico	(13)	54	(43)	10
Netherlands	329	670	118	30
New Zealand	(1)	0	(1)	0
Pakistan	18	77	10	(3)
Peru	0	0	(1)	0
Philippines	24	1,928	7	(20)
Poland	249	2,051	11	(10)
Portugal	59	369	7	(2)
Qatar	0	3	4	(0)
Romania	3	704	7	(1)
Russian Fed.	70	1,298	45	(10)
Saudi Arabia	20	74	(10)	2
Singapore	947	2,072	392	(49)
Slovakia	0	0	(13)	0
South Africa	73	104	42	(11)
South Korea	95	278	10	(5)
Spain	516	2,475	34	(11)
Sri Lanka	19	70	8	(4)
Sweden	1	27	2	(0)
Switzerland	302	667	22	(3)
Taiwan	58	182	20	(4)
Thailand	32	132	3	(0)
Turkey	43	128	18	(4)
UAE	16	174	5	(1)
Ukraine	5	29	2	(0)
Uruguay	(0)	0	(0)	0
USA	5,386	10,311	114	(1,096)
Venezuela	0	0	(0)	0
Vietnam	16	69	7	(1)

[1] All Postbank operations are disclosed as German operations subject to further systems integration.

45 – Shareholdings

The following pages show the Shareholdings of Deutsche Bank Group pursuant to Section 313 (2) of the German Commercial Code ("HGB") as well as to the Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 (Template EU LI3).

Footnotes:

1 Entity fully consolidated under the regulatory scope.
2 Entity neither consolidated nor deducted under the regulatory scope.
3 Status as shareholder with unlimited liability pursuant to Section 313 (2) Number 6 HGB.
4 Entity under the regulatory scope deducted from own funds according to Articles 36 and 48 CRR.
5 Controlled.
6 General Partnership.
7 Limited Partnership.
8 Only specified assets and related liabilities (silos) of this entity were consolidated.
9 Not controlled.
10 Accounted for at equity due to significant influence.
11 Classified as Structured Entity not to be accounted for at equity under IFRS.
12 Classified as Structured Entity not to be consolidated under IFRS.
13 Preliminary Own funds of € 7,082.3m / Result of € 118.8m (Business Year 2017).
14 Not consolidated or accounted for at equity as classified as securities available for sale.
15 Preliminary Own funds of € 8,570.5m / Result of € 129.4m (Business Year 2017).
16 Own funds of € 0.2m / Result of € 7.9m (Business Year 2016).
17 Entity proportionally consolidated under the regulatory scope.
18 Own funds of € 80.6m / Result of € 58.8m (Business Year 2016).
19 Own funds of € 25.4m / Result of € 9.0m (Business Year 2017).

Subsidiaries

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
1	Deutsche Bank Aktiengesellschaft	Frankfurt am Main	1	Credit Institution	
2	ABFS I Incorporated	Baltimore	1	Financial Institution	100.0
3	ABS MB Ltd.	Baltimore	1	Financial Institution	100.0
4	Acacia (Luxembourg) S.à r.l.	Luxembourg	2	Other Enterprise	100.0
5	Accounting Solutions Holding Company, Inc.	Wilmington	2	Other Enterprise	100.0
6	Alex. Brown Financial Services Incorporated	Baltimore	1	Financial Institution	100.0
7	Alex. Brown Investments Incorporated	Baltimore	1	Financial Institution	100.0
8	Alfred Herrhausen Gesellschaft - Das internationale Forum der Deutschen Bank - mbH	Berlin	2	Other Enterprise	100.0
9	Argent Incorporated	Baltimore	1	Financial Institution	100.0
10	B.T.I. Investments (in members' voluntary liquidation)	London	1	Financial Institution	100.0
11	Baincor Nominees Pty Limited	Sydney	2	Other Enterprise	100.0
12	Bainpro Nominees Pty Ltd	Sydney	1	Ancillary Services Undertaking	100.0
13	Baldur Mortgages Limited	London	1	Financial Institution	100.0
14	Bankers Trust Investments Limited	London	2	Other Enterprise	100.0
15	Barkly Investments Ltd.	St. Helier	1	Financial Institution	100.0
16	Bayan Delinquent Loan Recovery 1 (SPV-AMC), Inc.	Makati City	1	Financial Institution	100.0
17	Betriebs-Center für Banken AG	Frankfurt	1	Ancillary Services Undertaking	100.0
18	BHW - Gesellschaft für Wohnungswirtschaft mbH	Hameln	1	Financial Institution	100.0
19	BHW Bausparkasse Aktiengesellschaft	Hameln	1	Credit Institution	100.0
20	BHW Holding AG	Hameln	1	Financial Holding Company	100.0
21	BHW Kreditservice GmbH	Hameln	1	Ancillary Services Undertaking	100.0
22	Biomass Holdings S.à r.l.	Luxembourg	1	Financial Institution	100.0
23	Birch (Luxembourg) S.à r.l.	Luxembourg	2	Other Enterprise	100.0
24	Blue Cork, Inc.	Wilmington	1	Ancillary Services Undertaking	100.0
25	BNA Nominees Pty Limited	Sydney	1	Ancillary Services Undertaking	100.0
26	Borfield Sociedad Anonima	Montevideo	2	Other Enterprise	100.0
27	BT Globenet Nominees Limited	London	2	Other Enterprise	100.0
28	BT Milford (Cayman) Limited (in voluntary liquidation)	George Town	1	Ancillary Services Undertaking	100.0
29	BTAS Cayman GP	George Town	1, 3	Financial Institution	100.0
30	BTD Nominees Pty Limited	Sydney	2	Other Enterprise	100.0
31	Buxtal Pty. Limited	Sydney	1	Financial Institution	100.0
32	CAM Initiator Treuhand GmbH & Co. KG	Cologne	3, 4	Financial Institution	100.0
33	CAM PE Verwaltungs GmbH & Co. KG	Cologne	3, 4	Financial Institution	100.0
34	CAM Private Equity Nominee GmbH & Co. KG	Cologne	3, 4	Financial Institution	100.0
35	CAM Private Equity Verwaltungs-GmbH	Cologne	4	Financial Institution	100.0
36	Caneel Bay Holding Corp.	Chicago	4, 5	Financial Institution	0.0
37	Cape Acquisition Corp.	Wilmington	4	Financial Institution	100.0
38	CapeSuccess Inc.	Wilmington	4	Ancillary Services Undertaking	100.0
39	CapeSuccess LLC	Wilmington	4	Financial Institution	82.6
40	Cardales Management Limited (in members' voluntary liquidation)	St. Peter Port	1	Securities Trading Firm	100.0
41	Cardales UK Limited	London	1	Financial Institution	100.0
42	Career Blazers Consulting Services, Inc.	Albany	2	Other Enterprise	100.0
43	Career Blazers Contingency Professionals, Inc.	Albany	2	Other Enterprise	100.0
44	Career Blazers Learning Center of Los Angeles, Inc.	Los Angeles	2	Other Enterprise	100.0
45	Career Blazers LLC	Wilmington	4	Financial Institution	100.0
46	Career Blazers Management Company, Inc.	Albany	2	Other Enterprise	100.0
47	Career Blazers New York, Inc.	Albany	2	Other Enterprise	100.0
48	Career Blazers of Ontario Inc.	London, Ontario	2	Other Enterprise	100.0
49	Career Blazers Personnel Services of Washington, D.C., Inc.	Washington D.C.	2	Other Enterprise	100.0
50	Career Blazers Personnel Services, Inc.	Albany	4	Financial Institution	100.0
51	Career Blazers Service Company, Inc.	Wilmington	2	Other Enterprise	100.0
52	Caribbean Resort Holdings, Inc.	New York	1, 5	Financial Institution	0.0
53	Cathay Advisory (Beijing) Co., Ltd.	Beijing	2	Other Enterprise	100.0
54	Cathay Asset Management Company Limited	Port Louis	1	Financial Institution	100.0
55	Cathay Capital Company (No 2) Limited	Port Louis	1	Financial Institution	67.6
56	CBI NY Training, Inc.	Albany	2	Other Enterprise	100.0
57	Cedar (Luxembourg) S.à r.l.	Luxembourg	2	Other Enterprise	100.0
58	Centennial River 1 Inc.	Denver	2	Other Enterprise	100.0
59	Centennial River 2 Inc.	Austin	2	Other Enterprise	100.0
60	Centennial River Acquisition I Corporation	Wilmington	2	Other Enterprise	100.0
61	Centennial River Acquisition II Corporation	Wilmington	2	Other Enterprise	100.0
62	Centennial River Corporation	Wilmington	4	Financial Institution	100.0
63	Charlton (Delaware), Inc.	Wilmington	1	Financial Institution	100.0
64	China Recovery Fund, LLC	Wilmington	1	Financial Institution	85.0
65	Cinda - DB NPL Securitization Trust 2003-1	Wilmington	1, 5	Financial Institution	10.0
66	Consumo S.p.A.	Milan	1	Financial Institution	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
67	CREDA Objektanlage- und verwaltungsgesellschaft mbH	Bonn	4	Ancillary Services Undertaking	100.0
68	CTXL Achtzehnte Vermögensverwaltung GmbH i.L.	Munich	4	Financial Institution	100.0
69	Cyrus J. Lawrence Capital Holdings, Inc.	Wilmington	1	Financial Institution	100.0
70	D B Investments (GB) Limited	London	1	Financial Holding Company	100.0
71	D&M Turnaround Partners Godo Kaisha	Tokyo	1	Financial Institution	100.0
72	D.B. International Delaware, Inc.	Wilmington	1	Financial Institution	100.0
73	DAHOC (UK) Limited	London	1	Financial Institution	100.0
74	DAHOC Beteiligungsgesellschaft mbH	Frankfurt	1	Financial Institution	100.0
75	DB (Malaysia) Nominee (Asing) Sdn. Bhd.	Kuala Lumpur	2	Other Enterprise	100.0
76	DB (Malaysia) Nominee (Tempatan) Sdn. Bhd.	Kuala Lumpur	2	Other Enterprise	100.0
77	DB (Pacific) Limited	Wilmington	1	Financial Institution	100.0
78	DB (Pacific) Limited, New York	New York	1	Financial Institution	100.0
79	DB Abalone LLC	Wilmington	1	Financial Institution	100.0
80	DB Alex. Brown Holdings Incorporated	Wilmington	1	Financial Institution	100.0
81	DB Alps Corporation	Wilmington	1	Financial Institution	100.0
82	DB Alternative Trading Inc.	Wilmington	1	Financial Institution	100.0
83	DB Aotearoa Investments Limited	George Town	1	Ancillary Services Undertaking	100.0
84	DB Asia Pacific Holdings Limited	George Town	1	Financial Institution	100.0
85	DB Beteiligungs-Holding GmbH	Frankfurt	1	Financial Holding Company	100.0
86	DB Boracay LLC	Wilmington	1	Financial Institution	100.0
87	DB Capital Markets (Deutschland) GmbH	Frankfurt	1	Financial Holding Company	100.0
88	DB Capital Partners General Partner Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
89	DB Capital Partners, Inc.	Wilmington	1	Financial Institution	100.0
90	DB Cartera de Inmuebles 1, S.A.U.	Pozuelo de Alarcón	1	Ancillary Services Undertaking	100.0
91	DB Chestnut Holdings Limited	George Town	1	Ancillary Services Undertaking	100.0
92	DB Commodity Services LLC	Wilmington	1	Investment Firm	100.0
93	DB Consorzio S. Cons. a r. l.	Milan	1	Ancillary Services Undertaking	100.0
94	DB Corporate Advisory (Malaysia) Sdn. Bhd.	Kuala Lumpur	1	Financial Institution	100.0
95	DB Delaware Holdings (Europe) Limited	George Town	1	Financial Institution	100.0
96	DB Delaware Holdings (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
97	DB Direkt GmbH	Frankfurt	1	Ancillary Services Undertaking	100.0
98	DB Elara LLC	Wilmington	1	Financial Institution	100.0
99	DB Energy Commodities Limited (in members' voluntary liquidation)	London	1	Ancillary Services Undertaking	100.0
100	DB Energy Trading LLC	Wilmington	1	Ancillary Services Undertaking	100.0
101	DB Enfield Infrastructure Holdings Limited	St. Helier	1	Financial Institution	100.0
102	DB Equipment Leasing, Inc.	New York	1	Financial Institution	100.0
103	DB Equity Limited	London	1	Financial Institution	100.0
104	DB Finance (Delaware), LLC	Wilmington	1	Financial Institution	100.0
105	DB Fund Services LLC	Wilmington	2	Other Enterprise	100.0
106	DB Ganymede 2006 L.P.	George Town	1, 3	Financial Institution	100.0
107	DB Global Technology SRL	Bucharest	1	Ancillary Services Undertaking	100.0
108	DB Global Technology, Inc.	Wilmington	1	Ancillary Services Undertaking	100.0
109	DB Green Holdings Corp.	Wilmington	1	Financial Institution	100.0
110	DB Green, Inc.	New York	1	Financial Institution	100.0
111	DB Group Services (UK) Limited	London	1	Ancillary Services Undertaking	100.0
112	DB Holdings (New York), Inc.	New York	1	Financial Institution	100.0
113	DB Holdings (South America) Limited	Wilmington	1	Financial Institution	100.0
114	DB HR Solutions GmbH	Eschborn	1	Ancillary Services Undertaking	100.0
115	DB Impact Investment Fund I, L.P.	Edinburgh	1, 3	Financial Institution	100.0
116	DB Industrial Holdings Beteiligungs GmbH & Co. KG	Luetzen	1, 3	Financial Institution	100.0
117	DB Industrial Holdings GmbH	Luetzen	1	Financial Institution	100.0
118	DB Infrastructure Holdings (UK) No.3 Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
119	DB Intermezzo LLC	Wilmington	1	Financial Institution	100.0
120	DB International (Asia) Limited	Singapore	1	Credit Institution	100.0
121	DB International Investments Limited	London	1	Financial Institution	100.0
122	DB International Trust (Singapore) Limited	Singapore	2	Other Enterprise	100.0
123	DB Investment Managers, Inc.	Wilmington	1	Financial Institution	100.0
124	DB Investment Partners, Inc.	Wilmington	1	Financial Institution	100.0
125	DB Investment Resources (US) Corporation	Wilmington	1	Financial Institution	100.0
126	DB Investment Resources Holdings Corp.	Wilmington	1	Financial Institution	100.0
127	DB Investment Services GmbH	Frankfurt	1	Credit Institution	100.0
128	DB Io LP	Wilmington	1, 3	Financial Institution	100.0
129	DB IROC Leasing Corp.	New York	1	Financial Institution	100.0
130	DB London (Investor Services) Nominees Limited	London	1	Financial Institution	100.0
131	DB Management Support GmbH	Frankfurt	4	Ancillary Services Undertaking	100.0
132	DB Managers, LLC	West Trenton	1	Investment Firm	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
133	DB Mortgage Investment Inc.	Baltimore	1	Financial Institution	100.0
134	DB Nexus American Investments (UK) Limited	London	1	Financial Institution	100.0
135	DB Nexus Iberian Investments (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
136	DB Nexus Investments (UK) Limited	London	1	Financial Institution	100.0
137	DB Nominees (Hong Kong) Limited	Hong Kong	4	Ancillary Services Undertaking	100.0
138	DB Nominees (Singapore) Pte Ltd	Singapore	2	Other Enterprise	100.0
139	DB Omega BTV S.C.S.	Luxembourg	1, 3	Financial Institution	100.0
140	DB Omega Holdings LLC	Wilmington	1	Financial Institution	100.0
141	DB Omega Ltd.	George Town	1	Financial Institution	100.0
142	DB Omega S.C.S.	Luxembourg	1, 3	Financial Institution	100.0
143	DB Operaciones y Servicios Interactivos Agrupación de Interés Económico	Barcelona	1	Ancillary Services Undertaking	99.9
144	DB Overseas Finance Delaware, Inc.	Wilmington	1	Financial Institution	100.0
145	DB Overseas Holdings Limited	London	1	Financial Institution	100.0
146	DB Portfolio Southwest, Inc.	Austin	1	Ancillary Services Undertaking	100.0
147	DB Print GmbH	Frankfurt	1	Ancillary Services Undertaking	100.0
148	DB Private Clients Corp.	Wilmington	1	Financial Institution	100.0
149	DB Private Equity GmbH	Cologne	1	Asset Management Company	100.0
150	DB Private Equity International S.à r.l.	Luxembourg	4	Financial Institution	100.0
151	DB Private Equity Treuhand GmbH	Cologne	4	Financial Institution	100.0
152	DB Private Wealth Mortgage Ltd.	New York	1	Financial Institution	100.0
153	DB Re S.A.	Luxembourg	4	Reinsurance Undertaking	100.0
154	DB RMS Leasing (Cayman) L.P.	George Town	1, 3	Financial Institution	100.0
155	DB Securities S.A.	Warsaw	1	Investment Firm	100.0
156	DB Service Centre Limited	Dublin	1	Ancillary Services Undertaking	100.0
157	DB Service Uruguay S.A.	Montevideo	1	Financial Institution	100.0
158	DB Services Americas, Inc.	Wilmington	1	Ancillary Services Undertaking	100.0
159	DB Servizi Amministrativi S.r.l.	Milan	1	Ancillary Services Undertaking	100.0
160	DB Strategic Advisors, Inc.	Makati City	1	Ancillary Services Undertaking	100.0
161	DB Structured Derivative Products, LLC	Wilmington	1	Ancillary Services Undertaking	100.0
162	DB Structured Products, Inc.	Wilmington	1	Financial Institution	100.0
163	DB Trips Investments Limited	George Town	1, 5	Financial Institution	0.0
164	DB Trustee Services Limited	London	2	Other Enterprise	100.0
165	DB Trustees (Hong Kong) Limited	Hong Kong	2	Other Enterprise	100.0
166	DB U.S. Financial Markets Holding Corporation	Wilmington	1	Financial Institution	100.0
167	DB UK Australia Finance Limited (in voluntary liquidation)	George Town	1	Financial Institution	100.0
168	DB UK Australia Holdings Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
169	DB UK Bank Limited	London	1	Credit Institution	100.0
170	DB UK Holdings Limited	London	1	Financial Institution	100.0
171	DB UK PCAM Holdings Limited	London	1	Financial Institution	100.0
172	DB USA Core Corporation	West Trenton	1	Ancillary Services Undertaking	100.0
173	DB USA Corporation	Wilmington	1	Financial Holding Company	100.0
174	DB Valoren S.à r.l.	Luxembourg	1	Financial Holding Company	100.0
175	DB Value S.à r.l.	Luxembourg	1	Financial Holding Company	100.0
176	DB Vanquish (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
177	DB Vantage (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
178	DB Vantage No.2 (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
179	DB Vita S.A.	Luxembourg	4	Insurance Undertaking	75.0
180	DBAB Wall Street, LLC	Wilmington	1	Ancillary Services Undertaking	100.0
181	DBAH Capital, LLC	Wilmington	1	Financial Institution	100.0
182	DBCIBZ1	George Town	1	Financial Institution	100.0
183	DBCIBZ2	George Town	1	Financial Institution	100.0
184	DBFIC, Inc.	Wilmington	1	Financial Institution	100.0
185	DBNZ Overseas Investments (No.1) Limited	George Town	1	Financial Institution	100.0
186	DBOI Global Services (UK) Limited	London	1	Ancillary Services Undertaking	100.0
187	DBOI Global Services Private Limited	Mumbai	1	Ancillary Services Undertaking	100.0
188	DBR Investments Co. Limited	George Town	1	Financial Institution	100.0
189	DBRE Global Real Estate Management IA, Ltd.	George Town	2	Other Enterprise	100.0
190	DBRE Global Real Estate Management IB, Ltd.	George Town	2	Other Enterprise	100.0
191	DBRMSGP1	George Town	1, 3, 6	Financial Institution	100.0
192	DBRMSGP2	George Town	1, 3, 6	Financial Institution	100.0
193	DBUK PCAM Limited	London	1	Financial Holding Company	100.0
194	DBUKH No. 2 Limited	London	1, 5	Financial Institution	0.0
195	DBUSBZ1, LLC	Wilmington	2	Other Enterprise	100.0
196	DBUSBZ2, S.à r.l.	Luxembourg	1	Financial Institution	100.0
197	DBX Advisors LLC	Wilmington	1	Investment Firm	100.0
198	DBX Strategic Advisors LLC	Wilmington	1	Investment Firm	100.0
199	De Meng Innovative (Beijing) Consulting Company Limited	Beijing	1	Ancillary Services Undertaking	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
200	DeAM Infrastructure Limited	London	4	Financial Institution	100.0
201	DEBEKO Immobilien GmbH & Co Grundbesitz OHG	Eschborn	1, 3	Ancillary Services Undertaking	100.0
202	DEE Deutsche Erneuerbare Energien GmbH	Duesseldorf	1	Financial Institution	100.0
203	Delowrezham de México S. de R.L. de C.V.	Mexico City	1	Financial Institution	100.0
204	DEUFRAN Beteiligungs GmbH	Frankfurt	1	Financial Institution	100.0
205	DEUKONA Versicherungs-Vermittlungs-GmbH	Frankfurt	1	Ancillary Services Undertaking	100.0
206	Deutsche (Aotearoa) Capital Holdings New Zealand	Auckland	1	Financial Institution	100.0
207	Deutsche (Aotearoa) Foreign Investments New Zealand	Auckland	1	Financial Institution	100.0
208	Deutsche (New Munster) Holdings New Zealand Limited	Auckland	1	Financial Institution	100.0
209	Deutsche Access Investments Limited	Sydney	1	Financial Institution	100.0
210	Deutsche Aeolia Power Production Société Anonyme	Paiania	2	Other Enterprise	80.0
211	Deutsche Alt-A Securities, Inc.	Wilmington	4	Financial Institution	100.0
212	Deutsche Alternative Asset Management (France) SAS	Paris	2	Other Enterprise	100.0
213	Deutsche Alternative Asset Management (Global) Limited	London	1	Asset Management Company	100.0
214	Deutsche Alternative Asset Management (UK) Limited	London	1	Asset Management Company	100.0
215	Deutsche AM Distributors, Inc.	Wilmington	1	Investment Firm	100.0
216	Deutsche AM Management GmbH	Frankfurt	2	Other Enterprise	100.0
217	Deutsche AM Service Company	Wilmington	1	Ancillary Services Undertaking	100.0
218	Deutsche AM Trust Company	Salem	1	Investment Firm	100.0
219	Deutsche Asia Pacific Finance, Inc.	Wilmington	1	Financial Institution	100.0
220	Deutsche Asia Pacific Holdings Pte Ltd	Singapore	1	Financial Holding Company	100.0
221	Deutsche Asset Management (Asia) Limited	Singapore	1	Investment Firm	100.0
222	Deutsche Asset Management (Hong Kong) Limited	Hong Kong	1	Investment Firm	100.0
223	Deutsche Asset Management (India) Private Limited	Mumbai	1	Asset Management Company	100.0
224	Deutsche Asset Management (Japan) Limited	Tokyo	1	Investment Firm	100.0
225	Deutsche Asset Management (Korea) Company Limited	Seoul	1	Asset Management Company	100.0
226	Deutsche Asset Management (UK) Limited	London	1	Asset Management Company	100.0
227	Deutsche Asset Management Group Limited	London	1	Ancillary Services Undertaking	100.0
228	Deutsche Asset Management Holding SE	Frankfurt	1	Financial Holding Company	100.0
229	Deutsche Asset Management International GmbH	Frankfurt	1	Investment Firm	100.0
230	Deutsche Asset Management Investment GmbH	Frankfurt	1	Asset Management Company	100.0
231	Deutsche Asset Management S.A.	Luxembourg	1	Asset Management Company	100.0
232	Deutsche Asset Management S.G.I.I.C., S.A.	Madrid	1	Asset Management Company	100.0
233	Deutsche Asset Management Schweiz AG	Zurich	1	Investment Firm	100.0
234	Deutsche Asset Management Shanghai Investment Company Limited	Shanghai	1	Investment Firm	100.0
235	Deutsche Asset Management US Holding Corporation	Wilmington	1	Financial Holding Company	100.0
236	Deutsche Asset Management USA Corporation	Wilmington	1	Financial Holding Company	100.0
237	Deutsche Australia Limited	Sydney	1	Financial Institution	100.0
238	Deutsche Bank (Cayman) Limited	George Town	1	Credit Institution	100.0
239	Deutsche Bank (Chile)	Santiago	2	Other Enterprise	100.0
240	Deutsche Bank (China) Co., Ltd.	Beijing	1	Credit Institution	100.0
241	Deutsche Bank (Malaysia) Berhad	Kuala Lumpur	1	Credit Institution	100.0
242	Deutsche Bank (Mauritius) Limited	Port Louis	1	Credit Institution	100.0
243	Deutsche Bank (Suisse) SA	Geneva	1	Credit Institution	100.0
244	Deutsche Bank (Uruguay) Sociedad Anónima Institución Financiera Externa	Montevideo	1	Credit Institution	100.0
245	DEUTSCHE BANK A.S.	Istanbul	1	Credit Institution	100.0
246	Deutsche Bank Americas Holding Corp.	Wilmington	1	Financial Holding Company	100.0
247	Deutsche Bank Bauspar-Aktiengesellschaft	Frankfurt	1	Credit Institution	100.0
248	Deutsche Bank Europe GmbH	Frankfurt	1	Credit Institution	100.0
249	Deutsche Bank Financial Company	George Town	1	Financial Institution	100.0
250	Deutsche Bank Holdings, Inc.	Wilmington	1	Financial Institution	100.0
251	Deutsche Bank Insurance Agency Incorporated	Baltimore	2	Other Enterprise	100.0
252	Deutsche Bank Insurance Agency of Delaware	Wilmington	1	Financial Institution	100.0
253	Deutsche Bank International Limited	St. Helier	1	Credit Institution	100.0
254	Deutsche Bank International Trust Co. (Cayman) Limited	George Town	2	Other Enterprise	100.0
255	Deutsche Bank International Trust Co. Limited	St. Peter Port	2	Other Enterprise	100.0
256	Deutsche Bank Investments (Guernsey) Limited	St. Peter Port	1	Financial Institution	100.0
257	Deutsche Bank Luxembourg S.A.	Luxembourg	1	Credit Institution	100.0
258	Deutsche Bank Mutui S.p.A.	Milan	1	Financial Institution	100.0
259	Deutsche Bank México, S.A., Institución de Banca Múltiple	Mexico City	1	Credit Institution	100.0
260	Deutsche Bank National Trust Company	Los Angeles	1	Financial Institution	100.0
261	Deutsche Bank Nominees (Jersey) Limited	St. Helier	2	Other Enterprise	100.0
262	Deutsche Bank Polska Spólka Akcyjna	Warsaw	1	Credit Institution	100.0
263	Deutsche Bank Privat- und Geschäftskunden Aktiengesellschaft	Frankfurt	1	Credit Institution	100.0
264	Deutsche Bank Representative Office Nigeria Limited	Lagos	4	Ancillary Services Undertaking	100.0
265	Deutsche Bank S.A. - Banco Alemão	Sao Paulo	1	Credit Institution	100.0
266	Deutsche Bank Securities Inc.	Wilmington	1	Investment Firm	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
267	Deutsche Bank Securities Limited	Toronto	1	Investment Firm	100.0
268	Deutsche Bank Services (Jersey) Limited	St. Helier	1	Ancillary Services Undertaking	100.0
269	Deutsche Bank Società per Azioni	Milan	1	Credit Institution	99.9
270	Deutsche Bank Trust Company Americas	New York	1	Credit Institution	100.0
271	Deutsche Bank Trust Company Delaware	Wilmington	1	Credit Institution	100.0
272	Deutsche Bank Trust Company, National Association	New York	1	Financial Institution	100.0
273	Deutsche Bank Trust Corporation	New York	1	Financial Holding Company	100.0
274	Deutsche Bank Trustee Services (Guernsey) Limited	St. Peter Port	1	Ancillary Services Undertaking	100.0
275	Deutsche Bank Österreich AG	Vienna	1	Credit Institution	100.0
276	Deutsche Bank, Sociedad Anónima Española	Madrid	1	Credit Institution	99.8
277	Deutsche Capital Finance (2000) Limited	George Town	1	Financial Institution	100.0
278	Deutsche Capital Hong Kong Limited	Hong Kong	1	Financial Institution	100.0
279	Deutsche Capital Management Limited	Dublin	1	Asset Management Company	100.0
280	Deutsche Capital Markets Australia Limited	Sydney	1	Investment Firm	100.0
281	Deutsche Capital Partners China Limited	George Town	1	Financial Institution	100.0
282	Deutsche Cayman Ltd.	George Town	2	Other Enterprise	100.0
283	Deutsche CIB Centre Private Limited	Mumbai	1	Ancillary Services Undertaking	100.0
284	Deutsche Custody N.V.	Amsterdam	4	Financial Institution	100.0
285	Deutsche Domus New Zealand Limited	Auckland	1	Financial Institution	100.0
286	Deutsche Emerging Markets Investments (Netherlands) B.V.	Amsterdam	1	Ancillary Services Undertaking	99.9
287	Deutsche Equities India Private Limited	Mumbai	1	Securities Trading Firm	100.0
288	Deutsche Far Eastern Asset Management Company Limited	Taipei	1	Securities Trading Firm	60.0
289	Deutsche Fiduciary Services (Suisse) SA	Geneva	2	Other Enterprise	100.0
290	Deutsche Finance Co 1 Pty Limited	Sydney	1	Financial Institution	100.0
291	Deutsche Finance Co 2 Pty Limited	Sydney	1	Financial Institution	100.0
292	Deutsche Finance Co 3 Pty Limited	Sydney	1	Financial Institution	100.0
293	Deutsche Finance Co 4 Pty Limited	Sydney	1	Financial Institution	100.0
294	Deutsche Finance No. 2 (UK) Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
295	Deutsche Finance No. 2 Limited	George Town	1	Financial Institution	100.0
296	Deutsche Foras New Zealand Limited	Auckland	1	Financial Institution	100.0
297	Deutsche Futures Singapore Pte Ltd	Singapore	1	Investment Firm	100.0
298	Deutsche Gesellschaft für Immobilien-Leasing mit beschränkter Haftung	Duesseldorf	4	Financial Institution	100.0
299	Deutsche Global Markets Limited	Tel Aviv	1	Ancillary Services Undertaking	100.0
300	Deutsche Group Holdings (SA) Proprietary Limited	Johannesburg	1	Financial Institution	100.0
301	Deutsche Group Services Pty Limited	Sydney	1	Ancillary Services Undertaking	100.0
302	Deutsche Grundbesitz Beteiligungsgesellschaft mbH	Eschborn	4	Financial Institution	100.0
303	Deutsche Grundbesitz-Anlagegesellschaft mit beschränkter Haf-tung	Frankfurt	2	Other Enterprise	99.8
304	Deutsche Holdings (BTI) Limited	London	1	Financial Institution	100.0
305	Deutsche Holdings (Luxembourg) S.à r.l.	Luxembourg	1	Financial Holding Company	100.0
306	Deutsche Holdings (Malta) Ltd.	Valletta	1	Financial Holding Company	100.0
307	Deutsche Holdings (SA) (Proprietary) Limited	Johannesburg	1	Financial Institution	100.0
308	Deutsche Holdings Limited	London	1	Financial Holding Company	100.0
309	Deutsche Holdings No. 2 Limited	London	1	Financial Institution	100.0
310	Deutsche Holdings No. 3 Limited	London	1	Financial Institution	100.0
311	Deutsche Holdings No. 4 Limited	London	1	Financial Institution	100.0
312	Deutsche Immobilien Leasing GmbH	Duesseldorf	1	Financial Institution	100.0
313	Deutsche India Holdings Private Limited	Mumbai	1	Financial Holding Company	100.0
314	Deutsche International Corporate Services (Delaware) LLC	Wilmington	1	Ancillary Services Undertaking	100.0
315	Deutsche International Corporate Services (Ireland) Limited	Dublin	1	Financial Institution	100.0
316	Deutsche International Corporate Services Limited	St. Helier	2	Other Enterprise	100.0
317	Deutsche International Custodial Services Limited	St. Helier	2	Other Enterprise	100.0
318	Deutsche International Finance (Ireland) Limited	Dublin	1	Investment Firm	100.0
319	Deutsche International Trust Company N.V.	Amsterdam	2	Other Enterprise	100.0
320	Deutsche International Trust Corporation (Mauritius) Limited	Port Louis	2	Other Enterprise	100.0
321	Deutsche Inversiones Dos S.A. (en Liquidación)	Santiago	1	Financial Institution	100.0
322	Deutsche Inversiones Limitada	Santiago	1	Financial Institution	100.0
323	Deutsche Investment Management Americas Inc.	Wilmington	1	Financial Institution	100.0
324	Deutsche Investments (Netherlands) N.V.	Amsterdam	1	Financial Institution	100.0
325	Deutsche Investments Australia Limited	Sydney	1	Investment Firm	100.0
326	Deutsche Investments India Private Limited	Mumbai	1	Financial Institution	100.0
327	Deutsche Investor Services Private Limited	Mumbai	2	Other Enterprise	100.0
328	Deutsche Knowledge Services Pte. Ltd.	Singapore	1	Ancillary Services Undertaking	100.0
329	Deutsche Leasing New York Corp.	New York	1	Financial Institution	100.0
330	Deutsche Malta Company Ltd	Valletta	1	Ancillary Services Undertaking	100.0
331	Deutsche Mandatos S.A.	Buenos Aires	1	Financial Institution	100.0
332	Deutsche Master Funding Corporation	Wilmington	1	Financial Institution	100.0
333	Deutsche Mexico Holdings S.à r.l.	Luxembourg	1	Financial Holding Company	100.0

Serial No.	Name of company	Domicile of company	Footnote	Nature of activity	Share of Capital in %
334	Deutsche Morgan Grenfell Group Public Limited Company	London	1	Financial Institution	100.0
335	Deutsche Mortgage & Asset Receiving Corporation	Wilmington	1	Ancillary Services Undertaking	100.0
336	Deutsche Mortgage Securities, Inc.	Wilmington	4	Financial Institution	100.0
337	Deutsche Nederland N.V.	Amsterdam	1	Ancillary Services Undertaking	100.0
338	Deutsche New Zealand Limited	Auckland	1	Financial Institution	100.0
339	Deutsche Nominees Limited	London	1	Financial Institution	100.0
340	Deutsche Oppenheim Family Office AG	Grasbrunn	1	Investment Firm	100.0
341	Deutsche Overseas Issuance New Zealand Limited	Auckland	1	Ancillary Services Undertaking	100.0
342	Deutsche Postbank AG	Bonn	1	Credit Institution	100.0
343	Deutsche Postbank Finance Center Objekt GmbH	Schuettringen	1	Ancillary Services Undertaking	100.0
344	Deutsche Private Asset Management Limited	London	2	Other Enterprise	100.0
345	Deutsche Securities (India) Private Limited	New Delhi	1	Securities Trading Firm	100.0
346	Deutsche Securities (Proprietary) Limited	Johannesburg	1	Investment Firm	100.0
347	Deutsche Securities (SA) (Proprietary) Limited	Johannesburg	1	Financial Institution	100.0
348	Deutsche Securities Asia Limited	Hong Kong	1	Investment Firm	100.0
349	Deutsche Securities Australia Limited	Sydney	1	Investment Firm	100.0
350	Deutsche Securities Inc.	Tokyo	1	Investment Firm	100.0
351	Deutsche Securities Israel Ltd.	Tel Aviv	1	Financial Institution	100.0
352	Deutsche Securities Korea Co.	Seoul	1	Investment Firm	100.0
353	Deutsche Securities Mauritius Limited	Port Louis	1	Securities Trading Firm	100.0
354	Deutsche Securities Menkul Degerler A.S.	Istanbul	1	Securities Trading Firm	100.0
355	Deutsche Securities New Zealand Limited	Auckland	1	Securities Trading Firm	100.0
356	Deutsche Securities S.A.	Buenos Aires	1	Securities Trading Firm	100.0
357	Deutsche Securities Saudi Arabia LLC	Riyadh	1	Investment Firm	100.0
358	Deutsche Securities SpA	Santiago	1	Financial Institution	100.0
359	Deutsche Securities Venezuela S.A.	Caracas	1	Financial Institution	100.0
360	Deutsche Securities, S.A. de C.V., Casa de Bolsa	Mexico City	1	Investment Firm	100.0
361	Deutsche Securitisation Australia Pty Limited	Sydney	1	Ancillary Services Undertaking	100.0
362	Deutsche StiftungsTrust GmbH	Frankfurt	2	Other Enterprise	100.0
363	Deutsche Strategic	Luxembourg	2	Other Enterprise	100.0
364	Deutsche Strategic Investment Holdings Yugen Kaisha	Tokyo	1	Financial Institution	100.0
365	Deutsche Transnational Trustee Corporation Inc	Charlottetown	2	Other Enterprise	100.0
366	Deutsche Trust Company Limited Japan	Tokyo	2	Other Enterprise	100.0
367	Deutsche Trustee Company Limited	London	2	Other Enterprise	100.0
368	Deutsche Trustee Services (India) Private Limited	Mumbai	2	Other Enterprise	100.0
369	Deutsche Trustees Malaysia Berhad	Kuala Lumpur	2	Other Enterprise	100.0
370	Deutsches Institut für Altersvorsorge GmbH	Frankfurt	2	Other Enterprise	78.0
371	DFC Residual Corp.	Carson City	1	Financial Institution	100.0
372	DG China Clean Tech Partners	Tianjin	3, 4, 5,	Financial Institution	49.9
373	DI Deutsche Immobilien Treuhandgesellschaft mbH	Frankfurt	2	Other Enterprise	100.0
374	DIB-Consult Deutsche Immobilien- und Beteiligungs-Beratungsgesellschaft mbH i.L.	Duesseldorf	2	Other Enterprise	100.0
375	DIL Financial Services GmbH & Co. KG	Duesseldorf	2	Other Enterprise	100.0
376	DISCA Beteiligungsgesellschaft mbH	Duesseldorf	1	Financial Institution	100.0
377	DNU Nominees Pty Limited	Sydney	1	Ancillary Services Undertaking	100.0
378	DSL Portfolio GmbH & Co. KG	Bonn	1, 3	Ancillary Services Undertaking	100.0
379	DSL Portfolio Verwaltungs GmbH	Bonn	1	Financial Institution	100.0
380	DTS Nominees Pty Limited	Sydney	2	Other Enterprise	100.0
381	Durian (Luxembourg) S.à r.l.	Luxembourg	2	Other Enterprise	100.0
382	DWS Holding & Service GmbH	Frankfurt	1	Financial Institution	99.2
383	EC EUROPA IMMOBILIEN FONDS NR. 3 GmbH & CO. KG i.I.	Hamburg	2	Other Enterprise	65.2
384	ECT Holdings Corp.	Wilmington	1	Financial Institution	100.0
385	Elba Finance GmbH	Eschborn	1	Financial Institution	100.0
386	Elizabethan Holdings Limited	George Town	4	Financial Institution	100.0
387	Elizabethan Management Limited	George Town	2	Other Enterprise	100.0
388	Estate Holdings, Inc.	St. Thomas	2, 5	Other Enterprise	0.0
389	European Value Added I (Alternate G.P.) LLP	London	1	Financial Institution	100.0
390	Exinor SA (dissolution volontaire)	Bastogne	2	Other Enterprise	100.0
391	EXTOREL Private Equity Advisers GmbH i.L.	Cologne	4	Financial Institution	100.0
392	FARAMIR Beteiligungs- und Verwaltungs GmbH	Cologne	1	Financial Institution	100.0
393	Fenix Administración de Activos S. de R.L. de C.V.	Mexico City	4	Financial Institution	100.0
394	Fiduciaria Sant' Andrea S.r.L.	Milan	1	Investment Firm	100.0
395	Finanza & Futuro Banca Società per Azioni	Milan	1	Credit Institution	100.0
396	Franz Urbig- und Oscar Schlitter-Stiftung Gesellschaft mit beschränkter Haftung	Frankfurt	4	Ancillary Services Undertaking	100.0
397	Fünfte SAB Treuhand und Verwaltung GmbH & Co. Suhl "Rimbachzentrum" KG	Bad Homburg	2	Other Enterprise	74.9
398	G Finance Holding Corp.	Wilmington	1	Financial Institution	100.0
399	Gemini Technology Services Inc.	Wilmington	1	Ancillary Services Undertaking	100.0
400	German American Capital Corporation	Baltimore	1	Financial Institution	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
401	Greenwood Properties Corp.	New York	1, 5	Financial Institution	0.0
402	Grundstücksgesellschaft Frankfurt Bockenheimer Landstraße GbR	Troisdorf	2, 3	Other Enterprise	94.9
403	Grundstücksgesellschaft Kerpen-Sindorf Vogelrutherfeld GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
404	Grundstücksgesellschaft Köln-Ossendorf VI mbH	Cologne	1	Financial Institution	100.0
405	Grundstücksgesellschaft Leipzig Petersstraße GbR	Troisdorf	2, 3, 5	Other Enterprise	36.1
406	Grundstücksgesellschaft Wiesbaden Luisenstraße/Kirchgasse GbR	Troisdorf	2, 3	Other Enterprise	64.7
407	Hac Investments Ltd.	Wilmington	1	Financial Institution	100.0
408	Herengracht Financial Services B.V.	Amsterdam	2	Other Enterprise	100.0
409	HTB Spezial GmbH & Co. KG	Cologne	3, 4	Financial Institution	100.0
410	Immobilienfonds Büro-Center Erfurt am Flughafen Bindersleben I GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
411	Immobilienfonds Büro-Center Erfurt am Flughafen Bindersleben II GbR	Troisdorf	2, 3, 5	Other Enterprise	50.0
412	Immobilienfonds Mietwohnhäuser Quadrath-Ichendorf GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
413	Immobilienfonds Wohn- und Geschäftshaus Köln-Blumenberg V GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
414	IOS Finance E F C S.A.	Barcelona	1	Financial Institution	100.0
415	ISTRON Beteiligungs- und Verwaltungs-GmbH	Cologne	1	Financial Institution	100.0
416	IVAF I Manager, S.à r.l.	Luxembourg	1	Financial Institution	100.0
417	J R Nominees (Pty) Ltd	Johannesburg	2	Other Enterprise	100.0
418	Jyogashima Godo Kaisha	Tokyo	1	Financial Institution	100.0
419	KEBA Gesellschaft für interne Services mbH	Frankfurt	1	Ancillary Services Undertaking	100.0
420	Kidson Pte Ltd	Singapore	1	Financial Institution	100.0
421	Kingfisher Nominees Limited	Auckland	2	Other Enterprise	100.0
422	Konsul Inkasso GmbH	Essen	1	Ancillary Services Undertaking	100.0
423	Kradavimd UK Lease Holdings Limited	London	1	Financial Institution	100.0
424	LA Water Holdings Limited	George Town	1	Financial Institution	75.0
425	LAWL Pte. Ltd.	Singapore	1	Financial Institution	100.0
426	Leasing Verwaltungsgesellschaft Waltersdorf mbH	Schoenefeld	1	Financial Institution	100.0
427	Leonardo III Initial GP Limited	London	4	Financial Institution	100.0
428	LWC Nominees Limited	Auckland	2	Other Enterprise	100.0
429	Maher Terminals Holdings (Toronto) Limited	Vancouver	1	Financial Institution	100.0
430	MEF I Manager, S. à r.l.	Luxembourg	1	Financial Institution	100.0
431	MHL Reinsurance Ltd.	Burlington	4	Reinsurance Undertaking	100.0
432	MIT Holdings, Inc.	Baltimore	1	Financial Institution	100.0
433	MortgageIT Securities Corp.	Wilmington	1	Ancillary Services Undertaking	100.0
434	MortgageIT, Inc.	New York	1	Financial Institution	100.0
435	Navegator - SGFTC, S.A.	Lisbon	1	Ancillary Services Undertaking	100.0
436	NEPTUNO Verwaltungs- und Treuhand-Gesellschaft mit beschränkter Haftung	Cologne	1	Financial Institution	100.0
437	Nordwestdeutscher Wohnungsbauträger Gesellschaft mit beschränkter Haftung	Frankfurt	1	Financial Institution	100.0
438	norisbank GmbH	Bonn	1	Credit Institution	100.0
439	North American Income Fund Public Limited Company	Dublin	1	Financial Institution	66.8
440	North Las Vegas Property LLC	Wilmington	1	Ancillary Services Undertaking	100.0
441	OOO "Deutsche Bank TechCentre"	Moscow	1	Ancillary Services Undertaking	100.0
442	OOO "Deutsche Bank"	Moscow	1	Credit Institution	100.0
443	Opal Funds (Ireland) Public Limited Company	Dublin	4	Ancillary Services Undertaking	100.0
444	OPB Verwaltungs- und Beteiligungs-GmbH	Cologne	4	Financial Institution	100.0
445	OPB Verwaltungs- und Treuhand GmbH	Cologne	1	Financial Institution	100.0
446	OPB-Holding GmbH	Cologne	1	Financial Institution	100.0
447	OPB-Nona GmbH	Frankfurt	1	Financial Institution	100.0
448	OPB-Oktava GmbH	Cologne	4	Financial Institution	100.0
449	OPB-Quarta GmbH	Cologne	4	Financial Institution	100.0
450	OPB-Quinta GmbH	Cologne	4	Financial Institution	100.0
451	OPB-Septima GmbH	Cologne	4	Financial Institution	100.0
452	OPPENHEIM Capital Advisory GmbH	Cologne	1	Financial Institution	100.0
453	OPPENHEIM Flottenfonds V GmbH & Co. KG	Cologne	1, 3	Financial Institution	100.0
454	Oppenheim Fonds Trust GmbH	Cologne	1	Ancillary Services Undertaking	100.0
455	OPPENHEIM PRIVATE EQUITY Manager GmbH	Cologne	4	Financial Institution	100.0
456	OPPENHEIM PRIVATE EQUITY Verwaltungsgesellschaft mbH	Cologne	4	Financial Institution	100.0
457	OPS Nominees Pty Limited	Sydney	2	Other Enterprise	100.0
458	OVT Trust 1 GmbH	Cologne	2	Other Enterprise	100.0
459	OVV Beteiligungs GmbH	Cologne	4	Financial Institution	100.0
460	PADUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	1	Financial Institution	100.0
461	Pan Australian Nominees Pty Ltd	Sydney	1	Ancillary Services Undertaking	100.0
462	PB Factoring GmbH	Bonn	1	Financial Institution	100.0
463	PB Firmenkunden AG	Bonn	1	Ancillary Services Undertaking	100.0
464	PB International S.A.	Schuettringen	1	Financial Institution	100.0

Serial No.	Name of company	Domicile of company	Footnote	Nature of activity	Share of Capital in %
465	PB Spezial-Investmentaktiengesellschaft mit Teilgesellschaftsvermögen	Bonn	1	Ancillary Services Undertaking	98.2
466	PBC Banking Services GmbH	Frankfurt	1	Financial Institution	100.0
467	PCC Services GmbH der Deutschen Bank	Essen	1	Ancillary Services Undertaking	100.0
468	Pelleport Investors, Inc.	New York	1	Ancillary Services Undertaking	100.0
469	Plantation Bay, Inc.	St. Thomas	2	Other Enterprise	100.0
470	Postbank Akademie und Service GmbH	Hameln	2	Other Enterprise	100.0
471	Postbank Beteiligungen GmbH	Bonn	1	Financial Institution	100.0
472	Postbank Direkt GmbH	Bonn	1	Financial Institution	100.0
473	Postbank Filialvertrieb AG	Bonn	1	Financial Institution	100.0
474	Postbank Finanzberatung AG	Hameln	2	Other Enterprise	100.0
475	Postbank Immobilien GmbH	Hameln	2	Other Enterprise	100.0
476	Postbank Immobilien und Baumanagement GmbH	Bonn	1	Financial Institution	100.0
477	Postbank Immobilien und Baumanagement GmbH & Co. Objekt Leipzig KG	Bonn	1, 3	Ancillary Services Undertaking	90.0
478	Postbank Leasing GmbH	Bonn	1	Financial Institution	100.0
479	Postbank Service GmbH	Essen	1	Ancillary Services Undertaking	100.0
480	Postbank Systems AG	Bonn	1	Ancillary Services Undertaking	100.0
481	Private Equity Asia Select Company III S.à r.l.	Luxembourg	4	Ancillary Services Undertaking	100.0
482	Private Equity Global Select Company IV S.à r.l.	Luxembourg	4	Ancillary Services Undertaking	100.0
483	Private Equity Global Select Company V S.à r.l.	Luxembourg	4	Ancillary Services Undertaking	100.0
484	Private Equity Select Company S.à r.l.	Luxembourg	4	Ancillary Services Undertaking	100.0
485	Private Financing Initiatives, S.L.	Barcelona	1	Financial Institution	55.3
486	PT Deutsche Sekuritas Indonesia	Jakarta	1	Investment Firm	99.0
487	PT. Deutsche Verdhana Sekuritas Indonesia	Jakarta	4, 5	Investment Firm	40.0
488	Public joint-stock company "Deutsche Bank DBU"	Kiev	1	Credit Institution	100.0
489	R.B.M. Nominees Pty Ltd	Sydney	1	Ancillary Services Undertaking	100.0
490	Regula Limited	Road Town	2	Other Enterprise	100.0
491	RoPro U.S. Holding, Inc.	Wilmington	1	Financial Institution	100.0
492	Royster Fund Management S.à r.l.	Luxembourg	4	Ancillary Services Undertaking	100.0
493	RREEF America L.L.C.	Wilmington	1	Financial Institution	100.0
494	RREEF China REIT Management Limited	Hong Kong	2	Other Enterprise	100.0
495	RREEF European Value Added I (G.P.) Limited	London	1	Financial Institution	100.0
496	RREEF Fund Holding Co.	George Town	1	Financial Institution	100.0
497	RREEF India Advisors Private Limited	Mumbai	2	Other Enterprise	100.0
498	RREEF Investment GmbH	Frankfurt	1	Asset Management Company	99.9
499	RREEF Management GmbH	Frankfurt	1	Financial Institution	99.9
500	RREEF Management L.L.C.	Wilmington	2	Other Enterprise	100.0
501	RREEF Spezial Invest GmbH	Frankfurt	1	Asset Management Company	100.0
502	RTS Nominees Pty Limited	Sydney	2	Other Enterprise	100.0
503	SAB Real Estate Verwaltungs GmbH	Hameln	4	Financial Institution	100.0
504	Sagamore Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
505	SAGITA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	1	Financial Institution	100.0
506	Sal. Oppenheim Alternative Investments GmbH	Cologne	1	Financial Institution	100.0
507	Sal. Oppenheim jr. & Cie. AG & Co. Kommanditgesellschaft auf Aktien	Cologne	1, 3	Credit Institution	100.0
508	Sal. Oppenheim jr. & Cie. Beteiligungs GmbH	Cologne	1	Financial Institution	100.0
509	Sal. Oppenheim jr. & Cie. Komplementär AG	Cologne	1	Financial Institution	100.0
510	SAPIO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	1	Financial Institution	100.0
511	Sechste Salomon Beteiligungs- und Verwaltungsgesellschaft mbH	Cologne	1, 5	Financial Institution	0.0
512	Service Company Four Limited	Hong Kong	2	Other Enterprise	100.0
513	Sharps SP I LLC	Wilmington	1	Financial Institution	100.0
514	Structured Finance Americas, LLC	Wilmington	1	Investment Firm	100.0
515	Süddeutsche Vermögensverwaltung Gesellschaft mit beschränkter Haftung	Frankfurt	1	Financial Institution	100.0
516	Tasfiye Halinde Bebek Danismanlik Anonim Sirketi	Istanbul	1	Financial Institution	100.0
517	TELO Beteiligungsgesellschaft mbH	Schoenefeld	1	Financial Institution	100.0
518	Tempurrite Leasing Limited	London	1	Financial Institution	100.0
519	Thai Asset Enforcement and Recovery Asset Management Company Limited	Bangkok	1	Financial Institution	100.0
520	Tianjin Deutsche AM Fund Management Co., Ltd.	Tianjin	4	Ancillary Services Undertaking	100.0
521	Treuinvest Service GmbH	Frankfurt	2	Other Enterprise	100.0
522	Triplereason Limited	London	1	Financial Institution	100.0
523	UKE Beteiligungs-GmbH	Troisdorf	2, 5	Financial Institution	0.0
524	UKE Grundstücksgesellschaft mbH	Troisdorf	1, 5	Financial Institution	0.0
525	UKE, s.r.o.	Belá	2	Other Enterprise	100.0
526	Ullmann - Esch Grundstücksgesellschaft Kirchnerstraße GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
527	Ullmann - Esch Grundstücksverwaltungsgesellschaft Disternich GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0
528	Ullmann Ullmann Krockow Krockow Esch GbR	Troisdorf	2, 3, 5	Other Enterprise	0.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
529	VCM MIP 2002 GmbH & Co. KG i.L.	Cologne	3, 4	Financial Institution	90.0
530	VCM MIP II GmbH & Co. KG i.L.	Cologne	3, 4	Financial Institution	90.0
531	VCM Treuhand Beteiligungsverwaltung GmbH	Cologne	1	Financial Institution	100.0
532	VCP Treuhand Beteiligungsgesellschaft mbH	Cologne	4	Financial Institution	100.0
533	VCP Verwaltungsgesellschaft mbH i.L.	Cologne	4	Financial Institution	100.0
534	Vertriebsgesellschaft mbH der Deutschen Bank Privat- und Geschäftskunden	Berlin	4	Ancillary Services Undertaking	100.0
535	Vesta Real Estate S.r.l.	Milan	1	Ancillary Services Undertaking	100.0
536	VÖB-ZVD Processing GmbH	Frankfurt	1	Payment Institution	100.0
537	Wealthspur Investment Company Limited	Labuan	4	Financial Institution	100.0
538	WEPLA Beteiligungsgesellschaft mbH	Frankfurt	1	Financial Institution	100.0
539	Whale Holdings S.à r.l.	Luxembourg	1	Financial Institution	100.0
540	World Trading (Delaware) Inc.	Wilmington	1	Financial Institution	100.0

Consolidated Structured Entities

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
541	Alguer Inversiones Designated Activity Company	Dublin	2	Financial Institution	
542	Alixville Invest, S.L.	Madrid	2	Other Enterprise	
543	Amber Investments S.à r.l.	Luxembourg	1	Financial Institution	100.0
544	Argentina Capital Protected Investments Limited	George Town	2, 8	Other Enterprise	
545	Asset Repackaging Trust Five B.V.	Amsterdam	2, 8	Financial Institution	
546	Atena SPV S.r.l	Conegliano	1	Financial Institution	60.0
547	Atlas Investment Company 1 S.à r.l.	Luxembourg	2	Financial Institution	
548	Atlas Investment Company 2 S.à r.l.	Luxembourg	2	Financial Institution	
549	Atlas Investment Company 3 S.à r.l.	Luxembourg	2	Financial Institution	
550	Atlas Investment Company 4 S.à r.l.	Luxembourg	2	Financial Institution	
551	Atlas Portfolio Select SPC	George Town	4	Financial Institution	0.1
552	Atlas SICAV - FIS	Luxembourg	2, 8	Other Enterprise	
553	Axia Insurance, Ltd.	Hamilton	2, 8	Other Enterprise	
554	Azurix Argentina Holding, Inc.	Wilmington	1	Financial Institution	100.0
555	Azurix Cono Sur, Inc.	Wilmington	1	Financial Institution	100.0
556	Azurix Corp.	Wilmington	1	Financial Institution	100.0
557	Azurix Latin America, Inc.	Wilmington	1	Financial Institution	100.0
558	Baltics Credit Solutions Latvia SIA	Riga	2	Financial Institution	
559	Belzen Pty. Limited	Sydney	1	Financial Institution	100.0
560	Bürohaus Hauptstraße Gewerbeimmobilien Limited & Co. KG	Frankfurt	2	Other Enterprise	
561	Büropark Heimstetten Vermögensverwaltungs Limited & Co. KG	Frankfurt	2	Other Enterprise	
562	Cathay Capital (Labuan) Company Limited	Labuan	2	Other Enterprise	
563	Cathay Capital Company Limited	Port Louis	4	Financial Institution	9.5
564	Cathay Strategic Investment Company Limited	Hong Kong	2	Financial Institution	
565	Cathay Strategic Investment Company No. 2 Limited	George Town	2	Financial Institution	
566	Cayman Reference Fund Holdings Limited	George Town	2	Ancillary Services Undertaking	
567	Charitable Luxembourg Four S.à r.l.	Luxembourg	2	Financial Institution	
568	Charitable Luxembourg Three S.à r.l.	Luxembourg	2	Financial Institution	
569	Charitable Luxembourg Two S.à r.l.	Luxembourg	2	Financial Institution	
570	CITAN Beteiligungsgesellschaft mbH	Frankfurt	1	Financial Institution	100.0
571	City Leasing (Thameside) Limited	London	1	Financial Institution	100.0
572	City Leasing Limited	London	1	Financial Institution	100.0
573	CLASS Limited	St. Helier	2, 8	Other Enterprise	
574	Collins Capital Low Volatility Performance II Special Investments, Ltd.	Road Town	2	Financial Institution	
575	Concept Fund Solutions Public Limited Company	Dublin	2, 8	Other Enterprise	0.5
576	Crofton Invest, S.L.	Madrid	2	Other Enterprise	
577	Danube Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
578	Dariconic Designated Activity Company	Dublin	2	Financial Institution	
579	DB (Barbados) SRL	Christ Church	1	Ancillary Services Undertaking	100.0
580	DB Aircraft Leasing Master Trust	Wilmington	1, 5	Financial Institution	0.0
581	DB Alternative Strategies Limited (in voluntary liquidation)	George Town	1	Securities Trading Firm	100.0
582	DB Apex Management Limited	George Town	1	Financial Institution	100.0
583	DB Aster II, LLC	Wilmington	1	Ancillary Services Undertaking	100.0
584	DB Aster III, LLC	Wilmington	1	Ancillary Services Undertaking	100.0
585	DB Aster, Inc.	Wilmington	1	Financial Institution	100.0
586	DB Aster, LLC	Wilmington	1	Ancillary Services Undertaking	100.0
587	DB Capital Investments Sàrl	Luxembourg	1	Financial Institution	100.0
588	DB Chambers Limited (in voluntary liquidation)	George Town	1	Ancillary Services Undertaking	100.0
589	DB Covered Bond S.r.l.	Conegliano	1	Financial Institution	90.0
590	DB Credit Investments S.à r.l.	Luxembourg	1	Financial Institution	100.0
591	DB Finance International GmbH	Eschborn	1	Financial Institution	100.0
592	DB Global Markets Multi-Strategy Fund I Ltd.	George Town	4	Financial Institution	100.0
593	DB Global Masters Multi-Strategy Trust	George Town	4	Financial Institution	100.0
594	DB Global Masters Trust	George Town	2, 8	Securities Trading Firm	
595	DB Immobilienfonds 1 Wieland KG	Frankfurt	2	Other Enterprise	
596	DB Immobilienfonds 2 GmbH & Co. KG i.L.	Frankfurt	1	Financial Institution	74.0
597	DB Immobilienfonds 4 GmbH & Co. KG i.L.	Frankfurt	2	Other Enterprise	0.2
598	DB Immobilienfonds 5 Wieland KG	Frankfurt	2	Other Enterprise	
599	DB Impact Investment (GP) Limited	London	1	Financial Institution	100.0
600	DB Infrastructure Holdings (UK) No.1 Limited (in members' voluntary liquidation)	London	1	Financial Institution	100.0
601	DB Litigation Fee LLC	Wilmington	1	Financial Institution	100.0
602	DB Municipal Holdings LLC	Wilmington	1	Ancillary Services Undertaking	100.0
603	DB PWM	Luxembourg	2, 8	Other Enterprise	
604	DB PWM - Active Asset Allocation Growth II	Luxembourg	4	Ancillary Services Undertaking	100.0
605	DB PWM II - LiquidAlts UCITS (Euro)	Luxembourg	2	Other Enterprise	69.5

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
606	DB RC Holdings, LLC	Wilmington	1	Financial Institution	100.0
607	DB Real Estate Canadainvest 1 Inc.	Toronto	4	Financial Institution	100.0
608	DB Safe Harbour Investment Projects Limited	London	1	Financial Institution	100.0
609	DB SPEARs/LIFERs Trust	Wilmington	4, 8	Ancillary Services Undertaking	0.0
610	DB STG Lux 10 S.à r.l.	Luxembourg	2	Other Enterprise	100.0
611	DB STG Lux 11 S.à r.l.	Luxembourg	2	Other Enterprise	100.0
612	DB STG Lux 12 S.à r.l.	Luxembourg	2	Other Enterprise	100.0
613	DB STG Lux 9 S.à r.l.	Luxembourg	2	Other Enterprise	100.0
614	DB Structured Finance 1 Designated Activity Company	Dublin	1	Financial Institution	100.0
615	DB Structured Finance 2 Designated Activity Company	Dublin	1	Financial Institution	100.0
616	db x-trackers II	Luxembourg	2, 8	Other Enterprise	1.7
617	dbInvestor Solutions Public Limited Company	Dublin	2, 8	Financial Institution	
618	DBRE Global Real Estate Management US IA, L.L.C.	Wilmington	1	Financial Institution	100.0
619	DBRE Global Real Estate Management US IB, L.L.C.	Wilmington	1	Financial Institution	100.0
620	DBRMS4	George Town	1, 3, 6	Financial Institution	100.0
621	DBX ETF Trust	Wilmington	2, 8	Other Enterprise	
622	De Heng Asset Management Company Limited	Beijing	2	Financial Institution	
623	DeAM Capital Protect 2014	Frankfurt	2	Other Enterprise	
624	DeAM Capital Protect 2019	Frankfurt	2	Other Enterprise	
625	DeAM Capital Protect 2024	Frankfurt	2	Other Enterprise	
626	DeAM Capital Protect 2029	Frankfurt	2	Other Enterprise	
627	DeAM Capital Protect 2034	Frankfurt	2	Other Enterprise	
628	DeAM Capital Protect 2039	Frankfurt	2	Other Enterprise	
629	DeAM Capital Protect 2044	Frankfurt	2	Other Enterprise	
630	DeAM Capital Protect 2049	Frankfurt	2	Other Enterprise	
631	Deloraine Spain SL	Madrid	2	Financial Institution	
632	Deutsche Bank Best Allocation - Protect 80	Luxembourg	2	Other Enterprise	
633	Deutsche Bank Best Allocation - Protect 90	Luxembourg	2	Other Enterprise	
634	Deutsche Bank Capital Finance LLC I	Wilmington	1	Financial Institution	100.0
635	Deutsche Bank Capital Finance Trust I	Wilmington	1, 5	Financial Institution	0.0
636	Deutsche Bank Capital LLC I	Wilmington	1	Financial Institution	100.0
637	Deutsche Bank Capital Trust I	Wilmington	1, 5	Financial Institution	0.0
638	Deutsche Bank Contingent Capital LLC II	Wilmington	1	Financial Institution	100.0
639	Deutsche Bank Contingent Capital LLC III	Wilmington	1	Financial Institution	100.0
640	Deutsche Bank Contingent Capital LLC IV	Wilmington	1	Financial Institution	100.0
641	Deutsche Bank Contingent Capital LLC V	Wilmington	1	Financial Institution	100.0
642	Deutsche Bank Contingent Capital Trust II	Wilmington	1, 5	Financial Institution	0.0
643	Deutsche Bank Contingent Capital Trust III	Wilmington	1, 5	Financial Institution	0.0
644	Deutsche Bank Contingent Capital Trust IV	Wilmington	1, 5	Financial Institution	0.0
645	Deutsche Bank Contingent Capital Trust V	Wilmington	1, 5	Financial Institution	0.0
646	Deutsche Bank Luxembourg S.A. - Fiduciary Deposits	Luxembourg	2, 8	Other Enterprise	
647	Deutsche Bank Luxembourg S.A. - Fiduciary Note Programme	Luxembourg	2, 8	Other Enterprise	
648	Deutsche Bank SPEARs/LIFERs, Series DBE-7001 Trust	George Town	4	Ancillary Services Undertaking	26.7
649	Deutsche Bank SPEARs/LIFERs, Series DBE-7002 Trust	George Town	4	Ancillary Services Undertaking	14.2
650	Deutsche Bank SPEARs/LIFERs, Series DBE-7003 Trust	George Town	4	Ancillary Services Undertaking	5.0
651	Deutsche Bank SPEARs/LIFERs, Series DBE-7004 Trust	George Town	4	Ancillary Services Undertaking	5.0
652	Deutsche Bank SPEARs/LIFERs, Series DBE-7005 Trust	George Town	4	Ancillary Services Undertaking	5.0
653	Deutsche Bank SPEARs/LIFERs, Series DBE-7006 Trust	George Town	4	Ancillary Services Undertaking	14.3
654	Deutsche Bank SPEARs/LIFERs, Series DBE-7007 Trust	George Town	4	Ancillary Services Undertaking	100.0
655	Deutsche Bank SPEARs/LIFERs, Series DBE-7008 Trust	George Town	4	Ancillary Services Undertaking	5.0
656	Deutsche Bank SPEARs/LIFERs, Series DBE-7009 Trust	George Town	4	Ancillary Services Undertaking	5.0
657	Deutsche Colombia S.A.S.	Bogotá	1	Securities Trading Firm	100.0
658	Deutsche Income Trust - Deutsche Ultra-Short Investment Grade Fund	Boston	2	Other Enterprise	100.0
659	Deutsche Postbank Funding LLC I	Wilmington	1	Financial Institution	100.0
660	Deutsche Postbank Funding LLC II	Wilmington	1	Financial Institution	100.0
661	Deutsche Postbank Funding LLC III	Wilmington	1	Financial Institution	100.0
662	Deutsche Postbank Funding Trust I	Wilmington	1, 5	Financial Institution	0.0
663	Deutsche Postbank Funding Trust II	Wilmington	1, 5	Financial Institution	0.0
664	Deutsche Postbank Funding Trust III	Wilmington	1, 5	Financial Institution	0.0
665	Deutsche Services Polska Sp. z o.o.	Warsaw	1	Ancillary Services Undertaking	100.0
666	Dusk LLC	Wilmington	1	Ancillary Services Undertaking	100.0
667	DWS Garant 80 FPI	Luxembourg	2	Other Enterprise	
668	DWS Garant Top Dividende 2018	Luxembourg	2	Other Enterprise	
669	DWS World Protect 90	Luxembourg	2	Other Enterprise	
670	DWS Zeitwert Protect	Luxembourg	2	Other Enterprise	
671	Dynamic Infrastructure Securities Fund LP	Wilmington	2	Financial Institution	
672	Earls Eight Limited	George Town	2, 8	Other Enterprise	
673	Earls Four Limited	George Town	2, 8	Other Enterprise	

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
674	EARLS Trading Limited	George Town	2	Financial Institution	
675	Einkaufszentrum "HVD Dresden" S.à.r.l & Co. KG	Cologne	2	Other Enterprise	
676	Eirles Three Designated Activity Company	Dublin	2, 8	Financial Institution	
677	Eirles Two Designated Activity Company	Dublin	2, 8	Financial Institution	
678	Elmo Funding GmbH	Eschborn	1	Financial Institution	100.0
679	Elmo Leasing Vierzehnte GmbH	Eschborn	1	Ancillary Services Undertaking	100.0
680	Emerald Asset Repackaging Designated Activity Company	Dublin	1	Financial Institution	100.0
681	Emerging Markets Capital Protected Investments Limited	George Town	2, 8	Other Enterprise	
682	Emeris	George Town	2	Securities Trading Firm	
683	Epicuro SPV S.r.l.	Conegliano	2	Financial Institution	
684	Erste Frankfurter Hoist GmbH	Eschborn	1	Financial Institution	100.0
685	Eurohome (Italy) Mortgages S.r.l.	Conegliano	2	Financial Institution	
686	European Strategic Real Estate Fund ICAV	Dublin	2	Other Enterprise	
687	Feale Sp. z o.o.	Wolica	2	Other Enterprise	
688	Fondo Privado de Titulizacion Activos Reales 1 B.V.	Amsterdam	2	Other Enterprise	
689	Fondo Privado de Titulización PYMES I Limited	Dublin	2	Financial Institution	
690	FRANKFURT CONSULT GmbH	Frankfurt	1	Financial Institution	100.0
691	Fundo de Investimento em Direitos Creditórios Não-Padronizados - Precatórios Federais DB I	Rio de Janeiro	4	Financial Institution	100.0
692	Fundo de Investimento em Quotas de Fundos de Investimento em Direitos Creditórios Não-Padronizados Global Markets	Rio de Janeiro	4	Financial Institution	100.0
693	G.O. IB-US Management, L.L.C.	Wilmington	1	Financial Institution	100.0
694	GAC-HEL, Inc.	Wilmington	1	Ancillary Services Undertaking	100.0
695	Gladyr Spain, S.L.	Madrid	2	Financial Institution	
696	Glamour Bulk 1 Maritime Limited	Monrovia	2	Other Enterprise	
697	Global Markets Fundo de Investimento Multimercado	Rio de Janeiro	4	Financial Institution	100.0
698	Global Markets III Fundo de Investimento Multimercado - Crédito Privado e Investimento No Exterior	Rio de Janeiro	4	Financial Institution	100.0
699	Global Opportunities Co-Investment Feeder, LLC	Wilmington	2	Financial Institution	
700	Global Opportunities Co-Investment, LLC	George Town	2	Financial Institution	
701	Groton Invest, S.L.	Madrid	2	Financial Institution	
702	Grundstücksverwaltung Martin-Behaim-Strasse Gewerbeimmobi-lien Limited & Co. KG	Frankfurt	2, 3	Other Enterprise	
703	GWC-GAC Corp.	Wilmington	1	Ancillary Services Undertaking	100.0
704	Hamildak Designated Activity Company	Dublin	2	Financial Institution	
705	Harbour Finance Limited (in liquidation)	Dublin	1, 5	Financial Institution	0.0
706	Harvest Select Funds - Harvest China Fixed Income Fund II	Hong Kong	2	Other Enterprise	
707	Iberia Inversiones Designated Activity Company	Dublin	2	Financial Institution	
708	Iberia Inversiones II Designated Activity Company	Dublin	2	Financial Institution	
709	India Debt Opportunities Fund	Mumbai	2	Ancillary Services Undertaking	
710	Infrastructure Holdings (Cayman) SPC	George Town	2	Financial Institution	
711	Inn Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
712	Investor Solutions Limited	St. Helier	2, 8	Other Enterprise	
713	Isar Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
714	iShares Edge MSCI Australia Minimum Volatility ETF	Melbourne	2	Other Enterprise	91.7
715	IVAF (Jersey) Limited	St. Helier	2	Ancillary Services Undertaking	
716	Kelona Invest, S.L.	Madrid	2	Other Enterprise	
717	Kelsey Street LLC	Wilmington	1	Ancillary Services Undertaking	100.0
718	Kingfisher Holdings LLC	Wilmington	1	Financial Institution	100.0
719	KOMPASS 3 Beteiligungsgesellschaft mbH	Duesseldorf	4	Financial Institution	50.0
720	KOMPASS 3 Erste Beteiligungsgesellschaft mbH & Co. Euro KG i.L.	Duesseldorf	1, 3	Ancillary Services Undertaking	96.1
721	KOMPASS 3 Zweite Beteiligungsgesellschaft mbH & Co. USD KG i.L.	Duesseldorf	1, 3	Ancillary Services Undertaking	97.0
722	Kratus Inversiones Designated Activity Company	Dublin	2	Financial Institution	
723	La Fayette Dedicated Basket Ltd.	Road Town	2	Securities Trading Firm	
724	Ledyard, S.L.	Madrid	2	Other Enterprise	
725	Leo Consumo 1 S.r.l.	Conegliano	2	Financial Institution	
726	Leo Consumo 2 S.r.l.	Conegliano	1	Financial Institution	70.0
727	87 Leonard Development LLC	Wilmington	1	Ancillary Services Undertaking	100.0
728	Leonardo Charitable 1 Limited	George Town	2	Ancillary Services Undertaking	
729	Leonardo Secondary Opportunities Fund III (Alternate GP of GP), LP	Wilmington	2, 3	Financial Institution	
730	Leonardo Secondary Opportunities Fund III (Alternate GP), LP	Wilmington	2, 3	Financial Institution	
731	Leonardo Secondary Opportunities Fund III (GP) Limited	George Town	2	Financial Institution	
732	Leonardo Secondary Opportunities Fund III (Limited Partner) Limited	George Town	2	Financial Institution	
733	Leonardo Secondary Opportunities III (SLP GP) Limited	Edinburgh	2	Financial Institution	
734	Leonardo Secondary Opportunities III SLP, LP	Edinburgh	3, 4	Financial Institution	0.3
735	Life Mortgage S.r.l.	Conegliano	2	Financial Institution	

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
736	Lindsell Finance Limited	St. Julian's	1	Ancillary Services Undertaking	100.0
737	Lockwood Invest, S.L.	Madrid	2	Financial Institution	
738	London Industrial Leasing Limited	London	1	Financial Institution	100.0
739	Lupus alpha Low Beta Risk-Premium	Frankfurt	2	Other Enterprise	100.0
740	Macondo Spain SL	Madrid	2	Other Enterprise	100.0
741	Malabo Holdings Designated Activity Company	Dublin	2	Financial Institution	
742	Manta Acquisition LLC	Wilmington	1	Financial Institution	100.0
743	Manta Group LLC	Wilmington	1	Financial Institution	100.0
744	Maxima Alpha Bomaral Limited (in liquidation)	St. Helier	2	Securities Trading Firm	
745	Memax Pty. Limited	Sydney	1	Financial Institution	100.0
746	Merlin I	George Town	2	Securities Trading Firm	
747	Merlin XI	George Town	2	Securities Trading Firm	
748	Meseta Inversiones Designated Activity Company	Dublin	2	Financial Institution	
749	Mexico Capital Protected Investments Limited	George Town	2, 8	Other Enterprise	
750	Micro-E Finance S.r.l.	Rome	2	Financial Institution	
751	Midsel Limited	London	2	Other Enterprise	100.0
752	Mira GmbH & Co. KG	Frankfurt	1, 3	Ancillary Services Undertaking	100.0
753	Moon Leasing Limited	London	1	Financial Institution	100.0
754	Motion Picture Productions One GmbH & Co. KG	Frankfurt	1, 3	Financial Institution	100.0
755	MPP Beteiligungsgesellschaft mbH	Frankfurt	1	Financial Institution	100.0
756	Naturaleza Maritima S.A.	Panama City	2	Other Enterprise	
757	NCW Holding Inc.	Vancouver	1	Financial Institution	100.0
758	New 87 Leonard, LLC	Wilmington	1	Financial Institution	100.0
759	Nineco Leasing Limited	London	1	Financial Institution	100.0
760	Nortfol Pty. Limited	Sydney	1	Financial Institution	100.0
761	Oasis Securitisation S.r.l.	Conegliano	1, 5	Financial Institution	0.0
762	Oder Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
763	OPAL, en liquidation volontaire	Luxembourg	2, 8	Other Enterprise	
764	Opus Niestandaryzowany Sekurytyzacyjny Fundusz Inwestycyjny Zamkniety	Warsaw	2	Financial Institution	
765	Oran Limited	George Town	2	Financial Institution	
766	OTTAM Mexican Capital Trust Designated Activity Company	Dublin	2, 8	Financial Institution	
767	Palladium Securities 1 S.A.	Luxembourg	2, 8	Financial Institution	
768	PanAsia Funds Investments Ltd.	George Town	2, 8	Financial Institution	
769	PARTS Funding, LLC	Wilmington	1	Financial Institution	100.0
770	PARTS Student Loan Trust 2007 - CT1	Wilmington	1	Financial Institution	100.0
771	PD Germany Funding Company II, Ltd.	George Town	2	Financial Institution	
772	PD Germany Funding Company IV, Ltd.	George Town	2	Financial Institution	
773	PD Germany Funding Company V, Ltd.	George Town	2	Financial Institution	
774	PEIF II SLP Feeder, L.P.	Edinburgh	4	Financial Institution	0.7
775	Peruda Leasing Limited	London	1	Financial Institution	100.0
776	PERUS 1 S.à r.l.	Luxembourg	2	Financial Institution	
777	Philippine Opportunities for Growth and Income (SPV-AMC), INC.	Manila	1	Financial Institution	95.0
778	Pinehurst Securities SA	Luxembourg	2, 8	Financial Institution	
779	Port Elizabeth Holdings LLC	Wilmington	1	Financial Institution	100.0
780	Primus Solutions ICAV	Dublin	2	Other Enterprise	
781	Quantum 13 LLC	Wilmington	1	Ancillary Services Undertaking	100.0
782	Quartz No. 1 S.A.	Luxembourg	1, 5	Financial Institution	0.0
783	Reference Capital Investments Limited	London	1	Financial Institution	100.0
784	REO Properties Corporation	Wilmington	1	Ancillary Services Undertaking	100.0
785	REO Properties Corporation II	Wilmington	1, 5	Ancillary Services Undertaking	0.0
786	Residential Mortgage Funding Trust	Toronto	2	Financial Institution	
787	Rhine Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
788	Riviera Real Estate	Paris	2	Other Enterprise	100.0
789	RM Ayr Limited (in liquidation)	Dublin	2	Financial Institution	
790	RM Chestnut Limited (in liquidation)	Dublin	2	Financial Institution	
791	RM Fife Limited (in liquidation)	Dublin	2	Financial Institution	
792	RM Multi-Asset Limited (in liquidation)	Dublin	2	Financial Institution	
793	RM Sussex Limited (in liquidation)	Dublin	2	Financial Institution	
794	Romareda Holdings Designated Activity Company	Dublin	2	Financial Institution	
795	RREEF North American Infrastructure Fund B, L.P.	Wilmington	1	Financial Institution	99.9
796	SABRE Securitisation Limited	Sydney	2	Other Enterprise	
797	SCB Alpspitze UG (haftungsbeschränkt)	Frankfurt	2	Financial Institution	
798	Select Access Investments Limited	Sydney	2, 8	Other Enterprise	
799	Singer Island Tower Suite LLC	Wilmington	1	Ancillary Services Undertaking	100.0
800	Sixco Leasing Limited	London	1	Financial Institution	100.0
801	SMART SME CLO 2006-1, Ltd.	George Town	2	Financial Institution	
802	SOLIDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	1	Financial Institution	100.0
803	Somkid Immobiliare S.r.l.	Conegliano	2	Other Enterprise	100.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
804	SP Mortgage Trust	Wilmington	2	Other Enterprise	100.0
805	Strategic Global Opportunities Limited - Class A Main USD	Nassau	2	Financial Institution	
806	Swabia 1 Designated Activity Company	Dublin	2	Financial Institution	
807	Swabia 1. Vermögensbesitz-GmbH	Eschborn	1	Financial Institution	100.0
808	Tagus - Sociedade de Titularização de Creditos, S.A.	Lisbon	1	Financial Institution	100.0
809	The Canary Star Trust	George Town	4	Ancillary Services Undertaking	100.0
810	The Emperor Star Trust	George Town	4	Ancillary Services Undertaking	100.0
811	The India Debt Opportunities Fund Limited	Ebène	2	Ancillary Services Undertaking	
812	Trave Properties S.à r.l., en faillite	Luxembourg	2	Other Enterprise	25.0
813	TRS Aria LLC	Wilmington	4	Financial Institution	100.0
814	TRS Birch II LTD	George Town	1	Financial Institution	100.0
815	TRS Birch LLC	Wilmington	2	Other Enterprise	100.0
816	TRS Cypress II LTD	George Town	1	Financial Institution	100.0
817	TRS Elm II LTD	George Town	1	Financial Institution	100.0
818	TRS Leda LLC	Wilmington	4	Financial Institution	100.0
819	TRS Maple II LTD	George Town	1	Financial Institution	100.0
820	TRS Oak II LTD	George Town	1	Financial Institution	100.0
821	TRS Oak LLC	Wilmington	2	Other Enterprise	100.0
822	TRS Poplar II LTD	George Town	1	Financial Institution	100.0
823	TRS Scorpio LLC	Wilmington	4	Financial Institution	100.0
824	TRS Spruce II LTD	George Town	1	Financial Institution	100.0
825	TRS SVCO LLC	Wilmington	4	Financial Institution	100.0
826	TRS Sycamore II LTD	George Town	1	Financial Institution	100.0
827	TRS Tupelo II LTD	George Town	1	Financial Institution	100.0
828	TRS Venor LLC	Wilmington	4	Financial Institution	100.0
829	TRS Walnut II LTD	George Town	1	Financial Institution	100.0
830	TRS Walnut LLC	Wilmington	2	Other Enterprise	100.0
831	Vanguard Diversified Conservative Index ETF	Melbourne	2	Other Enterprise	55.3
832	VCM Golding Mezzanine GmbH & Co. KG	Munich	2, 3, 5	Financial Institution	0.0
833	Vermögensfondmandat Flexible (80% teilgeschützt)	Luxembourg	2	Other Enterprise	
834	Wedverville Spain, S.L.	Madrid	2	Other Enterprise	
835	Wendelstein 2015-1 UG (haftungsbeschränkt)	Frankfurt	2	Financial Institution	
836	Wendelstein 2017-1 UG (haftungsbeschränkt)	Frankfurt	2	Financial Institution	
837	Wibaux Invest, S.L.	Madrid	2	Other Enterprise	
838	ZALLUS Beteiligungsgesellschaft mbH	Duesseldorf	4	Financial Institution	50.0
839	ZARAT Beteiligungsgesellschaft mbH	Duesseldorf	4	Financial Institution	50.0
840	ZARAT Beteiligungsgesellschaft mbH & Co. Leben II KG i.L.	Duesseldorf	1, 3	Ancillary Services Undertaking	98.1
841	ZELAS Beteiligungsgesellschaft mbH	Duesseldorf	4	Financial Institution	50.0
842	ZELAS Beteiligungsgesellschaft mbH & Co. Leben I KG i.L.	Duesseldorf	1, 3	Ancillary Services Undertaking	98.2
843	Zenwix Pty. Limited	Sydney	1	Financial Institution	100.0
844	Zumirez Drive LLC	Wilmington	1	Ancillary Services Undertaking	100.0
845	ZURET Beteiligungsgesellschaft mbH	Duesseldorf	4	Financial Institution	50.0

Companies accounted for at equity

Serial No.	Name of company	Domicile of company	Footnote	Nature of activity	Share of Capital in %
846	AcadiaSoft, Inc.	Wilmington		Other Enterprise	4.5
847	AKA Ausfuhrkredit-Gesellschaft mit beschränkter Haftung	Frankfurt		Credit Institution	26.9
848	Argantis GmbH i.L.	Cologne		Financial Institution	50.0
849	Baigo Capital Partners Fund 1 Parallel 1 GmbH & Co. KG	Bad Soden am Taunus		Financial Institution	49.8
850	BANKPOWER GmbH Personaldienstleistungen	Frankfurt		Other Enterprise	30.0
851	Bestra Gesellschaft für Vermögensverwaltung mit beschränkter Haftung	Duesseldorf		Financial Institution	49.0
852	BFDB Tax Credit Fund 2011, Limited Partnership	New York	9	Financial Institution	99.9
853	BVT-CAM Private Equity Beteiligungs GmbH	Gruenwald		Financial Institution	50.0
854	BVT-CAM Private Equity Management & Beteiligungs GmbH	Gruenwald		Financial Institution	50.0
855	Comfund Consulting Limited	Bangalore		Other Enterprise	30.0
856	Craigs Investment Partners Limited	Tauranga		Securities Trading Firm	49.9
857	Cyber Defence Alliance Limited	London	10	Other Enterprise	0.0
858	DB Real Estate Global Opportunities IB (Offshore), L.P.	Camana Bay		Financial Institution	34.3
859	DBG Eastern Europe II Limited Partnership	St. Helier		Financial Institution	25.9
860	Deutsche Börse Commodities GmbH	Eschborn		Other Enterprise	16.2
861	Deutsche Gulf Finance	Riyadh		Financial Institution	29.1
862	Deutsche Regis Partners, Inc.	Makati City		Securities Trading Firm	49.0
863	Deutsche TISCO Investment Advisory Company Limited	Bangkok		Securities Trading Firm	49.0
864	Deutsche Zurich Pensiones Entidad Gestora de Fondos de Pensiones, S.A.	Barcelona		Other Enterprise	50.0
865	Deutscher Pensionsfonds Aktiengesellschaft	Bonn		Other Enterprise	25.1
866	DIL Internationale Leasinggesellschaft mbH	Duesseldorf		Financial Institution	50.0
867	Domus Beteiligungsgesellschaft der Privaten Bausparkassen mbH	Berlin		Financial Holding Company	21.1
868	Elbe Properties S.à r.l.	Luxembourg		Other Enterprise	25.0
869	eolec	Issy-les-Moulineaux		Other Enterprise	33.3
870	equiNotes Management GmbH	Duesseldorf		Other Enterprise	50.0
871	EVROENERGIAKI S.A.	Athens		Other Enterprise	40.0
872	Fünfte SAB Treuhand und Verwaltung GmbH & Co. "Leipzig-Magdeburg" KG	Bad Homburg		Other Enterprise	41.2
873	Fünfte SAB Treuhand und Verwaltung GmbH & Co. Dresden "Louisenstraße" KG	Bad Homburg		Other Enterprise	30.6
874	G.O. IB-SIV Feeder, L.L.C.	Wilmington		Financial Institution	15.7
875	German Public Sector Finance B.V.	Amsterdam		Financial Institution	50.0
876	Gesellschaft für Kreditsicherung mit beschränkter Haftung	Berlin		Financial Institution	36.7
877	giropay GmbH	Frankfurt		Other Enterprise	33.3
878	Gordian Knot Limited	London		Other Enterprise	24.7
879	Great Future International Limited	Road Town		Financial Institution	43.0
880	Grundstücksgesellschaft Bürohäuser Köln Rheinhallen GbR	Troisdorf	3	Other Enterprise	15.6
881	Grundstücksgesellschaft Karlsruhe Kaiserstraße GbR	Troisdorf	3	Other Enterprise	3.4
882	Grundstücksgesellschaft Köln Messe 15-18 GbR	Troisdorf	3	Other Enterprise	10.5
883	Grundstücksgesellschaft Köln Oppenheimstraße GbR	Troisdorf	3, 10	Other Enterprise	0.0
884	Grundstücksgesellschaft Köln-Merheim Winterberger Straße GbR	Troisdorf	3, 10	Other Enterprise	0.0
885	Grundstücksgesellschaft Köln-Ossendorf VI GbR	Troisdorf	3	Other Enterprise	44.9
886	Grundstücksgesellschaft München Synagogenplatz GbR	Troisdorf	3, 10	Other Enterprise	0.0
887	Grundstücksgesellschaft Schillingsrotter Weg GbR	Troisdorf	3, 10	Other Enterprise	0.0
888	Harvest Fund Management Co., Ltd.	Shanghai		Investment Firm	30.0
889	Huarong Rongde Asset Management Company Limited	Beijing		Financial Institution	40.7
890	ILV Immobilien-Leasing Verwaltungsgesellschaft Düsseldorf mbH	Duesseldorf		Financial Institution	50.0
891	Immobilienfonds Bürohaus Düsseldorf Grafenberg GbR	Troisdorf	3	Other Enterprise	10.0
892	Immobilienfonds Bürohaus Düsseldorf Parsevalstraße GbR	Cologne	3	Other Enterprise	7.0
893	Immobilienfonds Köln-Deutz Arena und Mantelbebauung GbR	Troisdorf	3	Other Enterprise	7.7
894	Immobilienfonds Köln-Ossendorf II GbR	Troisdorf	3	Other Enterprise	9.7
895	iSwap Limited	London		Financial Institution	14.0
896	IZI Düsseldorf Informations-Zentrum Immobilien Gesellschaft mit beschränkter Haftung	Duesseldorf		Financial Institution	21.1
897	IZI Düsseldorf Informations-Zentrum Immobilien GmbH & Co. Kommanditgesellschaft	Duesseldorf		Other Enterprise	25.0
898	KVD Singapore Pte. Ltd.	Singapore		Financial Institution	30.1
899	Lion Residential Holdings S.à r.l.	Luxembourg		Financial Institution	17.4
900	MidOcean Partners, L.P.	Wilmington		Financial Institution	20.0
901	North Coast Wind Energy Corp.	Vancouver	9	Other Enterprise	96.7
902	P.F.A.B. Passage Frankfurter Allee Betriebsgesellschaft mbH	Berlin		Other Enterprise	22.2
903	Parkhaus an der Börse GbR	Cologne	3	Other Enterprise	37.7
904	PERILLA Beteiligungsgesellschaft mbH	Duesseldorf		Financial Institution	50.0
905	Private Equity Gesellschaft bürgerlichen Rechts	Cologne	3, 10	Financial Institution	0.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
906	Raymond James New York Housing Opportunities Fund I-A L.L.C.	New York		Financial Institution	33.0
907	Raymond James New York Housing Opportunities Fund I-B L.L.C.	New York		Financial Institution	33.3
908	Raymond James New York Housing Opportunities Fund II L.L.C.	New York		Financial Institution	17.1
909	Raymond James New York Upstate Housing Opportunities Fund I L.L.C.	New York		Financial Institution	24.9
910	Relax Holding S.à r.l.	Luxembourg		Other Enterprise	20.0
911	REON - Park Wiatrowy I Sp. z o.o.	Warsaw		Other Enterprise	50.0
912	REON-Park Wiatrowy II Sp. z o.o.	Warsaw		Other Enterprise	50.0
913	REON-Park Wiatrowy IV Sp. z o.o.	Warsaw		Other Enterprise	50.0
914	Robuterra AG	Zurich	10	Financial Institution	0.0
915	Sakaras Holding Limited	Birkirkara	10	Financial Institution	0.0
916	SRC Security Research & Consulting GmbH	Bonn		Other Enterprise	22.5
917	Starpool Finanz GmbH	Berlin		Other Enterprise	49.9
918	Teesside Gas Transportation Limited	London		Other Enterprise	45.0
919	TradeWeb Markets LLC	Wilmington		Investment Firm	4.9
920	Triton Beteiligungs GmbH	Frankfurt		Financial Institution	33.1
921	U.S.A. Institutional Tax Credit Fund C L.P.	Dover		Financial Institution	18.9
922	U.S.A. Institutional Tax Credit Fund CVI L.P.	Dover		Financial Institution	13.8
923	U.S.A. Institutional Tax Credit Fund XCV L.P.	Dover		Financial Institution	23.5
924	U.S.A. ITCF XCI L.P.	New York	9	Financial Institution	99.9
925	UKEM Motoryacht Medici Mangusta GbR	Troisdorf	3, 10	Other Enterprise	0.0
926	Ullmann Krockow Esch GbR	Troisdorf	3, 10	Other Enterprise	0.0
927	Ullmann, Krockow, Esch Luftverkehrsgesellschaft bürgerlichen Rechts	Troisdorf	3, 10	Other Enterprise	0.0
928	Verimi GmbH	Frankfurt		Other Enterprise	11.1
929	Volbroker.com Limited	London		Financial Institution	22.5
930	Weser Properties S.à r.l.	Luxembourg		Other Enterprise	25.0
931	zeitinvest-Service GmbH	Eschborn		Other Enterprise	25.0
932	Zhong De Securities Co., Ltd	Beijing		Investment Firm	33.3
933	ZINDUS Beteiligungsgesellschaft mbH	Duesseldorf		Financial Institution	50.0
934	ZYRUS Beteiligungsgesellschaft mbH	Schoenefeld		Financial Institution	25.0
935	ZYRUS Beteiligungsgesellschaft mbH & Co. Patente I KG i.L.	Schoenefeld		Other Enterprise	20.4

Other Companies, where the holding exceeds 20 %

Serial No.	Name of company	Domicile of company	Footnote	Nature of activity	Share of Capital in %
936	ABATE Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
937	ABRI Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
938	AC VI Initiatoren GmbH & Co. KG	Munich	11	Financial Institution	25.0
939	Acamar Holding S.A.	Luxembourg	9, 11	Other Enterprise	95.0
940	ACHTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
941	ACHTUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
942	ACHTZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
943	ACIS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
944	ACTIO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
945	Adara S.A.	Luxembourg	9, 11	Other Enterprise	95.0
946	ADEO Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
947	ADLAT Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
948	ADMANU Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
949	Agena S.A.	Luxembourg	9, 11	Other Enterprise	95.0
950	AGLOM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
951	AGUM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
952	ALANUM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
953	ALMO Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
954	ALTA Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
955	ANDOT Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
956	APUR Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
957	ATAUT Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
958	AVOC Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
959	BAKTU Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
960	BALIT Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
961	Banks Island General Partner Inc.	Toronto	11	Financial Institution	50.0
962	Benefit Trust GmbH	Luetzen	1, 12,	Financial Institution	100.0
963	BIMES Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
964	BLI Beteiligungsgesellschaft für Leasinginvestitionen mbH	Duesseldorf	11	Financial Institution	33.2
965	BLI Internationale Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	32.0
966	BrisConnections Holding Trust	Kedron	14	Other Enterprise	35.6
967	BrisConnections Investment Trust	Kedron	14	Other Enterprise	35.6
968	DB Advisors SICAV	Luxembourg	12, 15	Other Enterprise	96.1
969	DB Petri LLC	Wilmington	12	Financial Institution	100.0
970	DB Placement, LLC	Wilmington	9, 11	Other Enterprise	100.0
971	DB RC Investments II, LLC	Wilmington	9, 11	Financial Institution	99.9
972	Deutsche River Investment Management Company S.à r.l., en faillite	Luxembourg	11	Financial Institution	49.0
973	DIL Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
974	DONARUM Holding GmbH	Duesseldorf	11	Financial Institution	50.0
975	DREIUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
976	DREIZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
977	DRITTE Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
978	DRITTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
979	EINUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
980	ELC Logistik-Centrum Verwaltungs-GmbH	Erfurt	11	Financial Institution	50.0
981	ELFTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
982	FÜNFTE Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
983	FÜNFTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
984	FÜNFUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH i.L.	Duesseldorf	11	Other Enterprise	50.0
985	FÜNFZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
986	Glor Music Production GmbH & Co. KG	Valley-Oberlaindern	14	Other Enterprise	21.2
987	Grundstücksvermietungsgesellschaft Wilhelmstr. mbH i.L.	Gruenwald	12	Financial Institution	100.0
988	HR "Simone" GmbH & Co. KG	Jork	14	Other Enterprise	21.8
989	Immobilien-Vermietungsgesellschaft Schumacher GmbH & Co. Objekt Rolandufer KG	Berlin	11	Financial Institution	20.5
990	Intermodal Finance I Ltd.	George Town	11	Other Enterprise	49.0
991	IOG Denali Upton, LLC	Dover	14	Other Enterprise	23.0
992	IOG NOD I, LLC	Dover	14	Other Enterprise	22.5
993	Isaac Newton S.A.	Luxembourg	9, 11,	Other Enterprise	95.0
994	Kinneil Leasing Company	London	3, 11	Financial Institution	35.0
995	M Cap Finance Mittelstandsfonds GmbH & Co. KG	Frankfurt	9, 14,	Financial Institution	77.1
996	Maestrale Projects (Holding) S.A.	Luxembourg	11	Financial Institution	49.7
997	Magalhaes S.A.	Luxembourg	9, 11	Other Enterprise	95.0
998	MCT Südafrika 3 GmbH & Co. KG	Hamburg	14	Other Enterprise	35.3

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
999	Metro plus Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	40.0
1000	MFG Flughafen-Grundstücksverwaltungsgesellschaft mbH & Co. BETA KG i.L.	Gruenwald	14	Other Enterprise	29.6
1001	MT "CAPE BEALE" Tankschiffahrts GmbH & Co. KG	Hamburg	14	Other Enterprise	23.9
1002	MT "KING DANIEL" Tankschiffahrts GmbH & Co. KG	Hamburg	14	Other Enterprise	23.4
1003	MT "KING DOUGLAS" Tankschiffahrts GmbH & Co. KG	Hamburg	14	Other Enterprise	23.5
1004	MT "KING EDWARD" Tankschiffahrts GmbH & Co. KG	Hamburg	14	Other Enterprise	27.1
1005	MT "KING ERIC" Tankschiffahrts GmbH & Co. KG	Hamburg	14	Other Enterprise	26.4
1006	NBG Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1007	NEUNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1008	NEUNZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1009	New Energy Biomasse Hellas GmbH i.L.	Duesseldorf	11	Other Enterprise	50.0
1010	Nexus Infrastruktur Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1011	NOFA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1012	NV Profit Share Limited	George Town	11	Other Enterprise	42.9
1013	OPPENHEIM Buy Out GmbH & Co. KG i.L.	Cologne	3, 5, 1	Financial Institution	27.7
1014	PADEM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1015	PAGUS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1016	PALDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1017	PANIS Grundstücks-Vermietungsgesellschaft mbH i.l.	Duesseldorf	11	Financial Institution	50.0
1018	PANTUR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1019	PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1020	PEDIS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1021	PEDUM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1022	PENDIS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1023	PENTUM Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1024	PERGOS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1025	PERGUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1026	PERLIT Mobilien-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1027	PERLU Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1028	PERNIO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1029	PERXIS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1030	PETA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1031	PONTUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1032	PRADUM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1033	PRASEM Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1034	PRATES Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1035	PRISON Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1036	Private Equity Invest Beteiligungs GmbH	Duesseldorf	11	Financial Institution	50.0
1037	Private Equity Life Sciences Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1038	PUDU Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1039	PUKU Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1040	PURIM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1041	QUANTIS Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1042	QUELLUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1043	QUOTAS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1044	SABIS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1045	SALIX Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1046	SALUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1047	SALUS Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Dresden KG	Duesseldorf	12	Financial Institution	58.5
1048	SANCTOR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1049	SANDIX Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1050	SANO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1051	SARIO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1052	SATINA Mobilien-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1053	SCANDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1054	SCHEDA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1055	Schumacher Beteiligungsgesellschaft mbH	Cologne	11	Financial Institution	33.2
1056	SCITOR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1057	SCITOR Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Heiligen-stadt KG	Duesseldorf	12	Financial Institution	71.1
1058	SCUDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1059	SCUDO Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Kleine Alexanderstraße KG i.L.	Duesseldorf	12	Other Enterprise	95.0
1060	SECHSTE Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1061	SECHSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1062	SECHZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1063	SEDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1064	SEGES Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1065	SEGU Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
1066	SELEKTA Grundstücksverwaltungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1067	SENA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1068	SENA Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Fehrenbach KG i.L.	Duesseldorf	12	Other Enterprise	94.7
1069	SENA Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Kamenz KG	Duesseldorf	9, 11	Financial Institution	100.0
1070	SERICA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1071	SIDA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1072	SIEBTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1073	SIEBZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1074	SIFA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1075	SILANUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1076	SILEX Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1077	SILEX Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Berlin KG i.L.	Duesseldorf	1, 12	Financial Institution	83.8
1078	SILIGO Mobilien-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1079	SILUR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1080	SIMILA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1081	SOLATOR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1082	SOLON Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1083	SOLON Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Heizkraft-werk Halle KG i.L.	Halle/Saale	11	Other Enterprise	30.5
1084	SOLUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1085	SOMA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1086	SOREX Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1087	SOSPITA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1088	SPhinX, Ltd. (in voluntary liquidation)	George Town	11	Other Enterprise	43.6
1089	SPINO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Other Enterprise	100.0
1090	SPLENDOR Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1091	STABLON Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1092	STAGIRA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1093	STATOR Heizkraftwerk Frankfurt (Oder) Beteiligungsgesellschaft mbH	Schoenefeld	12	Financial Institution	100.0
1094	SUBLICA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1095	SUBU Mobilien-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1096	SULPUR Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1097	SUPERA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1098	SUPLION Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1099	SUSA Mobilien-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1100	SUSIK Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1101	TABA Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1102	TACET Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1103	TAGO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1104	TAGUS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1105	TAKIR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1106	TEBOR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1107	TEMATIS Grundstücks-Vermietungsgesellschaft mbH i.L.	Duesseldorf	12	Financial Institution	100.0
1108	TERRUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1109	TESATUR Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1110	TESATUR Beteiligungsgesellschaft mbH & Co. Objekt Halle I KG	Duesseldorf	1, 12	Financial Institution	100.0
1111	TESATUR Beteiligungsgesellschaft mbH & Co. Objekt Nordhausen I KG	Duesseldorf	1, 12	Financial Institution	100.0
1112	TIEDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1113	TIEDO Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Lager Nord KG	Duesseldorf	11	Financial Institution	25.0
1114	TOSSA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1115	TRAGO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1116	TREMA Grundstücks-Vermietungsgesellschaft mbH	Berlin	11	Financial Institution	50.0
1117	TRENTO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1118	TRINTO Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1119	TRIPLA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	12	Financial Institution	100.0
1120	Triton Fund III G L.P.	St. Helier	9, 11,	Financial Institution	62.5
1121	TUDO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1122	TUGA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1123	TYRAS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1124	VARIS Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1125	VCJ Lease S.à r.l.	Luxembourg	9, 11	Other Enterprise	95.0
1126	VCL Lease S.à r.l.	Luxembourg	9, 11	Other Enterprise	95.0
1127	VCM Initiatoren III GmbH & Co. KG	Munich	11	Financial Institution	24.9
1128	VCM Partners GmbH & Co. KG	Munich	11	Financial Institution	25.0
1129	VIERTE Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1130	VIERTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1131	VIERUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1132	VIERZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
1133	Wohnungs-Verwaltungsgesellschaft Moers mbH	Duesseldorf	11	Financial Institution	50.0
1134	Wohnungsgesellschaft HEGEMAG GmbH	Darmstadt	11	Financial Institution	50.0
1135	XARUS Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1136	XELLUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1137	XENTIS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1138	XERA Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1139	ZABATUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1140	ZAKATUR Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1141	ZARGUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1142	ZEA Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	25.0
1143	ZEHNTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1144	ZENO Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1145	ZEPTOS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1146	ZEREVIS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1147	ZERGUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1148	ZIDES Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1149	ZIMBEL Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1150	ZINUS Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1151	ZIRAS Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1152	ZITON Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1153	ZITUS Grundstücks-Vermietungsgesellschaft mbH	Schoenefeld	11	Financial Institution	50.0
1154	ZONTUM Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1155	ZORUS Grundstücks-Vermietungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1156	ZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1157	ZWEITE Fonds-Beteiligungsgesellschaft mbH	Duesseldorf	11	Financial Institution	50.0
1158	ZWEITE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1159	ZWEIUNDZWANZIGSTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1160	ZWÖLFTE PAXAS Treuhand- und Beteiligungsgesellschaft mbH	Duesseldorf	11	Other Enterprise	50.0
1161	ZYLUM Beteiligungsgesellschaft mbH	Schoenefeld	11	Financial Institution	25.0

Holdings in large corporations, where the holding exceeds 5 % of the voting rights

Serial No.	Name of company	Domicile of company	Foot-note	Nature of activity	Share of Capital in %
1162	ABRAAJ Holdings	George Town		Financial Institution	8.8
1163	Accunia A/S	Copenhagen		Investment Firm	6.1
1164	BBB Bürgschaftsbank zu Berlin-Brandenburg GmbH	Berlin		Financial Institution	5.6
1165	Bürgschaftsbank Brandenburg GmbH	Potsdam		Financial Institution	8.5
1166	Bürgschaftsbank Mecklenburg-Vorpommern GmbH	Schwerin		Financial Institution	8.4
1167	Bürgschaftsbank Sachsen GmbH	Dresden		Financial Institution	6.3
1168	Bürgschaftsbank Sachsen-Anhalt GmbH	Magdeburg		Financial Institution	8.2
1169	Bürgschaftsbank Schleswig-Holstein Gesellschaft mit beschränkter Haftung	Kiel		Financial Institution	5.6
1170	Bürgschaftsbank Thüringen GmbH	Erfurt		Financial Institution	8.7
1171	Bürgschaftsgemeinschaft Hamburg GmbH	Hamburg		Financial Institution	8.7
1172	Cecon ASA	Arendal		Other Enterprise	9.6
1173	China Polymetallic Mining Limited	George Town		Other Enterprise	5.7
1174	DGHL Limited (in voluntary liquidation)	Camana Bay		Financial Institution	16.3
1175	Landgesellschaft Mecklenburg-Vorpommern mit beschränkter Haftung	Leezen		Other Enterprise	11.0
1176	MTS S.p.A.	Rome		Other Enterprise	5.0
1177	Philipp Holzmann Aktiengesellschaft i.I.	Frankfurt		Other Enterprise	19.5
1178	Prader Bank S.p.A.	Bolzano		Credit Institution	9.0
1179	Private Export Funding Corporation	Wilmington		Financial Institution	6.0
1180	PT Trikomsel OKE Tbk	Jakarta		Other Enterprise	12.0
1181	Saarländische Investitionskreditbank Aktiengesellschaft	Saarbruecken		Credit Institution	11.8
1182	Silver Creek Low Vol Strategies, Ltd.	George Town		Securities Trading Firm	10.5
1183	The Ottoman Fund Limited	St. Helier		Other Enterprise	13.6
1184	TRIUVA Kapitalverwaltungsgesellschaft mbH	Frankfurt		Asset Management Company	6.0
1185	Yensai.com Co., Ltd.	Tokyo		Investment Firm	7.1

Confirmations

Independent Auditor's Report

To Deutsche Bank Aktiengesellschaft, Frankfurt am Main

Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

Opinions

We have audited the consolidated financial statements of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at December 31, 2017, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, for the financial year from January 1 to December 31, 2017.

In our opinion, on the basis of the knowledge obtained in the audit,

– the accompanying consolidated financial statements comply, in all material respects, with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch – German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2017, and of its financial performance for the financial year from January 1 to December 31, 2017, and
– the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322(3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of Level 3 Financial Instruments and Unobservable Inputs therein

With regard to significant accounting policies and critical accounting estimates, we refer to Note 1 of the consolidated financial statements (sections "Financial Assets and Liabilities at Fair Value through Profit or Loss" and "Financial Assets Classified as Available for Sale"). For information on level 3 financial instruments, we refer to Note 13 of the consolidated financial statements.

The Financial Statement Risk

Level 3 financial instruments consist of financial assets and liabilities. As of the reporting date, the Group reports level 3 financial assets held at fair value in the amount of € 22.0 billion, representing 3.2 % of the financial assets at fair value and 1.5 % of total assets. Level 3 financial liabilities amount to € 7.1 billion, representing 1.5 % of the financial liabilities at fair value and 0.5 % of total assets, respectively.

By definition, market prices are not observable for the valuation of these financial instruments. The fair values are therefore to be determined on the basis of accepted valuation methods. These valuation methods may consist of complex models and can include assumptions and estimates over unobservable inputs which require judgment.

The financial statement risk arises particularly with respect to complex valuation models or unobservable valuation parameters that are used in determining fair values leading to level 3 financial instruments not being in accordance with accounting principles.

Our Audit Approach

To determine our audit approach, we initially evaluated the general suitability and the potential for misstatements in models and parameters including unobservable inputs and, where applicable, associated valuation adjustments used for the valuation of level 3 financial instruments.

Based on our risk assessment, we established an audit approach including control and substantive testing.

In order to assess the adequacy of the Group's internal controls regarding the valuation of financial instruments and determination of unobservable inputs therein we evaluated the design and implementation and tested operating effectiveness of key controls. We also made use of KPMG-internal valuation specialists as needed. Audit procedures included but were not limited to controls over:

– monthly independent price verification (IPV) procedures performed by the Group to assure the adequacy of input parameters used for level 3 financial instruments,
– model validation of valuation models used by the Group including respective governance,
– calculation and recording of valuation adjustments for credit risk, funding cost, and others required by accounting standards to determine fair values, and
– collateral disputes arising from counterparty valuation disagreements.

Where we had findings regarding design or effectiveness of controls, we tested additional compensating controls. We considered our audit results when designing nature and scope of additional substantive audit procedures.

We performed substantive procedures on a risk-based sample of level 3 financial instruments. These include in particular:

– performance of independent price verification (IPV), with usage of KPMG-internal valuation specialists on selected individual transactions of financial instruments,
– independent recalculation of selected valuation adjustments
– performance of procedures to determine adequacy of models used, including key inputs and their usage in the respective pricing models, and
– testing whether the non-observability of key inputs to level 3 financial instruments with reference to active markets was accurately assessed as required by the accounting standards.

Our Observations

Based on the results of our key controls testing and substantive audit procedures, we consider models and related parameters used for valuing level 3 financial instruments to be reasonable.

Loan Loss Allowances in Credit Portfolios of certain Industries

For a qualitative and quantitative description of the management of credit risks, including the valuation of loans, we refer to the Risk Report section in the group management report. With regard to significant accounting policies and critical accounting estimates we refer to note 1 of the consolidated financial statements (section "Impairment of Loans and Provision for Off-balance Sheet Positions"). For information on loans and allowance levels, we refer to notes 19 and 20 of the consolidated financial statements.

The Financial Statement Risk

As of the reporting date, the Group reports loans – net of loan loss provisions of € 3.9 billion – in the amount of € 401.7 billion, representing 27 % of total assets. In the financial year 2017, the Group recorded an amount of € 525 million as provision for credit losses in the consolidated statement of income.

As part of our risk assessment, we identified loans for borrowers in the segments of Shipping, Oil & Gas, as well as Metals, Mining & Steel as bearing a higher valuation risk due to industry-specific challenges. The gross exposure of loans in these higher-risk industries amounted to approximately € 15 billion. Of the related loan loss provision shown in the consolidated statement of income for the financial year 2017, € 198 million or 38 % of the provision in the lending business recognized in 2017 are applicable to the shipping portfolio.

The financial statement risk arises particularly from estimation uncertainties in the calculation of individually assessed loan loss allowance which are, especially in these industries, based upon judgmental assumptions and scenarios (i.e. recovery scenario, going concern scenario etc.), including assessments of proceeds from collateral.

Our Audit Approach

In order to perform a risk assessment and to plan our audit procedures, we conducted a portfolio analysis to assess the inherent valuation risks and to identify higher-risk industries. In addition, we assessed the Group's methodologies and key inputs used to derive individually assessed loan loss provisions.

Based on our risk assessment, we established an audit approach including control and substantive testing.

In our controls testing, we evaluated design, implementation and operating effectiveness of controls over valuation of loans. These include but are not limited to controls over:

– the review and approval of impairment policies and general methodology,
– the review for loans under enhanced monitoring,
– regular valuation of collateral, and
– the calculation and recording of individually assessed loan loss allowance.

In addition, we performed substantive audit procedures for a selection of loans in the identified higher-risk industries to test that the cash flows used for calculating the individually assessed loan loss provisions were derived appropriately. In assessing the adequacy of expected cash flows, we considered industry specific market expectations and the respective engagement strategy (e.g. restructuring, liquidation). For selected engagements, we also recalculated the individually assessed loan loss provisions.

Our Observations

Based on the results of our key controls testing and substantive audit procedures, we consider the assumptions and scenarios to determine individually assessed loan loss allowance for loans relating to the identified higher-risk industries to be reasonable.

Recognition and Measurement of Deferred Tax Assets

For a description of the significant accounting policies and critical accounting estimates as well as underlying assumptions for the recognition and measurement of deferred tax assets, we refer to Note 1 of the consolidated financial statements "Significant Accounting Policies and Critical Accounting Estimates" (section "Income Taxes"). For information on deferred tax assets, we refer to Note 36 of the consolidated financial statements.

The Financial Statement Risk

The consolidated financial statements contain deferred tax assets of € 6.8 billion. In the reporting period, the Group has reduced the carrying amount of deferred tax assets by € 1.4 billion due to the US tax reform.

Recognition and measurement of deferred tax assets contain judgment and besides objective factors also numerous estimates regarding future taxable profit and the usability of unused tax losses and tax credits.

The financial statement risk arises particularly from future usability of the benefits being estimated inappropriately. The estimation of future usability depends on future taxable profit potential based on the business plan and taking into account the expected development of key value-determining assumptions and parameters included therein, all being subject to uncertainty. These include in particular assumptions on the development of pre-tax earnings, the influence of potential special items, and permanent effects which determine the taxable profit available in the future. Such estimates must also consider current political and economic developments and jurisdiction specific considerations, including but not limited to US tax reform.

Our Audit Approach

We conducted a risk assessment to gain an understanding of the applicable tax laws and regulations relevant to the Group. Based on that, we performed both tests of related internal key controls and substantive audit procedures with the assistance of KPMG-internal tax specialists. We performed the following audit procedures as part of our controls testing including, but not limited to:

– evaluation of the policies used for recognition and measurement of deferred tax assets in accordance with IAS 12 and
– test of design, implementation and operating effectiveness of internal controls with respect to recognition of deferred tax assets in the Group.

Furthermore, we performed substantive audit procedures for a risk-based sample of deferred tax assets in different countries. This included, but was not limited to:

– assessment of the appropriateness of parameters applied to the business plans, including sub-plans for relevant countries where appropriate. In doing so, we scrutinized the appropriateness of the planning parameters applied that are relevant to the Group's significant subdivisions by considering potential positive and negative indicators regarding recoverability or occurrence of planning parameters and assumptions, and
– review of the bridge from pre-tax income to the planned taxable profit for certain countries.

Our Observations

Based on the results of our key controls testing and substantive audit procedures we consider recognition and measurement of deferred tax assets in particular regarding the assumptions and parameters to develop the taxable profit and usability of tax losses and credits to be reasonable.

Presentation of Legal Risks in the Financial Statements

For a qualitative and quantitative description of significant litigations we refer to Note 29 of the consolidated financial statements.

The Financial Statement Risk

As of the reporting date, the Group reports provisions for legal risks in the amount of € 2.0 billion. They consist of provisions for civil litigations amounting to € 1.1 billion and provisions for regulatory enforcement amounting to € 0.9 billion.

The financial statement risk arises particularly from failure to appropriately reflect potential financial obligations (provisions or contingent liabilities) resulting from non-compliance with applicable laws, regulatory requirements or contractual agreements, or asserted claims, including consideration of disclosure in the Group's financial statements. The identification of those matters, the evaluation of its likelihood, and the valuation of potential financial obligations resulting thereof is subject to judgment and estimation uncertainty.

Our Audit Approach

We conducted a risk assessment regarding potential obligating events in designing our audit approach. This was based on an assessment of the internal controls regarding the complete and accurate recording of legal risks as well as inquiries with management and departments that are responsible to identify, evaluate and monitor legal risks. It further consisted of a review of internal and external documentation and publicly available information and inspection of accounts regarding legal expenses.

Based on our risk assessment, we established an audit approach including control and substantive testing.

To test the adequacy of the internal control system, we identified controls designed to assure the completeness and accuracy of valuation of provisions and contingent liabilities for legal risks and tested the design and the implementation, as well as the operating effectiveness of such controls.

Additionally, we have conducted substantive audit procedures for a risk-based sample of cases, and sent legal confirmation letters to the lawyers dealing with material litigation.

We evaluated the recognition and valuation of material provisions and contingent liabilities of the Group based on facts and circumstances available regarding compliance with the accounting standards.

In order to determine the facts and circumstances of the individual cases, we performed inspection of relevant documents and we inquired with the Group's internal and external legal counsel. We assessed the material assumptions made and key judgements applied including the evaluation of disconfirming evidence. Specifically, for matters where potential obligations existed but the exposure was considered less than probable, we considered audit evidence regarding the lack of recognition and the disclosure thereof.

Additionally, we considered whether the Group's disclosures of the application of judgement in estimating provisions and contingent liabilities is adequately reflected. Also, we considered whether the Group's disclosures in relation with the individual cases reflect the uncertainties associated with legal and regulatory matters appropriately.

Our Observations

Based on the results of our key controls testing and substantive audit procedures, we considered the identification of matters and the evaluation of its likelihood and estimated provision for potential obligations as reasonable. The notes appropriately disclose the estimation uncertainty in valuation.

IT Access Management in the financial reporting process

For a description of internal controls over the financial reporting process including IT access management controls, we refer to the group management report in section “Internal Control over Financial Reporting”.

The Financial Statement Risk

The financial reporting process is highly dependent on information technology and the availability of complete and accurate electronic data due to the size and the complexity of the Group. The inappropriate granting of or ineffective monitoring of access rights to IT systems therefore presents a risk to the accuracy of financial reporting. This risk applies in particular to systems with access rights which do not correspond to a “need to know” or “need to have” principle, i.e. access is granted solely based on the requirements of the role and no further authorization requirement is in place, or the segregation of duties principle, i.e. between IT and specialist departments as well as between development and application operations.

Unauthorized or extensive access rights and a lack of segregation of duties cause a risk of intended or unintended manipulation of data that could have a material effect on the completeness and accuracy of the financial statements. Therefore, the design of and compliance with respective precautions is a significant matter for our audit.

Our Audit Approach

We obtained an understanding of the Group's business IT related control environment. Furthermore we conducted a risk assessment and identified IT applications, databases and operating systems that are relevant to our audit.

For relevant IT-dependent controls within the financial reporting process (so-called IT application controls) we identified supporting general IT controls and evaluated their design, implementation, and operating effectiveness. We tested key controls particularly in the area of access protection and linkage of such controls to the completeness and accuracy of financial reporting. Our audit procedures included, but were not limited to, the following:

- Tests of controls regarding initial access granted to IT systems for new employees or employees changing roles, whether that access was subject to appropriate screening and if it was approved by an authorized person in line with the role based authorization concept.
- Test of controls regarding removal of employee or former employee access rights within an appropriate period of time after having changed roles or leaving the company.
- Test of controls regarding the appropriateness of system access rights for privileged or administrative authorizations (superuser) being subject to a restrictive authorization assignment procedure and the regular review thereof.
- Moreover, we conducted specific testing procedures in the area of password protection, security settings regarding modifications for applications, databases, and operating systems, the segregation of specialist department and IT users and the segregation of employees responsible for program development and those responsible for system operations. In cases where certain IT controls were not effective we identified and tested additional compensating controls for implementation and operating effectiveness as well as testing other compensating evidence.

Considering the results of our control tests, we decided on the nature and scope of further substantive audit procedures to be performed. Particularly, where we identified user authorizations not being withdrawn on time after leaving the Bank, we performed an inspection of the activity log of individual users to determine whether unauthorized activities had occurred that would materially affect the completeness and accuracy of financial information processed.

Also, by tests of detail we assessed if program developers had approval rights in the modification process and whether they were able to carry out any modifications in the productive versions of applications, databases, and operating systems to assess if these responsibilities were functionally segregated. We have also analyzed the segregation of duties on critical trading and payment systems in order to assess whether the segregation of duties between front and back offices has been adhered to.

Our Observations

Based on the results of our key controls testing and substantive audit procedures, we consider the IT access management in the financial reporting process to generally address the requirements for completeness and accuracy of financial reporting relevant data. In cases where we identified control deficiencies, we found that compensating controls were in place and tested other compensating evidence to address the risk of material misstatement over the financial statements.

Other Information

Management is responsible for the other information. The other information comprises of the remaining parts in the annual report, with the exception of the audited consolidated financial statements and the group management report and our auditor’s report.

Our opinions on the consolidated financial statements and the group management report do not cover the other information and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

– is materially inconsistent with the consolidated financial statements, with the group management report, or our knowledge obtained in the audit, or
– otherwise appears to be materially misstated.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group’s position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of the group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB, and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

– Identify and assess the risks of material misstatement of the consolidated financial statements and the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
– Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
– Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by the management and related disclosures.
– Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
– Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events, in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
– Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
– Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
– Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor of by the annual general meeting on May 18, 2017. We have been engaged by the Supervisory Board on July 26, 2017. We or our predecessor firms have served as auditor to Deutsche Bank Aktiengesellschaft and its predecessor companies since 1952.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

We provided the following services in addition to the financial statement audit, as disclosed in Note 43 – "Supplementary Information to the Consolidated Financial Statements according to Sections 297 (1a) / 315a HGB and the return on assets according to Article 26a of the German Banking Act".

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Burkhard Böth.

Frankfurt am Main, March 12, 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft

Pukropski
Wirtschaftsprüfer

Böth
Wirtschaftsprüfer

Responsibility Statement by the Management Board

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Frankfurt am Main, March 12, 2018

John Cryan

Marcus Schenck

Christian Sewing

Kimberly Hammonds

Stewart Lewis

Sylvie Matherat

James von Moltke

Nicolas Moreau

Garth Ritchie

Karl von Rohr

Werner Steinmüller

Frank Strauß

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Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code / Corporate Governance Report

All information presented in this Corporate Governance Statement according to §§ 289f, 315d German Commercial Code / Corporate Governance Report is shown as of February 16, 2018.

Management Board and Supervisory Board

Management Board

The Management Board of Deutsche Bank AG is responsible for the management of the company in accordance with the law, the Articles of Association of Deutsche Bank AG and the Terms of Reference for the Management Board with the objective of creating sustainable value in the interests of the company. It considers the interests of shareholders, employees and other company-related stakeholders. The members of the Management Board are collectively responsible for managing the bank's business. The Management Board, as the Group Management Board, manages the Deutsche Bank Group in accordance with uniform guidelines; it exercises general control over all Group companies.

The Management Board decides on all matters prescribed by law or the Articles of Association and ensures compliance with the legal requirements and internal guidelines (compliance). It also takes the necessary measures to ensure that adequate internal guidelines are developed and implemented. The Management Board's responsibilities include, in particular, the bank's strategic management and direction, the allocation of resources, financial accounting and reporting, control and risk management, as well as a properly functioning business organization and corporate control. The Management Board decides on the appointments to the senior management level below the Management Board and, in particular, on the appointment of Global Key Function Holders. In appointing people to management functions in the Group, the Management Board takes diversity into account and strives, in particular, to achieve an appropriate representation of women.

The Management Board works closely together with the Supervisory Board in a cooperative relationship of trust and for the benefit of the company. The Management Board reports to the Supervisory Board at a minimum within the scope prescribed by law or administrative guidelines, in particular on all issues with relevance for the Group concerning strategy, the intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance.

A comprehensive presentation of the duties, responsibilities and procedures of our Management Board are specified in its Terms of Reference, the current version of which is available on our website (www.db.com/ir/en/documents.htm).

Personnel changes to the Management Board and the current members of the Management Board in the 2017 financial year

James von Moltke was appointed member of the Management Board with effect from July 1, 2017, and Frank Strauß was appointed member of the Management Board with effect from September 1, 2017, both of them for a three-year period.

Jeffrey Urwin stepped down from the bank's Management Board effective as of March 31, 2017.

In the following, information is provided on the current members of the Management Board. The information includes the year in which they were born, the year in which they were first appointed and the year in which their term expires as well as their current positions and area of responsibility according to the current Business Allocation Plan for the Management Board. Furthermore, their other board mandates or directorships outside of Deutsche Bank Group are specified. The members of our Management Board have generally undertaken not to assume chairmanships of supervisory boards of companies outside Deutsche Bank Group.

John Cryan

Year of birth: 1960
First appointed: 2015
Term expires: 2020

John Cryan became a member of our Management Board on July 1, 2015 and has been sole Chairman of our Management Board since the conclusion of the Annual General Meeting on May 19, 2016. According to the Business Allocation Plan for the Management Board, he is responsible for, among other things, the areas of Communications & Corporate Social Responsibility (CSR), Group Audit, Corporate Strategy, Incident & Investigation Management as well as the Business Selection and Conflicts Office. In addition, he took on responsibility for the bank's business in the Americas as of March 16, 2017.

From May 2016 to June 2017 he held global responsibility for Regional Management and was also responsible for the EMEA region (excluding Germany and the UK).

Mr. Cryan became a member of Deutsche Bank's Supervisory Board in 2013, where he served as Chairman of the Audit Committee and member of the Risk Committee. Upon becoming Co-Chairman of the Management Board in 2015, he stepped down from the Supervisory Board. From 2012 to 2014 Mr. Cryan was President Europe, Head Africa, Head Portfolio Strategy and Head Credit Portfolio at Temasek Holdings Pte. Ltd., the Singaporean state investment company. Previously, he was Group Chief Financial Officer of UBS AG from 2008 to 2011, having worked in corporate finance and client advisory roles at UBS and SG Warburg in London, Munich and Zurich starting in 1987.

He began his career as a trainee chartered accountant at Arthur Andersen in London. He is a graduate of the University of Cambridge.

Mr. Cryan is a Non-Executive Director of MAN Group Plc.

Dr. Marcus Schenck

Year of birth: 1965
First appointed: 2015
Term expires: 2023

Dr. Marcus Schenck became a member of our Management Board on May 21, 2015 and was appointed President as of March 5, 2017. Until June 30, 2017 he was our Chief Financial Officer. Since July 1, 2017, he has been the Co-Head of our Corporate & Investment Bank together with Garth Ritchie. In July 2017, he assumed responsibility for the EMEA region.

In January 2015, Dr. Schenck joined Deutsche Bank from Goldman Sachs International, where he was Partner and Head of Investment Banking Services for Europe, Middle East & Africa. Additionally, he was a member of the Operating Committee of the Investment Banking Division of Goldman Sachs. From 2006 to 2013, Dr. Schenck was Chief Financial Officer and a member of the Management Board of German energy supplier E.ON SE. From 1997 to 2006, he held a number of senior positions at Goldman Sachs in Frankfurt. Prior to that, he was a consultant at McKinsey & Company.

He holds a "Diplom-Volkswirt" degree from the University of Bonn and a PhD in Economics from the University of Cologne.

Dr. Schenck does not have any external directorships subject to disclosure.

Christian Sewing

Year of birth: 1970
First appointed: 2015
Term expires: 2022

Christian Sewing became a member of our Management Board on January 1, 2015 and was appointed President as of March 5, 2017. Since January 2016, he has been the Head of Private, Wealth & Commercial Clients (excluding Postbank). Effective September 1, 2017, he was appointed Co-Head of Private & Commercial Bank (including Postbank), together with Frank Strauß. Furthermore he is Regional CEO Germany. From January to June 2015, he was responsible on the Management Board for Legal, Incident Management Group and Group Audit, and thereafter he took on responsibility for Private & Business Clients.

Prior to assuming his role on the Management Board, Mr. Sewing was Global Head of Group Audit and held a number of positions before that in Risk, including Deputy Chief Risk Officer (from 2012 to 2013) and Chief Credit Officer (from 2010 to 2012) of Deutsche Bank.

From 2005 until 2007, Mr. Sewing was a member of the Management Board of Deutsche Genossenschafts-Hypothekenbank.

Before graduating with a diploma from the Bankakademie Bielefeld and Hamburg, Mr. Sewing completed a bank apprenticeship at Deutsche Bank in 1989.

Mr. Sewing does not have any external directorships subject to disclosure.

Kimberly Hammonds

Year of birth: 1967
Appointed: 2016
Term expires: 2019

Kimberly Hammonds became a member of our Management Board on August 1, 2016. She is our Chief Operating Officer and is responsible for Technology and Operations, Information Security, Data Management, Digital Transformation and Corporate Services.

Ms. Hammonds joined Deutsche Bank in 2013 as Global Chief Information Officer and Global Co-Head of Group Technology & Operations. She was with Boeing from 2008 to 2013, most recently as Chief Information Officer. Before working for Boeing, she held a number of management positions at Dell and Ford Motor Company, in product engineering, manufacturing, marketing and information technology leadership.

She has an MBA from Western Michigan University and a degree in mechanical engineering from the University of Michigan, USA.

Ms. Hammonds is a member of the Board of Directors of Red Hat Inc., USA and has been a Non-Executive Director of Cloudera Inc., USA, since May 2017.

Stuart Lewis

Year of birth: 1965
First appointed: 2012
Term expires: 2020

Stuart Lewis became a member of our Management Board on June 1, 2012. He is our Chief Risk Officer and is responsible for, among other things, the functions managing Credit Risk, Non-Financial Risk, Market Risk and Liquidity Risk as well as for further Risk-Infrastructure units.

He joined Deutsche Bank in 1996. Prior to assuming his current role, Mr. Lewis was Deputy Chief Risk Officer and subsequently Chief Risk Officer of the Corporate & Investment Bank from 2010 to 2012. Between 2006 and 2010 he was Chief Credit Officer.

Before joining Deutsche Bank in 1996, he worked at Credit Suisse and Continental Illinois National Bank in London.

He studied at the University of Dundee, where he obtained an LLB (Hons), and he holds an LLM from the London School of Economics. He also attended the College of Law, Guildford.

Mr. Lewis does not have any external directorships subject to disclosure.

Sylvie Matherat

Year of birth: 1962
First appointed: 2015
Term expires: 2023

Sylvie Matherat became a member of our Management Board on November 1, 2015. She is our Chief Regulatory Officer and is responsible for the functions Compliance, Anti-Financial Crime (AFC), Regulatory Affairs, and Government & Public Affairs.

Ms. Matherat joined Deutsche Bank from Banque de France where she was Deputy Director General and responsible for regulation and financial stability issues, payment and settlement infrastructures, banking services, and the Target 2 Securities project. Ms. Matherat previously held various positions at the banking supervisory authority and in the private sector.

She studied public law and finance at the Institut d'Études Politiques de Paris, France, and holds a Master's degree in law and political sciences. In 2014 she was awarded the Légion d'Honneur.

Ms. Matherat does not have any external directorships subject to disclosure.

James von Moltke

Year of birth: 1969
First appointed: 2017
Term expires: 2020

James von Moltke became a member of our Management Board on July 1, 2017. He is our Chief Financial Officer and in this function he is responsible for, among other things, Finance, Group Tax, Group Treasury, Investor Relations, as well as Corporate M&A & Corporate Investments.

Before Mr. von Moltke joined Deutsche Bank he served as Treasurer of Citigroup. He started his career at Credit Suisse First Boston in London in 1992. In 1995, he joined J.P. Morgan, working at the bank for 10 years in New York and Hong Kong. After next working at Morgan Stanley in New York for four years, where he led the Financial Technology advisory team globally, Mr. von Moltke joined Citigroup as Head of Corporate M&A in 2009. Three years later he became the U.S. bank's Global Head of Financial Planning.

He holds a Bachelor of Arts degree from New College, University of Oxford.

Mr. von Moltke does not have any external directorships subject to disclosure.

Nicolas Moreau

Year of birth: 1965
First appointed: 2016
Term expires: 2019

Nicolas Moreau became a member of our Management Board on October 1, 2016. He is our Head of Deutsche Asset Management.

Mr. Moreau was Chairman and CEO of AXA France and a member of the AXA Group Management Committee, as well as Vice Chairman of the Group Investment Committee. Mr. Moreau spent 25 years with the AXA Group, where he held various positions including CEO of AXA Investment Managers and CEO of AXA UK & Ireland.

Mr. Moreau studied at the École Polytechnique in Paris, France, and holds a Master's degree in engineering. He is also a qualified actuary. In 2015, he was awarded the Légion d'Honneur.

Mr. Moreau does not have any external directorships subject to disclosure.

Garth Ritchie

Year of birth: 1968
First appointed: 2016
Term expires: 2018

Garth Ritchie became a member of our Management Board on January 1, 2016. He was Head of our Global Markets business division until March 15, 2017, became Head of Corporate & Investment Bank on March 16, 2017 and has been the Co-Head of our Corporate & Investment Bank since July 1, 2017, together with Dr. Marcus Schenck. Mr. Ritchie is also Regional CEO for the UK & Ireland.

Mr. Ritchie joined Deutsche Bank in 1996 and became Co-Head of Equities in the Corporate Banking & Securities Business Division in 2009 and its sole Head in 2010. He held various positions in trading and derivatives for over two decades.

Prior to joining Deutsche Bank, Mr. Ritchie held positions at Fergusson Brothers and First National Bank of South Africa.

He holds a Bachelor of Commerce in Finance and Economics from the University of Port Elizabeth (South Africa).

Mr. Ritchie does not have any external directorships subject to disclosure.

Karl von Rohr

Year of birth: 1965
First appointed: 2015
Term expires: 2023

Karl von Rohr became a member of our Management Board on November 1, 2015. He is our Chief Administrative Officer and is responsible for the functions Legal, Global Governance and Human Resources.

Mr. von Rohr joined Deutsche Bank in 1997. From 2013 to 2015 he was Global Chief Operating Officer, Regional Management. Prior to this, he was Head of Human Resources for Deutsche Bank in Germany and member of the Management Board of Deutsche Bank Privat- und Geschäftskunden AG. During his time at Deutsche Bank, he has held various senior management positions in other divisions in Germany and Belgium.

He studied law at the universities of Bonn (Germany), Kiel (Germany), Lausanne (Switzerland) and at Cornell University (U.S.A.).

Mr. von Rohr is a member of the following Supervisory Boards: BVV Versicherungsverein des Bankgewerbes a.G. and BVV Versorgungskasse des Bankgewerbes e.V.

Werner Steinmüller

Year of birth: 1954
First appointed: 2016
Term expires: 2019

Werner Steinmüller became a member of our Management Board on August 1, 2016. He is our Regional CEO Asia Pacific.

Mr. Steinmüller joined Deutsche Bank in 1991. He was Head of Global Transaction Banking from 2004 to 2016, Chief Operating Officer (COO) of Global Transaction Banking from 2003 to 2004, Head of the Global Banking Division Europe from 1998 to 2003, and Co-Head of Corporate Finance Germany from 1996 to 1998.

Prior to joining Deutsche Bank, he worked at Citibank from 1979 to 1991.

He holds a Diploma in Business Administration and Mechanical Engineering from TU Darmstadt.

Mr. Steinmüller does not have any external directorships subject to disclosure.

Frank Strauß

Year of birth: 1970
First appointed: 2017
Term expires: 2020

Frank Strauß became a member of our Management Board on September 1, 2017. He is our Co-Head of Private & Commercial Bank (including Postbank) together with Christian Sewing. Mr. Strauß is also responsible for Postbank (including integration matters).

Having completed training to become a bank officer in Iserlohn, Mr. Strauß moved to Frankfurt in 1995, where he held various management positions at Deutsche Bank and Deutsche Bank 24, its former subsidiary. From 2002 onwards he coordinated European operations in the bank's Private & Business Clients division. In 2005 he took over responsibility for developing the bank's Asian operations in Mumbai and Beijing. One year later he was appointed Head of Private & Business Clients Germany. In July 2011 he moved to Postbank, where he became the Management Board member responsible for sales, before assuming the role of Chairman of the Management Board one year later.

He completed a bank apprenticeship at Deutsche Bank in Iserlohn between 1989 and 1992.

Mr. Strauß does not have any external directorships subject to disclosure.

Supervisory Board

The Supervisory Board of Deutsche Bank AG appoints, supervises and advises the Management Board and is directly involved in decisions of fundamental importance to the bank. It works together closely with the Management Board in a cooperative relationship of trust and for the benefit of the company. The Supervisory Board decides on the appointment and dismissal of members of the Management Board including long-term succession planning for the Management Board based on the recommendations of the Chairman's Committee and the Nomination Committee. Based on the recommendation of the Compensation Control Committee, the Supervisory Board determines the total compensation of the individual members of the Management Board resolves on the compensation system for the Management Board and reviews it regularly.

The Supervisory Board receives reports from the Management Board at least within the scope prescribed by law or administrative guidelines, in particular on all issues of relevance for the Group concerning strategy, intended business policy, planning, business development, risk situation, risk management, staff development, reputation and compliance. Furthermore, the Audit Committee is also informed regularly, and in the case of severe deficiencies without undue delay, of any serious deficiencies identified by Group Audit and of any substantial deficiencies which have not yet been rectified. The Chairman of the Supervisory Board is informed accordingly of any serious findings against the members of the Management Board. In addition to the already existing reporting principles, the Supervisory Board and Management Board, adopted an Information Regime with detailed specifications regarding the Management Board's reporting to the Supervisory Board as well as rules relating to enquiries addressed by the Supervisory Board to the Management Board. Furthermore, the Information Regime covers, among other things, the Supervisory Board's requests for information and reports from employees of the company, and the exchange of information in connection with the meetings of the Supervisory Board and its committees.

The Chairman of the Supervisory Board plays a crucial role in the proper functioning of the Supervisory Board and has a leadership role in this. He can issue internal guidelines and principles concerning the Supervisory Board's internal organization and communications, the coordination of the work within the Supervisory Board and the Supervisory Board's interaction with the Management Board. Between meetings, the Chairman of the Supervisory Board, and, if expedient, the chairpersons of the Supervisory Board committees, maintain regular contact with the Management Board, especially with the Chairman of the Management Board, and deliberate with him on issues of Deutsche Bank Group's strategy, planning, the development of business, risk situation, its risk management, governance, compliance and material litigation cases. The Chairman of the Supervisory Board and – within their respective functional responsibility – the chairpersons of the Supervisory Board committees are informed without delay by the Chairman of the Management Board or by the respectively responsible Management Board member about important events of material significance for the assessment of the situation, development and management of Deutsche Bank Group. The Chairman of the Supervisory Board engages in discussions with investors on Supervisory Board-related topics when necessary and regularly informs the Supervisory Board of the substance of such discussions.

The types of business that require the approval of the Supervisory Board to be transacted are specified in Section 13 of our Articles of Association. The Supervisory Board meets, if required, without the Management Board. After due consideration and insofar as materially appropriate, the Supervisory Board, or any of its committees, may, in order to perform their tasks, consult auditors, legal advisors and other internal or external advisors. In performing their tasks, the Chairman of the Supervisory Board, the chairpersons of the standing committees and the Supervisory Board members are supported by the Office of the Supervisory Board, which is independent of the Management Board.

In 2017, a total of 59 meetings of the Supervisory Board and its committees took place. As in previous years, joint meetings were held on topics of relevance for several committees.

The duties, procedures and committees of the Supervisory Board are specified in its Terms of Reference. The current version is available on the Deutsche Bank website (www.db.com/ir/en/documents.htm).

Members of the Supervisory Board

The Supervisory Board of Deutsche Bank AG has 20 members. In accordance with the German Co-Determination Act (Mitbestimmungsgesetz), it comprises an equal number of shareholder representatives and employee representatives.

The members representing our shareholders were elected at the Annual General Meeting on May 23, 2013. In departure from this, Dr. Paul Achleitner was first elected at the Annual General Meeting on May 31, 2012, and Gerhard Eschelbeck, Professor Dr. Stefan Simon and Gerd Alexander Schütz were elected at the Annual General Meeting on May 18, 2017. The election of employee representatives took place on April 16, 2013, Alfred Herling stepped down as an employee representative from the Supervisory Board on December 31, 2016. Until then, he was Deputy Chairman of the Supervisory Board. For the remainder of his term of office on the Supervisory Board, he is being replaced by the substitute member elected to take his place, Stefan Rudschäfski, whom the Supervisory Board elected Deputy Chairman of the Supervisory Board with effect from January 1, 2017.

The following table shows information on the current members of our Supervisory Board. The information includes the years in which the members were born, the years in which they were first elected or appointed, the years when their terms expire, their principal occupation and their membership on other companies' supervisory boards, other nonexecutive directorships and other positions. Representatives of the employees are indicated with an asterisk (*).

Member	Principal occupation	Supervisory board memberships and other directorships
Dr. Paul Achleitner Year of birth: 1956 First elected: 2012 Term expires: 2022	Chairman of the Supervisory Board of Deutsche Bank AG, Frankfurt	Bayer Aktiengesellschaft; Daimler AG; Henkel AG & Co. KGaA (member of the Shareholders' Committee)
Wolfgang Böhr* Year of birth: 1963 Promoted to the post as Alternate Member: 2015 Term expires: 2018	Chairman of the Staff Council of Deutsche Bank, Düsseldorf; Member of the Group Staff Council of Deutsche Bank; Member of the General Staff Council of Deutsche Bank	Betriebskrankenkasse Deutsche Bank AG (member of the Advisory Board)
Frank Bsirske* Year of birth: 1952 First elected: 2013 Term expires: 2018	Chairman of the trade union ver.di (Vereinte Dienstleistungsgewerkschaft), Berlin	RWE AG (Deputy Chairman); Deutsche Postbank AG (Deputy Chairman); IBM Central Holding GmbH (until June 2017); Kreditanstalt für Wiederaufbau (KfW) (member of the Board of Supervisory Directors); innogy SE (Deputy Chairman)
Dina Dublon Year of birth: 1953 First elected: 2013 Term expires: 2018		Accenture PLC (until February 2017); PepsiCo Inc.
Jan Duscheck* Year of birth: 1984 Appointment by court: 2016 Term expires: 2018	Head of national working group Banking, trade union ver.di (Vereinte Dienstleistungsgewerkschaft), Berlin	No memberships or directorships subject to disclosure
Gerhard Eschelbeck Year of birth: 1965 First elected: 2017 Term expires: 2022	Vice President Security & Privacy Engineering, Google Inc., Mountain View	No memberships or directorships subject to disclosure
Katherine Garrett-Cox Year of birth: 1967 First elected: 2011 Term expires: 2021	Managing Director and Chief Executive Officer, Gulf International Bank (UK) Ltd., London	No memberships or directorships subject to disclosure
Timo Heider* Year of birth: 1975 First elected: 2013 Term expires: 2018	Deputy Chairman of the Group Staff Council of Deutsche Bank AG; Chairman of the Group Staff Council of Deutsche Postbank AG; Chairman of the General Staff Council of BHW Kreditservice GmbH; Chairman of the Staff Council of BHW Bausparkasse AG/Postbank Finanzberatung AG	Deutsche Postbank AG; BHW Bausparkasse AG (Deputy Chairman); Pensionskasse der BHW Bausparkasse AG VVaG (Deputy Chairman)
Sabine Irrgang* Year of birth: 1962 First elected: 2013 Term expires: 2018	Head of Human Resources Baden-Württemberg, Deutsche Bank AG	No memberships or directorships subject to disclosure
Professor Dr. Henning Kagermann Year of birth: 1947 First elected: 2000 Term expires: 2018	President of acatech – German Academy of Science and Engineering, Munich	Münchener Rückversicherungs-Gesellschaft AG; Deutsche Post AG; BMW Bayerische Motoren Werke AG (until May 2017); KUKA AG (since May 2017)
Martina Klee* Year of birth: 1962 First elected: 2008 Term expires: 2018	Chairperson of the Staff Council Group COO Eschborn/Frankfurt of Deutschen Bank	Sterbekasse für die Angestellten der Deutsche Bank-Gruppe VVaG

Member	Principal occupation	Supervisory board memberships and other directorships
Henriette Mark* Year of birth: 1957 First elected: 2003 Term expires: 2018	Chairperson of the Combined Staff Council Munich and Southern Bavaria of Deutsche Bank; Member of the Group Staff Council of Deutsche Bank; Member of the General Staff Council of Deutsche Bank	No memberships or directorships subject to disclosure
Richard Meddings Year of birth: 1958 Appointment by court: 2015 Term expires: 2021		HM Treasury; Legal & General Group PLC (until May 2017); TSB Bank PLC (Non-Executive Director since September 2017 and Chairman since February 2018); Jardine Lloyd Thompson Group PLC (Non-Executive Director) (since October 2017)
Louise M. Parent Year of birth: 1950 Appointment by court: 2014 Term expires: 2018	Of Counsel, Cleary Gottlieb Steen & Hamilton LLP, New York	Zoetis Inc.; Fidelity National Information Service Inc. (since October 2017)
Gabriele Platscher* Year of birth: 1957 First elected: 2003 Term expires: 2018	Chairperson of the Combined Staff Council Braunschweig/Hildesheim of Deutsche Bank	BVV Versicherungsverein des Bankgewerbes a.G. (Deputy Chairperson); BVV Versorgungskasse des Bankgewerbes e.V. (Deputy Chairperson); BVV Pensionsfonds des Bankgewerbes AG (Deputy Chairperson)
Bernd Rose* Year of birth: 1967 First elected: 2013 Term expires: 2018	Chairman of the General Staff Council of Postbank Filialvertrieb AG; Member of the General Staff Council of Deutsche Postbank; Member of the General Staff Council of Deutsche Bank; Member of the European Staff Council of Deutsche Bank	Deutsche Postbank AG; Postbank Filialvertrieb AG; ver.di Vermögensverwaltungsgesellschaft (Deputy Chairman)
Stefan Rudschäfski* Year of birth: 1965 Promoted to the post as Alternate Member: 2017 Term expires: 2018	Deputy Chairman of the Supervisory Board of Deutsche Bank AG, Frankfurt; Deputy Chairman of the General Staff Council of Deutsche Bank; Member of the Group Staff Council of Deutsche Bank; Exempted Staff Council member, Deutsche Bank Privat- und Geschäftskunden AG, Hamburg; Chairman of the Staff Council of Deutsche Bank, Hamburg	Betriebskrankenkasse Deutsche Bank AG (Member of the Advisory Board)
Gerd Alexander Schütz Year of birth: 1967 First elected: 2017 Term expires: 2018	Founder and Member of the Management Board of C-QUADRAT Investment Aktiengesellschaft, Vienna	MyBucks S.A. RCS (Non-Executive Chairman of the Board of Directors) (until February 2018)
Prof. Dr. Stefan Simon Year of birth: 1969 Appointment by court: 2016 Term expires: 2022	Self-employed attorney at law with his own law firm, SIMON GmbH, Schwyz	Leop. Krawinkel GmbH & Co. KG (Member of the Advisory Council; Chairman of the Advisory Council since January 2018)
Dr. Johannes Teyssen Year of birth: 1959 First elected: 2008 Term expires: 2018	Chairman of the Management Board of E.ON SE, Essen	Uniper SE (Deputy Chairman) (until June 2017); Nord Stream AG (Member of the Shareholders' Committee) (since June 2017)

* Employees representatives.

Objectives for the composition of the Supervisory Board, profile of requirements and status of implementation

In accordance with the German Banking Act, members of the Supervisory Board must be reliable, must have the expertise required to perform their control function and to assess and monitor the businesses the company operates, and must commit sufficient time to the performance of their tasks. According to Section 5.4.1 (2) sentence 1 of the German Corporate Governance Code (the "Code") of February 7, 2017, the Supervisory Board has to prepare and adopt a profile of requirements for the Supervisory Board as a whole, in addition to determining concrete objectives for its composition. The Supervisory Board established the following objectives for its composition in October 2010 and last amended them in February 2018. While taking into account the requirements of Section 5.4.1 (2) sentence 1 of the Code, the Supervisory Board adopted the profile of requirements at its meeting on October 26, 2017.

The Supervisory Board shall be composed in such a way that its members as a whole possess the knowledge, abilities and expert experience to properly complete its tasks and the members in their entirety of the Supervisory Board and the Audit Committee must be familiar with the banking sector. In particular, the Supervisory Board members should have sufficient time to perform their mandates. The composition of the Supervisory Board should ensure the Supervisory Board's qualified control of and advice for the Management Board of an internationally operating, broadly positioned bank and should preserve the reputation of Deutsche Bank Group among the public. In this regard, in particular, attention should be placed on the integrity, personality, willingness to perform, professionalism and independence of the individuals proposed for election. The objective is for the Supervisory Board as a whole to have all of the knowledge and experience considered to be essential while taking into account the activities of Deutsche Bank Group.

The Supervisory Board, as a whole, must possess the expertise required to effectively monitor and advise the Management Board in its management of Deutsche Bank AG and Deutsche Bank Group – also with regard to the observance of the relevant bank supervisory regulations.

The profile of requirements includes, in particular, the knowledge, skills and professional expertise that are collectively required to perform the tasks of the Supervisory Board of Deutsche Bank AG (collective qualifications). Each Supervisory Board member must have an understanding of the fields of expertise specified below that is appropriate for the size and complexity of Deutsche Bank AG. Experts shall have profound expertise in the individual fields.

The fields of expertise include, in particular, the fields listed below:

– Knowledge in the areas of banking, financial services, financial markets and the financial industry, including the home market and the bank's key markets outside Europe
– Knowledge of the relevant clients for the bank, the market expectations and the operational environment
– Risk management (investigation, assessment, mitigation, management and control of financial and non-financial risks, capital and liquidity management, shareholdings)
– Accounting (according to International Financial Reporting Standards (IFRS) and the German Commercial Code (HGB)) and audits of annual financial statements (financial experts: these members of the Supervisory Board must fulfill the requirements as "financial experts" as such term is defined by the implementation rules of the U.S. Securities and Exchange Commission (SEC) issued pursuant to section 407 of the Sarbanes-Oxley Act of 2002 and by Section 100 of the German Stock Corporation Act)
– Corporate and social responsibility, including reporting
– Taxation
– Internal audit
– Compliance and internal controls
– Strategic planning, business and risk strategies as well as their implementation
– Digitalization
– Information technology (IT), IT systems and IT security
– Regulatory framework and legal requirements, in particular, knowledge of the legal systems relevant for the bank
– Knowledge of the social, political and regulatory expectations in the home market
– Selection procedure for management body members and assessment of their suitability
– Governance and corporate culture
– Human resources and staff management
– Compensation and compensation systems (compensation expert)
– Management of a large, international regulated company
– Internal organization of the bank

Furthermore, consideration is to be given to the amendments to the current version of the Business Allocation Plan for the Management Board of Deutsche Bank AG as well as to the requirements and expectations of the regulatory authorities.

Furthermore, the Supervisory Board shall have an adequate number of independent members and shall not have more than two former members of the Management Board of Deutsche Bank AG. Under the premise that the performance of the Supervisory Board mandate in itself by the representatives of the employees cannot be reason to doubt fulfillment of the independence criteria according to Section 5.4.2 of the Code, the Supervisory Board shall have a total of at least sixteen members that are independent within the meaning of the Code. In any event, the Supervisory Board shall be composed such that the number of independent members, within the meaning of Section 5.4.2, among the shareholder representatives will be at least six. The members of the Supervisory Board may not exercise functions on a management body of, or perform advisory duties, at major competitors. Important and not just temporary conflicts of interest with respect to a member of the Supervisory Board should lead to a termination of the mandate. Members of the Supervisory Board may not hold more than the allowed number of supervisory board mandates according to Section 25d of the German Banking Act (KWG) or mandates in supervisory bodies of companies which have similar requirements.

There is a regular maximum age limit of 70. In well-founded, individual cases, a Supervisory Board member may be elected or appointed for a period that extends at the latest until the end of the fourth Annual General Meeting that takes place after he or she has reached the age of 70. This age limit was taken into account in the election proposals to the recent General Meetings and shall also be taken into account for the next Supervisory Board elections or subsequent appointments for Supervisory Board positions that become vacant. In October 2015, the Supervisory Board resolved that for members of the Supervisory Board to be elected or appointed in future, the length of each individual Supervisory Board membership shall not, as a rule, exceed 15 years.

The Supervisory Board respects diversity when proposing members for appointment to the Supervisory Board. In light of the international operations of Deutsche Bank, care should be taken that the Supervisory Board has an appropriate number of members with long-term international experience. Currently, the professional careers or private lives of seven members of the Supervisory Board are centered outside Germany. Furthermore, all of the shareholder representatives on the Supervisory Board have several years of international experience from their current or former activities as management board members or CEOs or a comparable executive function of corporations or organizations with international operations. In these two ways, the Supervisory Board believes the international activities of the company are sufficiently taken into account. The objective is to retain the currently existing international profile.

For the election proposals to the General Meeting, the Supervisory Board takes into account the recommendations of the Nomination Committee and the legal requirements according to which the Supervisory Board shall be composed of at least 30 % women and at least 30 % men. Special importance was already attached to an appropriate consideration of women in the selection process for the Supervisory Board elections in 2008. In reviewing potential candidates for a new election or subsequent appointments to Supervisory Board positions that have become vacant, qualified women shall be included in the selection process and shall be appropriately considered in the election proposals. For many years now, more than 30 % of the Supervisory Board members have been women and, since 2013, 30 % of the shareholder representatives have been women. Currently, seven Supervisory Board members are women, i.e. 35 % of all members. The Supervisory Board strives to maintain this number. It should be taken into account that the Supervisory Board can only influence the composition of the Supervisory Board through its election proposals to the General Meeting.

The Supervisory Board believes that it complies with the specified concrete objectives regarding its composition and the profile of requirements. The members of the Supervisory Board as a whole possess the knowledge, ability and expert experience to properly complete their tasks. Diversity is appropriately taken into account. Further details in this context are given in the “Diversity Concept”, which is also part of this Corporate Governance Statement / Corporate Governance Report.

In accordance with Section 5.4.2 of the Code, the Supervisory Board determined that it has what it considers to be an adequate number of independent members among the shareholder representatives these are namely: Dr. Paul Achleitner, Dina Dublon, Gerhard Eschelbeck, Katherine Garrett-Cox, Richard Meddings, Louise M. Parent, Professor Dr. Stefan Simon and Dr. Johannes Teyssen. Currently, the Supervisory Board does not consider Professor Dr. Henning Kagermann independent due to his length of service on the Supervisory Board of more than 15 years, nor Gerd Alexander Schütz as a representative of the large shareholder HNA.

Some members of the Supervisory Board are, or were last year, in high-ranking positions at other companies that Deutsche Bank has business relations with. Business transactions with these companies are conducted under the same conditions as those between unrelated third parties. These transactions, in our opinion, do not affect the independence of the Supervisory Board members involved.

Standing Committees

The Supervisory Board has established the following seven standing committees. To the extent required, the committees coordinate their work and consult each other on an ad hoc basis. The committee chairpersons report regularly to the Supervisory Board on the work of the committees. The Report of the Supervisory Board in the Annual Report 2017 provides information on the concrete work of the committees over the preceding year.

Chairman's Committee: It is responsible for, in particular: preparing the meetings of the Supervisory Board and handling current business between meetings of the Supervisory Board; preparing for decisions by the Supervisory Board on the appointment and dismissal of members of the Management Board, including long-term succession planning for the Management Board, while taking the recommendations of the Nomination Committee into account; concluding, amending and terminating employment and pension contracts in consideration of the plenary Supervisory Board's sole authority to decide on the compensation of the members of the Management Board; taking note of and, where necessary, expressing an opinion on contracts and/or amendments to contracts for a General Manager (Generalbevollmächtigter) of Deutsche Bank AG that is designated as an intended member of the Management Board; handling other contractual business with active and former members of the Management Board pursuant to Section 112 of the German Stock Corporation Act; and approving Management Board members' mandates, honorary offices or special tasks outside of Deutsche Bank Group. The Chairman's Committee is also responsible for: approving the hand-over of confidential internal data concerning a Management Board member in consultation with the Chairman of the Management Board and/or the Chief Risk Officer, unless they have a conflict of interests; approving contracts with Supervisory Board members pursuant to Section 114 of the German Stock Corporation Act; preparing for decisions of the Supervisory Board in the field of corporate governance, deciding in the Supervisory Board's stead on an adjustment of the annual Declaration of Conformity to changed actual circumstances and verifying compliance with the Declaration of Conformity. Its tasks also include: taking note of and, where necessary, expressing an opinion on the Supervisory Board's and its committees' costs for consultations with auditors, experts, legal advisors and other external advisors; as well as preparing recommendations for decisions of the Supervisory Board on pursuing claims for damages or taking other measures against incumbent or former members of the Management Board. As and when necessary, the Chairman's Committee draws on the expertise of the Chair of the Integrity Committee.

The Chairman's Committee held seven meetings in 2017.

The current members of the Chairman's Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann and Stefan Rudschäfski.

Nomination Committee: It is responsible for, in particular, supporting the Supervisory Board in identifying candidates to fill a position on the bank's Management Board. In doing so, the Nomination Committee shall take into account the balance and diversity of the knowledge, skills and experience of all members of the Management Board, prepare a job description with a candidate profile, and state the time commitment associated with the tasks. Furthermore, it is responsible in particular for drawing up an objective to promote the representation of the under-represented gender on the Supervisory Board as well as a strategy for achieving this and the regular assessment, to be performed at least once a year, of the structure, size, composition and performance of the Management Board and of the Supervisory Board and making recommendations regarding this to the Supervisory Board. The Nomination Committee supports the Supervisory Board in the regular assessment, to be performed at least once a year, of the knowledge, skills and experience of the individual members of the Management Board and Supervisory Board as well as of the respective body collectively, and in reviewing the Management Board's principles for selecting and appointing persons to the upper management levels and the recommendations made to the Management Board in this respect. The shareholder representatives on the Nomination Committee prepare the Supervisory Board's proposals for the election or appointment of new shareholder representatives to the Supervisory Board. In this context, they take into account the profile of requirements for the Supervisory Board, the criteria specified by the Supervisory Board for its composition as well as the balance and diversity of the knowledge, skills and experience of all members of the Supervisory Board, prepare a job description with a candidate profile, and state the time commitment associated with the tasks.

The Nomination Committee held eight meetings in 2017.

The current members of the Nomination Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann, Stefan Rudschäfski and Dr. Johannes Teyssen.

Audit Committee: It supports the Supervisory Board in particular in monitoring the financial accounting process, and it can submit recommendations or suggestions to the Supervisory Board on ensuring the integrity of the financial reporting process. Furthermore, the Audit Committee supports the Supervisory Board in monitoring the effectiveness of the risk management system, particularly of the internal control system and the internal audit system, the auditing of the financial statements, especially with regard to the auditor's independence and the additional services provided by the auditor, and the Management Board's prompt remediation – through suitable measures – of the deficiencies identified by the auditor and bank-internal control functions based on internal and external audits, in particular relating to weaknesses in risk controls, as well as non-compliance with policies, laws and regulatory requirements. The Committee is entitled to inspect all business documents of the bank, including the business information stored on data carriers. The Audit Committee pre-reviews the annual and consolidated financial statements and management reports as well as the separate non-financial report and the separate consolidated non-financial report, if they were prepared. It discusses the audit reports with the auditor and prepares the decisions of the Supervisory Board on establishing the annual financial statements and the approval of the consolidated financial statements as well as the resolution proposal on the appropriation of distributable profit. The Audit Committee submits corresponding recommendations to the Supervisory Board. It also provides support to the Supervisory Board with regard to engaging any external assurances for the non-financial statement and the consolidated non-financial statements of for the separate non-financial report and separate consolidated non-financial report. It discusses important changes to the audit and accounting methods. The Audit Committee also discusses the quarterly financial statements and the report on the limited review of the quarterly financial statements with the Management Board and the auditor prior to their publication. Furthermore, the Audit Committee submits proposals to the Supervisory Board for the appointment of the auditor and prepares the proposal of the Supervisory Board to the General Meeting for the election of the auditor. The Audit Committee advises the Supervisory Board on issuing the audit mandate to the auditor elected by the General Meeting, submits proposals to the Supervisory Board for the auditor's remuneration and can specify areas of focus for the audit. It supports the Supervisory Board in monitoring the independence, qualifications and efficiency of the auditor as well as the rotation of the members of the audit team. Mandates for non-audit-related services given to the auditor or to companies to which the auditor is related in legal, economic or personnel terms need the prior consent of the Audit Committee (in this context, see also the Principal Accountant Fees and Services section of this Corporate Governance Statement/Corporate Governance Report). The Audit Committee releases guidelines for the employment of staff – including former staff – of the auditor by the company. It arranges to be informed regularly about the work done by Group Audit, the effectiveness of the internal audit system and in particular about the focal areas of its auditing activity and on the results of its audits. It is responsible, in particular, for receiving and handling the quarterly, annual and ad hoc reports of Group Audit. The Management Board informs the Audit Committee about special audits, substantial complaints and other exceptional measures on the part of German and foreign bank regulatory authorities. The Committee regularly obtains reports on the receipt and handling of complaints from employees of the bank and its subsidiaries, from shareholders of Deutsche Bank AG and from third parties. In particular complaints concerning accounting, internal accounting controls, auditing and other financial reporting matters must be submitted to the Committee without undue delay. Reports concerning compliance matters are presented at the meetings of the Committee on a regular basis. The Chairman of the Audit Committee is entitled, in addition to the Chairman of the Supervisory Board, to obtain information directly from the Head of Compliance. The Audit Committee is responsible for acknowledging communications about significant reductions in the Compliance budget and for taking receipt of and handling the report by the Head of Compliance (Compliance Report) in accordance with Article 22 (2) letter C) of the Delegated Regulation (European Union) 2017/565 which is made at least once a year. Furthermore, the Committee is entitled to obtain, through its Chairman, information in connection with its tasks from the auditor, the Management Board, the Head of Group Audit and – with the prior consent of the Management Board – senior managers of the bank reporting directly to the Management Board.

The Audit Committee held eight meetings in 2017, thereof one jointly with the Risk Committee.

The current members of the Audit Committee are Richard Meddings (Chairman), Dr. Paul Achleitner, Katherine Garrett-Cox, Henriette Mark, Gabriele Platscher, Bernd Rose and Professor Dr. Stefan Simon.

Risk Committee: It advises the Supervisory Board on overall risk appetite and risk strategy, and monitors the implementation of the stated risk appetite and risk strategy by the senior management level. The Risk Committee monitors the material aspects of the rating and valuation processes. In undertaking this responsibility, it receives reports from the Management Board about the operations of the bank's rating systems and about material changes or exceptions from established policies that will materially impact the operations of the bank's rating systems. The Risk Committee receives reports from the Management Board which are appropriate to monitor whether the conditions in the client business are in line with the bank's business model and risk structure. If this is not the case, the Risk Committee requests proposals from the Management Board on how the terms and conditions in the client business could be structured to bring them into line with the bank's business model and risk structure, and monitors their implementation. The Risk Committee examines whether the incentives set by the compensation system take into consideration the company's risk, capital and liquidity structure as well as the likelihood and timing of earnings. The Risk Committee also performs all of the tasks assigned to it by law or regulatory authorities. It handles loans which require a resolution by the Supervisory Board pursuant to law or our Articles of Association. In this context, it approves, among other things, the acquisition of participations as defined by Section 13 (1) d) of the Articles of Association of Deutsche Bank AG, insofar as the value of the participation does not exceed 3% of liable capital and the participation will probably not remain in the bank's full or partial possession for more than twelve months. If this period is exceeded, the Chairperson of the Committee informs the Supervisory Board without delay and obtains its approval. At the meetings of the Risk Committee, the Management Board reports on credit, market, liquidity, operational, litigation and reputational risks. The Management Board also reports on risk strategy, credit portfolios, loans requiring Supervisory Board approval pursuant to law or our Articles of Association, questions of capital resources and matters of special importance due to the risks they entail (for additional information on the disclosure of the risk management objectives and policies for individual risk categories, please see the Risk Report of the Annual Report).

The Risk Committee held nine meetings in 2017, including one jointly with the Compensation Control Committee, one jointly with the Audit Committee and one jointly with the Integrity Committee.

The current members of the Risk Committee are Dina Dublon (Chairperson), Dr. Paul Achleitner, Wolfgang Böhr, Richard Meddings and Louise M. Parent.

Integrity Committee: It continually advises and monitors the Management Board with regard to whether management ensures the economically sound, sustainable development of the company while observing the principles of sound, responsible management, fulfilling the company's social responsibilities and protecting the natural resources of the environment (environmental, social and governance (ESG) issues), and to whether the business management is aligned to these values with the objective of a holistic corporate culture. The Integrity Committee monitors the Management Board's measures that ensure the company's compliance with legal requirements, authorities' regulations and the company's own in-house policies (preventive compliance control). It regularly reviews the bank's Code of Business Conduct and Ethics to foster conduct on the part of company employees that is exemplary in every way, both within and outside the company, and that such conduct is not just aligned to the formal compliance with statutory requirements. It supports on request the Risk Committee in monitoring and analyzing the legal and reputational risks that are material to the bank. For this purpose, it advises the Management Board on how to generate awareness of the importance of such risks. It supports on request the preparation of the Chairman's Committee's recommendations for Supervisory Board decisions on pursuing recourse claims or taking other measures against current or former members of the Management Board and these are presented by its Chairperson to the Chairman's Committee. Furthermore, the Integrity Committee supports the Supervisory Board in the monitoring of the litigation cases with the highest risk and other material cases.

The Integrity Committee held seven meetings in 2017, including one jointly with the Risk Committee.

The current members of the Integrity Committee are Professor Dr. Stefan Simon (Chairman), Dr. Paul Achleitner, Sabine Irrgang, Timo Heider, Martina Klee, Louise M. Parent and Dr. Johannes Teyssen.

Compensation Control Committee: It supports the Supervisory Board in the appropriate structuring of the compensation systems for the members of the Management Board. It also monitors the appropriate structure of the compensation systems for the Management Board members and employees and, in particular, the appropriate structure of the compensation for the heads of the risk control function and compliance function and for the employees who have a material influence on the bank's overall risk profile. The Compensation Control Committee supports the Supervisory Board in monitoring the process to identify risk takers in accordance with Section 18 (2) of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) and Group risk takers in accordance with Section 27 (2) sentence 1 of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) as well as the appropriate structure of the compensation systems for the company's employees. The Committee assesses the effects of the compensation systems on risk, capital and liquidity management, while ensuring that the compensation systems are aligned to the business strategy focused on the bank's sustainable development, to the risk strategies derived from this and to the compensation strategies at the company and Group levels. It prepares the Supervisory Board's resolutions on the compensation of the Management Board, considering, in particular, the effects of the resolutions on the company's risks and risk management. The long-term interests of shareholders, investors and other stakeholders as well as the public interest are also taken into account. It also prepares the Supervisory Board's resolutions on setting the total amount of variable compensation for the members of the Management Board in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) and on setting the appropriate compensation parameters, targets for contributions to performance, payment and deferral periods as well as the conditions for a full forfeiture or partial reduction of variable compensation. It also checks regularly, at least annually, whether the adopted specifications are still appropriate. Furthermore, it checks, as part of its support to the Supervisory Board in monitoring the appropriate structure of the compensation systems for employees, regularly, but at least annually, in particular, whether the total amount of variable compensation has been set in accordance with Section 45 (2) sentence 1 No. 5a of the German Banking Act (KWG) in consideration of Section 7 of the Regulation on Remuneration in Financial Institutions (InstitutsVergV) and whether the specified principles to assess the compensation parameters, contributions to performance as well as the payment and deferral periods, including the conditions for a full forfeiture or partial reduction of the variable compensation, are appropriate. In addition, it supports the Supervisory Board in monitoring whether the internal controls and other relevant areas are properly involved in the structuring of the compensation systems. The Committee is authorized to obtain, via its Chairperson, information relating to the Committee tasks from the head of the internal audit department and from the heads of the organizational units responsible for structuring the compensation systems.

The Compensation Control Committee held ten meetings in 2017, including one jointly with the Risk Committee.

The current members of the Compensation Control Committee are Dr. Paul Achleitner (Chairman), Frank Bsirske, Professor Dr. Henning Kagermann and Stefan Rudschäfski.

Mediation Committee: In addition to these six standing committees, the Mediation Committee, which is required by German law, makes proposals to the Supervisory Board on the appointment or dismissal of members of the Management Board in cases where the Supervisory Board is unable to reach a two-thirds majority decision with respect to the appointment or dismissal. The Mediation Committee only meets if necessary.

The Mediation Committee did not hold any meetings in 2017.

The current members of the Mediation Committee are Dr. Paul Achleitner (Chairman), Wolfgang Böhr, Professor Dr. Henning Kagermann and Stefan Rudschäfski.

Further details regarding the Chairman's Committee, the Nomination Committee, the Audit Committee, the Risk Committee, the Integrity Committee and the Compensation Control Committee are regulated in separate Terms of Reference. The current versions are available on our website, along with the Terms of Reference for the Supervisory Board (see: www.db.com/ir/en/documents.htm).

Share Plans

For information on our employee share programs, please refer to the additional Note 35 "Employee Benefits" to the Consolidated Financial Statements.

Reporting and Transparency

Directors' Share Ownership

Management Board. For information on the share ownership of the Management Board, please refer to our detailed Compensation Report in the Management Report.

Supervisory Board. The members of our Supervisory Board held the following numbers of our shares and share awards under our employee share plans.

Members of the Supervisory Board	Number of shares	Number of share awards
Dr. Paul Achleitner	0	0
Wolfgang Böhr	0	0
Frank Bsirske	0	0
Dina Dublon	0	0
Jan Duscheck	0	0
Gerhard Eschelbeck	0	0
Katherine Garrett-Cox	0	0
Timo Heider	0	0
Sabine Irrgang	1,170	0
Professor Dr. Henning Kagermann	0	0
Martina Klee	2,328	10
Henriette Mark	1,524	0
Richard Meddings	0	0
Louise Parent	0	0
Gabriele Platscher	1,293	10
Bernd Rose	0	0
Stefan Rudschäfski	733	6
Gerd Alexander Schütz	0	0
Professor Dr. Stefan Simon	0	0
Dr. Johannes Teyssen	0	0
Total	7,048	26

The members of the Supervisory Board held 7,048 shares, amounting to less than 0.01 % of our shares as of February 16, 2018.

As listed in the "Number of share awards" column in the table, the members who are employees of Deutsche Bank hold matching awards granted under the Global Share Purchase Plan, which are scheduled to be delivered to them on November 1, 2018.

As described in the "Management Report: Compensation Report: Compensation System for Supervisory Board Members", 25 % of each member's compensation for services as a member of the Supervisory Board for a given prior year is, rather than being paid in cash, converted into notional shares of Deutsche Bank AG in February of the following year. The cash value of the notional shares is paid to the member in February of the year following his departure from the Supervisory Board or the expiration of his term of office, based on the market price of the Deutsche Bank share near the payment date. The table in the section specified above shows the number of notional shares that will be credited in spring 2018 to members of the Supervisory Board as part of their 2017 compensation.

Related Party Transactions

For information on related party transactions please refer to Note 38 "Related Party Transactions".

Auditing and Controlling

Audit Committee Financial Expert

The Supervisory Board determined that Dr. Paul Achleitner, Katherine Garrett-Cox. Richard Meddings and Professor Dr. Stefan Simon, who are members of its Audit Committee, are “audit committee financial experts”, as such term is defined by the implementation rules of the U.S. Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. These audit committee financial experts are “independent” of the bank, as defined in Rule 10A-3 under the U.S. Securities Exchange Act of 1934. In accordance with the provisions of Sections 107 (4) and 100 (5) of the German Stock Corporation Act (AktG) as well as Section 25d (9) of the German Banking Act (KWG), they have the required expert knowledge in financial accounting and auditing.

Compensation Control Committee Compensation Expert

Pursuant to Section 25d (12) of the German Banking Act (KWG), at least one member of the Compensation Control Committee must have sufficient expertise and professional experience in the field of risk management and risk controlling, in particular, with regard to the mechanisms to align compensation systems to the company’s overall risk appetite and strategy and the bank’s capital base. The Supervisory Board determined that Dr. Paul Achleitner and Professor Dr. Henning Kagermann, members of the Compensation Control Committee, fulfill the requirements of Section 25d (12) of the German Banking Act (KWG) and therefore have the required expertise and professional experience in risk management and risk controlling.

For a description of the experience of the Supervisory Board members mentioned in the two foregoing paragraphs, please see “Management Report: Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Supervisory Board” of the Annual Report.

Values and leadership principles of Deutsche Bank AG and Deutsche Bank Group

Code of Business Conduct and Ethics

Deutsche Bank AG’s and Deutsche Bank Group’s Code of Business Conduct and Ethics describes the values and minimum standards for ethical business conduct that we expect all of our employees to follow. These values and standards govern employee interactions with our clients, competitors, business partners, government and regulatory authorities, and shareholders, as well as with other employees. The Code of Business Conduct and Ethics defines our values and beliefs and includes the self-commitment of the Management Board, the Supervisory Board as well as the senior management of Deutsche Bank Group to be compliant with these values and beliefs. In addition, it forms the cornerstone of our policies, which provide guidance on compliance with applicable laws and regulations.

In accordance with Section 406 of the Sarbanes-Oxley Act of 2002, we adopted a Code of Ethics for Senior Financial Officers of Deutsche Bank AG and Deutsche Bank Group with special obligations that apply to our “senior financial officers”, which currently consist of Deutsche Bank’s Chairman of the Management Board, Chief Financial Officer, Group Controller as well as certain other senior financial officers. There were no amendments or waivers to this Code of Ethics in 2017.

The current versions of the Code of Business Conduct and Ethics as well as the Code of Ethics for Senior Financial Officers of Deutsche Bank AG and Deutsche Bank Group are available from Deutsche Bank’s website: www.db.com/ir/en/documents.htm.

Corporate Governance at Deutsche Bank AG and Deutsche Bank Group

Deutsche Bank established a Global Governance Function to define, implement and monitor the corporate governance framework of Deutsche Bank AG and Deutsche Bank Group. It performs its governance function throughout the Group. The Global Governance Function addresses corporate governance issues in Deutsche Bank AG and Deutsche Bank Group, while focusing closely on clear organizational structures aligned to the key elements of good corporate governance.

Deutsche Bank AG and Deutsche Bank Group are committed to ensuring a corporate governance framework in accordance with international standards and statutory provisions. In order to support this objective, Deutsche Bank AG and Deutsche Bank Group have instituted clear and comprehensive principles, which are documented in the bank's Corporate Governance Fundamentals.

Principal Accountant Fees and Services

In accordance with German law, our principal accountant is appointed at our Annual General Meeting based on a recommendation of our Supervisory Board. The Audit Committee of our Supervisory Board prepares such a recommendation. Subsequent to the principal accountant's appointment, the Audit Committee awards the contract and in its sole authority approves the terms and scope of the audit and all audit engagement fees as well as monitors the principal accountant's independence. KPMG AG Wirtschaftsprüfungsgesellschaft was our principal accountant for the 2016 and 2017 fiscal years, respectively.

The table set forth below contains the aggregate fees billed for each of the last two fiscal years by KPMG AG Wirtschaftsprüfungsgesellschaft and the worldwide member firms of KPMG International in each of the following categories: (1) Audit fees, which are fees for professional services for the audit of our annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for those fiscal years, (2) Audit-related fees, which are fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported as Audit fees, (3) Tax-related fees, which are fees for professional services rendered for tax compliance, tax consulting and tax planning, and (4) All other fees, which are fees for products and services other than Audit fees, Audit-related fees and Tax-related fees. These amounts include expenses and exclude Value Added Tax (VAT).

Fee category in € m.	2017	2016
Audit fees	51	49
Audit-related fees	18	26
Tax-related fees	4	6
All other fees	0	1
Total fees	73	82

The Audit fees include fees for professional services for the audit of our annual financial statements and consolidated financial statements and do not include the audit fees for Postbank and its subsidiaries, as they are not audited by KPMG. The Audit-related fees include fees for other assurance services required by law or regulations, in particular for financial service specific attestation, for quarterly reviews, for spin-off audits and for merger audits, as well as fees for voluntary assurance services, like voluntary audits for internal management purposes and the issuance of comfort letters. Our Tax-related fees include fees for services relating to the preparation and review of tax returns and related compliance assistance and advice, tax consultation and advice relating to Group tax planning strategies and initiatives and assistance with assessing compliance with tax regulations.

United States law and regulations, and our own policies, generally require that all engagements of our principal accountant be pre-approved by our Audit Committee or pursuant to policies and procedures adopted by it. Our Audit Committee has adopted the following policies and procedures for consideration and approval of requests to engage our principal accountant to perform non-audit services. Engagement requests must in the first instance be submitted to the Accounting Engagement Team. If the request relates to services that would impair the independence of our principal accountant, the request must be rejected. Our Audit Committee has given its pre-approval for specified assurance, financial advisory and tax services, provided the expected fees for any such service do not exceed € 1 million. If the engagement request relates to such specified pre-approved services, it may be approved by the Accounting Engagement Team and must thereafter be reported to the Audit Committee. If the engagement request relates neither to prohibited non-audit services nor to pre-approved non-audit services, it must be forwarded to the Audit Committee for consideration. In addition, to facilitate the consideration of engagement requests between its meetings, the Audit Committee has delegated approval authority to several of its members who are "independent" as defined by the Securities and Exchange Commission and the New York Stock Exchange. Such members are required to report any approvals made by them to the Audit Committee at its next meeting.

Additionally, United States law and regulations permit the pre-approval requirement to be waived with respect to engagements for non-audit services aggregating to no more than five percent of the total amount of revenues we paid to our principal accountant, if such engagements were not recognized by us at the time of engagement and were promptly brought to the attention of our Audit Committee or a designated member thereof and approved prior to the completion of the audit. In 2016 and 2017, the percentage of the total amount of revenues we paid to our principal accountant for non-audit services that was subject to such a waiver was less than 5 % for each year.

Compliance with the German Corporate Governance Code

Declaration pursuant to Section 161 German Stock Corporation Act (AktG) (Declaration of Conformity 2017)

The Declaration of Conformity pursuant to Section 161 of the Stock Corporation Act, last issued by the Supervisory Board and Management Board on October 27, 2016, was reissued at the meeting of the Supervisory Board on October 26, 2017. The Management Board and Supervisory Board state according to Section 161 of the Stock Corporation Act:

(1) The last Declaration of Conformity was issued on October 27, 2016. Since then Deutsche Bank AG has complied and will continue to comply in the future with the recommendations of the “Government Commission’s on the German Corporate Governance Code” in the version of the Code dated May 5, 2015, published in the Bundesanzeiger on June 12, 2015, subject to the following deviations:

- Relating to No. 5.3.3, according to which the Supervisory Board is to form a Nomination Committee composed exclusively of shareholder representatives. Section 25 (d) of the German Banking Act stipulates that the Nomination Committee of the supervisory body must take on additional tasks that should be performed not solely by the shareholder representatives on the supervisory board. For this reason, the Nomination Committee of the Supervisory Board of Deutsche Bank AG also comprises representatives of the employees. However, it will be ensured that the candidate recommendations for the election proposals to the General Meeting will be prepared exclusively by the Committee’s shareholder representatives.
- Relating to No. 4.2.3 (2) sentence 6, according to which the amount of compensation for the Management Board members is to be capped, both overall and with regard to variable compensation components. The existing employment contracts (in conjunction with equity plan conditions) of the members of the Management Board of Deutsche Bank AG do provide for a limit (cap) in the awarding of total compensation and their variable compensation components. In this context, however, some hold the view that such limits would have to apply not only to the granting and awarding of the compensation components but also to their later payout. Although Deutsche Bank AG does not consider this view to be convincing, we state merely as a precautionary measure that a limit (cap) has not been set for the payout amount of deferred equity-based compensation and that therefore Deutsche Bank AG deviates from the recommendation in No. 4.2.3 (2) sentence 6 according to this interpretation.

(2) On February 7, 2017, the “Government Commission on the German Corporate Governance Code” submitted a new version of the Code, which was published in the Bundesanzeiger on April 24, 2017. Deutsche Bank AG has also complied and will continue to comply in the future with the recommendations of the new version of the Code subject to the deviations as stated in 1. above.

Statement on the Suggestions of the German Corporate Governance Code

Deutsche Bank voluntarily complies with the suggestions of the Code in the version dated February 7, 2017, with the following exceptions:

– The representatives appointed by Deutsche Bank to exercise shareholders' voting rights can be reached by those attending the General Meeting until just before voting commences. The representatives are reachable by those not attending until 12 noon on the day of the General Meeting using the instruction tool in the Internet (Code No. 2.3.2). In this manner, the risk of any technical disruptions directly before voting takes place can basically be excluded. The broadcast through the Internet also ends at the latest at this time, which means information useful for forming an opinion can no longer be expected after this point by shareholders who only participate through proxies.
– Our broadcast of the General Meeting through the Internet (Code No. 2.3.3) starts with the opening of the General Meeting by the Chairman and covers the report of the Supervisory Board and the report of the Management Board. The shareholders then have the opportunity to hold their discussions with management. These take place without a public broadcast through the Internet.

Targets for the proportion of women in management positions/gender quota

As of the date of this Corporate Governance Statement, the percentage of women on the Supervisory Board of Deutsche Bank AG is 35 %. The statutory minimum of 30 % pursuant to Section 96 (2) of the German Stock Corporation Act (AktG) is thereby fulfilled.

On September 12, 2015, the Supervisory Board set a target for the Management Board of Deutsche Bank AG to have at least one female member by June 30, 2017. When the decision was made there were no women on the Management Board. As of June 30, 2017, two women were members of the Management Board of Deutsche Bank AG, Sylvie Matherat and Kimberly Hammonds, and this is still the case as of the date of this Corporate Governance Statement. On July 27, 2017, the Supervisory Board set a target for the percentage of women on the Management Board of Deutsche Bank AG of at least 20% of the members by June 30, 2022.

On September 16, 2015, the Management Board set targets for the percentage of women at 17 % for the first management level and 21 % for the second management level, to be reached by June 30, 2017 (when the decision was made the percentage of women on the first management level was 14 %, and 18 % on the second management level). At the same meeting, the Management Board also set targets to be reached by December 31, 2020, for the percentage of women on the first management level at 20 % and on the second management level at 25 %.

The population of the first management level comprises Managing Directors and Directors who report directly to the Management Board and managers with comparable responsibilities and the population of the second management level comprises Managing Directors and Directors who report to the first management level.

Implementing German gender quota legislation at Deutsche Bank AG

in % (unless stated otherwise)	Status as of Dec 31, 2016	Status as of Jun 30, 2017	Target for Jun 30, 2017	Status as of Dec 31, 2017	Target for Dec 31, 2020	Target for Jun 30, 2022
Women on the Supervisory Board	35 %	35 %	30 %[1]	35 %	30 %[1]	-
Women on the Management Board	2	2	at least 1	16.7 %	-	20 %[2]
First management level below the Management Board	15.7 %	20.6 %	17 %	18.0 %	20 %	-
Second level below the Management Board	19.5 %	19.6 %	21 %	19.6 %	25 %	-

[1] Legal requirement.
[2] For a Management Board size of between eight and 12 members, this corresponds two women.

Key conditions have changed since the target was set for the percentage of women on the “Second level below the Management Board” in September 2015. These changes include the stronger integration of Infrastructure functions in the bank’s business divisions as well as our decisions regarding the partial IPO of our Asset Management subsidiary and the merging of our Private & Commercial Bank and Postbank. Furthermore, our extensive cost reduction program imposed restrictions on hiring and appointments at this level. In fact, the already relatively low number of employees on the “Second level below the Management Board” declined further in the period since September 2015, by nearly 17 %. Small changes in absolute numbers led to relatively high fluctuations in terms of percentages. Nevertheless, we maintained our target and continue to focus on increasing the percentage of women in management positions. Within this framework, our decisions on promotions and appointments are aligned, in particular, to the suitability of the candidates for the respective roles, their demonstrated performance and their future potential.

Diversity Concept

As an integral part of our strategy as a leading European bank with a global reach and a strong home market in Germany, Diversity is a decisive factor for our success. Diversity & Inclusion help Deutsche Bank in forming sustainable relationships with our clients and partners and in taking part in the societies where we do business.

Age, gender as well as educational and professional backgrounds have long been accepted as key aspects of our far more comprehensive understanding of Diversity at Deutsche Bank.

We are convinced that Diversity & Inclusion stimulate innovation, for example, and help us to take more balanced decisions and thus play a decisive role for the success of Deutsche Bank. Diversity & Inclusion are therefore integral components of the bank’s values and beliefs and its Code of Business Conduct and Ethics.

The Supervisory Board and Management Board strive to and should serve as role models for the bank, also with regard to Diversity & Inclusion. In accordance with our values and beliefs specified above, diversity in the composition of the Supervisory Board and the Management Board also facilitates the proper performance of the tasks and duties assigned to them by law, the Articles of Association and the Terms of Reference.

Based on Deutsche Bank’s understanding of Diversity & Inclusion, the values and beliefs and the measures described in the following for their implementation also apply – to the extent legally admissible – to the Supervisory Board and the Management Board of Deutsche Bank AG. The Supervisory Board considers diversity in the company, in particular, when filling positions on the Management Board and Supervisory Board.

Diversity Concept for the Supervisory Board

The Supervisory Board is to be composed in such a way that its members as a whole possess the expertise, skills and professional experience required to effectively monitor and advise the Management Board in its management of Deutsche Bank AG and Deutsche Bank Group – also with regard to the observance of the relevant bank supervisory regulations.

In light of the international operations of Deutsche Bank, care shall be taken, in particular, that the Supervisory Board has an appropriate number of members with many years of international experience.

Also in light of the legal requirements to be observed, the Supervisory Board shall be composed of at least 30 % women and at least 30 % men.

There is an age limit of 70, in principle, for members of the Supervisory Board and the maximum length of each individual Supervisory Board membership shall generally not exceed 15 years.

Implementation

It should be taken into account that the Supervisory Board can only influence the composition of the Supervisory Board through its proposals to the General Meeting for the election of the shareholder representatives.

Based on a proposal of the Nomination Committee, a profile of requirements was issued for the Supervisory Board and candidate profiles were issued for the Chairperson of the Supervisory Board, the members of the Supervisory Board and the chairpersons of each of the committees. The profiles summarize the knowledge, abilities and experience required to properly complete the tasks of the Supervisory Board of Deutsche Bank AG (collective suitability).

For the election proposals to the General Meeting, the Supervisory Board takes into account the legal requirements according to which the Supervisory Board shall be composed of at least 30% women and at least 30% men (joint fulfilment by shareholder and employee representatives).

The Nomination Committee also supports the Supervisory Board with the periodic assessment, to be performed at least once a year, of the knowledge, skills and experience of the individual members of the Supervisory Board as well as of the Supervisory Board in its entirety.

Results achieved in the 2017 financial year

Throughout the 2017 financial year, 13 men and 7 women (35 %) were members of the Supervisory Board. The statutory minimum quota of 30 % was thus exceeded.

The age structure is diverse, ranging from 33 to 70 years of age at the end of the financial year and spanning three generations, according to the general definition of the term.

The length of experience as member of the Supervisory Board of Deutsche Bank ranged from under one year to around 17 years. Three of the 20 members of the Supervisory Board joined the Supervisory Board in the 2017 financial year.

In accordance with our objectives specified above, all of the shareholder representatives on the Supervisory Board have many years of international experience in various companies and functions.

The diverse range of the members' educational and professional backgrounds includes banking, business administration, economics, law, history and information technology.

The bank transparently reports on Supervisory Board diversity in addition to the information presented above in this Corporate Governance Report / Corporate Governance Statement in the section "Management Board and Supervisory Board: Supervisory Board" as well as on the bank's website: www.db.com (Heading "Investor Relations", "Corporate Governance", "Supervisory Board").

Diversity Concept for the Management Board

Through the composition of the Management Board, it is to be ensured that its members have, at all times, the required knowledge, skills and experience necessary to properly perform their tasks. Accordingly, when selecting members for the Management Board, care is to be taken that they collectively have sufficient expertise and diversity within the meaning of our objectives specified above.

By way of resolution of the Supervisory Board, there was to be at least one woman on the Management Board by June 30, 2017, and the Management Board is to be composed of at least 20 % women by June 30, 2022. For a Management Board size of between eight and 12 members, this corresponds two women.

For the Management Board members, the age limit is reached, in general, when a member reaches the retirement age, according to the rules of the German statutory pension insurance scheme, for the long-term insured to claim an early retirement pension ("Renteneintrittsalter zur vorzeitigen Inanspruchnahme der Altersrente für langjährig Versicherte"). This is currently at 63 years of age.

Implementation

In accordance with the law, the Articles of Association and Terms of Reference, the Supervisory Board adopted candidate profiles for the members of the Management Board, based on a proposal from the Nomination Committee. These profiles take into account an “Expertise and Capability Matrix”, specifying, among other things, the required knowledge, skills and experience to perform the tasks as Management Board member, in order to successfully develop and implement the bank’s strategy in the respective market or the respective division and as a management body collectively.

In identifying candidates to fill a position on the bank’s Management Board, the Supervisory Board’s Nomination Committee takes into account the appropriate diversity balance of all Management Board members collectively. Furthermore, it also considers the targets set by the Supervisory Board in accordance with statutory requirements for the percentage of women on the Management Board.

The Nomination Committee supports the Supervisory Board with the periodic assessment, to be performed at least once a year, of the knowledge, skills and experience of the individual members of the Management Board and of the Management Board in its entirety.

Results achieved in the 2017 financial year

Throughout the financial year, two women were members of the Management Board. The target adopted for June 30, 2017 of at least one woman on the Management Board was thus clearly fulfilled. As of the end of the year, there were 10 men and two women on the Management Board.

The age structure is diverse, ranging from 47 to 63 years of age at the end of the financial year and spanning two generations, according to the general definition of the term.

The length of experience as member of the Management Board of Deutsche Bank ranged from under one year to around 5 years. Two of the 12 members of the Management Board joined the Management Board in the 2017 financial year.

Also with our strategy in mind of being a leading European bank with a global reach and a strong home market in Germany, half of the Management Board members have a German background. However, the ethnic diversity of the Management Board does not currently reflect the diversity of the markets where we do business or the diversity of our employees.

The diverse range of the members’ educational and professional backgrounds includes banking, business administration, economics, law and engineering.

The bank transparently reports on Management Board diversity in addition to the information presented above in this Corporate Governance Report / Corporate Governance Statement in the section “Management Board and Supervisory Board: Management Board” as well as on the bank’s website: www.db.com (Heading “Investor Relations”, “Corporate Governance”, “Management Board”).

4

Supplementary Information (Unaudited)

Non-GAAP Financial Measures

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

Return on Equity Ratios

The Group reports a post-tax return on average shareholders' equity and a post-tax return on average tangible shareholders' equity, each of which is a non-GAAP financial measure.

The post-tax returns on average shareholders' equity and average tangible shareholders' equity are calculated as net income (loss) attributable to Deutsche Bank shareholders as a percentage of average shareholders' equity and average tangible shareholders' equity, respectively.

Net income (loss) attributable to Deutsche Bank shareholders is a non-GAAP financial measure and is defined as net income (loss) excluding post-tax income (loss) attributable to noncontrolling interests. For the Group, it reflects the reported effective tax rate, which was 160 % for the full year 2017, (67) % for 2016 and (11) % for 2015. For the segments, the applied tax rate was 33 % for all reported periods in 2017 and 35 % for the all reported periods in 2015 and 2016.

At the Group level, tangible shareholders' equity is shareholders' equity as reported in the Consolidated Balance Sheet excluding goodwill and other intangible assets. Tangible shareholders´ equity for the segments is calculated by deducting goodwill and other intangible assets from shareholders' equity as allocated to the segments, as described in Note 4 "Business Segments and Related Information" to the consolidated financial statements within the section "Measurement of Segment Profit and Loss". Shareholders' equity and tangible shareholders' equity are presented on an average basis.

The Group believes that a presentation of average tangible shareholders' equity makes comparisons to its competitors easier, and refers to this measure in the return on equity ratios presented by the Group. However, average tangible shareholders' equity is not a measure provided for in IFRS, and the Group's ratios based on this measure should not be compared to other companies' ratios without considering differences in the calculations.

The reconciliation of the aforementioned ratios is set forth in the table below:

						2017
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total
Income (loss) before income taxes (IBIT)	843	359	720	–	(695)	1,228
Income tax expense	0	0	0	–	0	(1,963)
Net Income (loss)	565	241	482	–	(2,023)	(735)
Net income (loss) attributable to noncontrolling interests	0	0	0	–	(15)	(15)
Net Income attributable to DB shareholders and additional equity components	**565**	**241**	**482**	**–**	**(2,038)**	**(751)**
Average shareholders' equity	44,169	14,934	4,725	–	99	63,926
Add (deduct): Average goodwill and other intangible assets	(2,965)	(2,079)	(3,837)	–	(1)	(8,881)
Average tangible shareholders' equity	**41,203**	**12,855**	**888**	**–**	**98**	**55,045**
Post-tax return on average shareholders' equity	1 %	2 %	10 %	–	N/M	(1) %
Post-tax return on average tangible shareholders' equity	1 %	2 %	54 %	–	N/M	(1) %

						2016
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consoli-dation & Adjust-ments	Total
Income (loss) before income taxes (IBIT)	1,705	1,439	(206)	(3,207)	(541)	(810)
Income tax expense	0	0	0	0	0	(546)
Net Income (loss)	1,115	941	(135)	(2,097)	(1,181)	(1,356)
Net income (loss) attributable to noncontrolling interests	0	0	0	0	(45)	(45)
Net Income attributable to DB shareholders and additional equity components	1,115	941	(135)	(2,097)	(1,226)	(1,402)
Average shareholders’ equity	40,518	15,018	4,864	1,682	0	62,082
Add (deduct): Average goodwill and other intangible assets	(2,749)	(1,896)	(4,907)	(324)	0	(9,876)
Average tangible shareholders’ equity	37,769	13,122	(43)	1,359	0	52,206
Post-tax return on average shareholders’ equity	3 %	6 %	(3) %	N/M	N/M	(2) %
Post-tax return on average tangible shareholders’ equity	3 %	7 %	N/M	N/M	N/M	(3) %

						2015
in € m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consoli-dation & Adjust-ments	Total
Income (loss) before income taxes (IBIT)	(376)	(3,370)	682	(2,264)	(770)	(6,097)
Income tax expense	0	0	0	0	0	(675)
Net Income (loss)	(243)	(2,177)	441	(1,463)	(3,331)	(6,772)
Net income (loss) attributable to noncontrolling interests	0	0	0	0	(21)	(21)
Net Income attributable to DB shareholders and additional equity components	(243)	(2,177)	441	(1,463)	(3,353)	(6,794)
Average shareholders’ equity	39,258	14,333	5,352	3,735	6,377	69,055
Add (deduct): Average goodwill and other intangible assets	(3,177)	(1,781)	(5,048)	(72)	(3,831)	(13,909)
Average tangible shareholders’ equity	36,081	12,552	304	3,663	2,546	55,146
Post-tax return on average shareholders’ equity	(1) %	(15) %	8 %	N/M	N/M	(10) %
Post-tax return on average tangible shareholders’ equity	(1) %	(17) %	145 %	N/M	N/M	(12) %

Adjusted Costs

Adjusted costs is one of the Group's key performance indicators and is a non-GAAP financial measure most directly comparable to the IFRS financial measure noninterest expenses. Adjusted costs is calculated by adjusting noninterest expenses under IFRS for (i) impairment of goodwill and other intangible assets, (ii) litigation, (iii) policyholder benefits and claims and (iv) restructuring and severance. Policyholder benefits and claims arose from the Abbey Life Assurance business which was sold in late 2016 and so will not occur in subsequent periods. The Group believes that a presentation of noninterest expenses excluding the impact of these items provides a more meaningful depiction of the costs associated with our operating businesses.

						2017
in € m.	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total Consolidated
Noninterest expenses	13,143	9,518	1,811	–	223	24,695
Impairment of goodwill and other intangible assets	6	12	3	–	0	21
Litigation	44	53	5	–	112	213
Policyholder benefits and claims	0	0	0	–	0	0
Restructuring and severance	152	399	18	–	2	570
Adjusted costs	12,941	9,054	1,786	–	109	23,891

						2016
in € m.	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total Consolidated
Noninterest expenses	14,193	9,212	3,220	2,701	116	29,442
Impairment of goodwill and other intangible assets	285	0	1,021	(49)	(0)	1,256
Litigation	608	56	(0)	1,750	(18)	2,397
Policyholder benefits and claims	0	0	374	0	0	374
Restructuring and severance	391	204	69	23	(6)	681
Adjusted costs	12,909	8,951	1,757	977	140	24,734

						2015
in € m.	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consolidation & Adjustments	Total Consolidated
Noninterest expenses	18,856	13,495	2,334	3,006	976	38,667
Impairment of goodwill and other intangible assets	2,168	3,608	0	0	0	5,776
Litigation	2,932	56	1	1,849	380	5,218
Policyholder benefits and claims	0	0	256	0	0	256
Restructuring and severance	257	679	8	24	(3)	965
Adjusted costs	13,499	9,152	2,069	1,133	599	26,451

Book Value and Tangible Book Value per Basic Share Outstanding

Book value per basic share outstanding and tangible book value per basic share outstanding are non-GAAP financial measures that are used and relied upon by investors and industry analysts as capital adequacy metrics. Book value per basic share outstanding represents the Bank's total shareholders' equity divided by the number of basic shares outstanding at period-end. Tangible book value represents the Bank's total shareholders' equity less goodwill and other intangible assets. Tangible book value per basic share outstanding is computed by dividing tangible book value by period-end basic shares outstanding.

Tangible Book Value

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	 in %	2016 increase (decrease) from 2015 in € m.	 in %
Total shareholders' equity (Book value)	**63,174**	59,833	62,678	3,341	6	(2,845)	(5)
Goodwill and other intangible assets	**(8,839)**	(8,982)	(10,078)	143	(2)	1,096	(11)
Tangible shareholders' equity (Tangible book value)	**54,335**	50,851	52,600	3,484	7	(1,750)	(3)

Basic Shares Outstanding

in € m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in € m.	 in %	2016 increase (decrease) from 2015 in € m.	 in %
Number of shares	**2,066.8**	1,545.5	1,545.5	521.3	33.7	0	0
Shares outstanding:							
Treasury shares	**(0.4)**	(0.2)	(0.4)	(0.1)	63.5	0.2	(46.0)
Vested share awards	**28.5**	23.3	9.9	5.2	22.4	13.4	134.3
Basic shares outstanding[1]	**2,094.9**	1,568.6	1,555.0	526.3	33.6	13.6	0.9
Book value per basic share outstanding in €	**30.16**	38.14	40.31	(7.98)	(20.9)	(2.17)	(5.4)
Tangible book value per basic share outstanding in €	**25.94**	32.42	33.83	(6.48)	(20.0)	(1.41)	(4.2)

[1] The basic shares outstanding have been adjusted for comparative periods in order to reflect the effect of the bonus component of subscription rights issued in April 2017 in connection with the capital increase.

Fully loaded CRR/CRD 4 Measures

Our regulatory assets, exposures, risk-weighted assets, capital and ratios thereof are calculated for regulatory purposes and are set forth throughout this document under CRR/CRD 4. CRR/CRD 4 provides for "transitional" (or "phase-in") rules, under which capital instruments that are no longer eligible under the new rules are permitted to be phased out as the new rules on regulatory adjustments are phased in, as well as regarding the risk weighting of certain categories of assets. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. Unless otherwise noted, our CRR/CRD 4 solvency measures set forth in this document reflect these transitional rules.

We also set forth in this document such CRR/CRD 4 measures on a "fully loaded" basis, reflecting full application of the final CRR/CRD 4 framework without consideration of the transitional provisions under CRR/CRD 4, except as described below.

The transitional rules included rules permitting the grandfathering of equity investments at a risk-weight of 100 % instead of a risk weight between 190 % and 370 % determined based on Article 155 CRR that would apply under the CRR/CRD 4 fully loaded rules. Despite the grandfathering rule for equity investments not applying under the full application of the final CRR/CRD 4 framework, we continued to apply it in our CRR/CRD 4 fully loaded methodology for a limited subset of equity positions for the periods ended December 31, 2015 and December 31, 2016, based on our intention to mitigate the impact of the expiration of the grandfathering rule through sales of the underlying assets or other measures prior to its expiration at end of 2017. We did not apply the grandfathering rule in our CRR/CRD 4 fully loaded methodology for the period ended December 31, 2017.

As of December 31, 2016, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA consisted of 15 transactions amounting to € 220 million in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been no more than € 816 million, and thus our Group fully loaded RWA would have been no more than € 358.1 billion as of December 31, 2016, rather than the Group fully loaded RWA of € 357.5 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2016 using fully loaded RWAs without application of the grandfathering rule, such capital ratios would have remained unchanged (due to rounding) at the 11.8 %, 13.1 % and 16.6 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

As of December 31, 2015, our portfolio of transactions for which we applied the equity investment grandfathering rule in calculating our fully loaded RWA amounted to € 1.5 billion in exposures. Had we not applied the grandfathering rule for these transactions, their fully loaded RWA would have been no more than € 5.4 billion, and thus our Group fully loaded RWA would have been no more than € 400.7 billion as of December 31, 2015, rather than the Group fully loaded RWA of € 396.7 billion that we reported on a fully loaded basis with application of the grandfathering rule. Also, had we calculated our fully loaded CET 1 capital ratio, Tier 1 capital ratio and Total capital ratio as of December 31, 2015 using fully loaded RWAs without application of the grandfathering rule, such capital ratios would have been 11.0 %, 12.1 % and 15.2 %, respectively, instead of the 11.1 %, 12.3 % and 15.4 %, respectively, that we reported on a fully loaded basis with application of the grandfathering rule.

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

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

For descriptions of these fully loaded CRR/CRD 4 measures and the differences from the most directly comparable measures under the CRR/CRD 4 transitional rules, please refer to "Management Report: Risk Report: Risk and Capital Performance: Capital and Leverage Ratio", in particular the subsections thereof entitled "Development of Regulatory Capital", "Development of Risk-Weighted Assets" and "Leverage Ratio".

Declaration of Backing

Deutsche Bank AG ensures, except in the case of political risk, that the following subsidiaries are able to meet their contractual liabilities:

DB Investments (GB) Limited, London

Deutsche Asset Management International GmbH, Frankfurt am Main[1]

Deutsche Asset Management Investment GmbH, Frankfurt am Main[2]

Deutsche Asset Management S.A., Luxembourg[3]

Deutsche Australia Limited, Sydney

DEUTSCHE BANK A.Ş., Istanbul

Deutsche Bank Americas Holding Corp., Wilmington

Deutsche Bank (China) Co., Ltd., Beijing

Deutsche Bank Europe GmbH, Frankfurt am Main

Deutsche Bank Luxembourg S.A., Luxembourg

Deutsche Bank (Malaysia) Berhad, Kuala Lumpur

Deutsche Bank Polska Spółka Akcyjna, Warsaw

Deutsche Bank Privat- und Geschäftskunden AG, Frankfurt am Main

Deutsche Bank S.A. – Banco Alemão, São Paulo

Deutsche Bank, Sociedad Anónima Española, Madrid

Deutsche Bank Società per Azioni, Milan

Deutsche Bank (Suisse) SA, Geneva

Deutsche Bank Trust Company Americas, New York

Deutsche Futures Singapore Pte Ltd, Singapore

Deutsche Holdings (Malta) Ltd., St. Julians

Deutsche Immobilien Leasing GmbH, Düsseldorf

Deutsche Morgan Grenfell Group Public Limited Company, London

Deutsche Securities Inc., Tokyo

Deutsche Securities Asia Limited, Hong Kong

Deutsche Securities Saudi Arabia LLC, Riyadh

DWS Holding & Service GmbH, Frankfurt am Main[4]

norisbank GmbH, Bonn

Public joint-stock company “Deutsche Bank DBU”, Kiev

OOO “Deutsche Bank”, Moscow

Sal. Oppenheim jr. & Cie. AG & Co. KGaA, Köln

[1] We have withdrawn and terminated the declaration of backing for Deutsche Asset Management International GmbH, Frankfurt am Main, last-mentioned in the Annual Report 2016, effective at the end of June 30, 2018.
[2] We have withdrawn and terminated the declaration of backing for Deutsche Asset Management Investment GmbH, Frankfurt am Main, last-mentioned in the Annual Report 2016, effective at the end of June 30, 2018.
[3] We have withdrawn and terminated the declaration of backing for Deutsche Asset Management S.A., Luxembourg, last-mentioned in the Annual Report 2016, effective at the end of June 30, 2018.
[4] We have withdrawn and terminated the declaration of backing for DWS Holding & Service GmbH, Frankfurt am Main, last-mentioned in the Annual Report 2016, effective at the end of June 30, 2018.

Group Five-Year Record

in € m.	2017	2016	2015	2014	2013
Net interest income	**12,378**	14,707	15,881	14,272	14,834
Provision for credit losses	525	1,383	956	1,134	2,065
Net interest income after provision for credit losses	**11,853**	13,324	14,925	13,138	12,769
Commissions and fee income	11,002	11,744	12,765	12,409	12,308
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,926	1,401	3,842	4,299	3,817
Other noninterest income (loss)	142	2,162	1,037	969	956
Total net revenues	**26,447**	30,014	33,525	31,949	31,915
Compensation and benefits	12,253	11,874	13,293	12,512	12,329
General and administrative expenses	11,973	15,454	18,632	14,654	15,126
Policyholder benefits and claims	0	374	256	289	460
Impairment of goodwill and other intangible assets	21	1,256	5,776	111	79
Restructuring activities	447	484	710	133	399
Total noninterest expenses	**24,695**	29,442	38,667	27,699	28,394
Income (loss) before income taxes	**1,228**	(810)	(6,097)	3,116	1,457
Income tax expense	1,963	546	675	1,425	775
Net income (loss)	**(735)**	(1,356)	(6,772)	1,691	681
Net income attributable to noncontrolling interests	15	45	21	28	15
Net income (loss) attributable to Deutsche Bank shareholders and additional equity components	(751)	(1,402)	(6,794)	1,663	666

in € (unless stated otherwise)					
Basic earnings per share[1,2]	(0.53)	(1.08)	(4.52)	1.20	0.57
Diluted earnings per share[1,3]	(0.53)	(1.08)	(4.52)	1.17	0.56
Dividends paid per share[4]	0.19[6]	0.00	0.75	0.75	0.75
Dividends paid per share in U.S.$[5]	0.21	0.00	0.84	1.02	0.97

1 The number of average basic and diluted shares outstanding has been adjusted for all periods before April 2017 in order to reflect the effect of the bonus component of subscription rights issued in connection with the capital increase completed in April 2017, all periods before June 2014 have been adjusted in order to reflect the effect of the bonus component of subscription rights issued in connection with the capital increase completed in June 2014.
2 We calculate basic earnings per share for each period by dividing our net income attributable to Deutsche Bank shareholders by the average number of common shares outstanding. Earnings were adjusted by € 298 million and € 276 million and € 228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2017, April 2016 and April 2015, respectively.
3 We calculate diluted earnings per share for each period by dividing our net income attributable to Deutsche Bank shareholders by the average number of common shares outstanding, both after assumed conversions. Earnings were adjusted by € 298 million and € 276 million and € 228 million net of tax for the coupons paid on Additional Tier 1 Notes in April 2017, April 2016 and April 2015, respectively. For 2017, 2016 and 2015, there is no dilutive effect as the Group reported a net loss.
4 Dividends we declared and paid in the year.
5 Dividends declared and paid in U.S.$ were translated from euro into U.S.$ based on the exchange rates as of the respective payment days.
6 The dividend paid in 2017 consisted of € 0.11 for 2016 and of € 0.08 for 2015 that were paid simultaneously in 2017 after the agreement by the annual general meeting in 2017.

	2017	2016	2015	2014	2013
in € m.	in € m.	in € m.	in € m.	in € m.	in € m.
Total assets	1,474,732	1,590,546	1,629,130	1,708,703	1,611,400
Loans	401,699	408,909	427,749	405,612	376,582
Deposits	580,812	550,204	566,974	532,931	527,750
Long-term debt	159,715	172,316	160,016	144,837	133,082
Common shares[1]	5,291	3,531	3,531	3,531	2,610
Total shareholders' equity	63,174	59,833	62,678	68,351	54,719
Common Equity Tier 1 capital (CRR/CRD 4)[2]	50,808	47,782	52,429	60,103	38,534
Common Equity Tier 1 capital (CRR/CRD 4 fully loaded)[2]	48,300	42,279	44,101	46,076	38,534
Tier 1 capital (CRR/CRD 4)[2]	57,631	55,486	58,222	63,898	50,717
Tier 1 capital (CRR/CRD 4 fully loaded)[2]	52,921	46,829	48,651	50,695	50,717
Total regulatory capital (CRR/CRD 4)[2]	64,016	62,158	64,522	68,293	55,464
Total regulatory capital (CRR/CRD 4 fully loaded)[2]	63,250	59,502	60,976	63,072	55,464

1 Capital increased from authorized capital against cash contributions through a public offering with subscription rights in April 2017 and in June 2014.
2 Figures presented for 2017, 2016, 2015 and 2014 are based on the transitional rules ("CRR/CRD 4") and the full application ("CRR/CRD 4 fully loaded") of the CRR/CRD 4 framework. Figures presented for 2013 are based on "Basel 2.5". The capital ratios relate the respective capital to risk-weighted assets. Until 2013 transitional items pursuant to the former Section 64h (3) of the German Banking Act are excluded.

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Publication

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Cautionary statement regarding forward-looking statements

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

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, potential defaults of borrowers or trading counterparties, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of March 16, 2018 under the heading “Risk Factors.” Copies of this document are readily available upon request or can be downloaded from www.db.com/ir.

2018
Financial Calendar

April 26, 2018
Interim Report as of March 31, 2018

May 24, 2018
Annual General Meeting in the Festhalle Frankfurt am Main (Exhibition Center)

May 29, 2018
Dividend payment

July 25, 2018
Interim Report as of June 30, 2018

October 24, 2018
Interim Report as of September 30, 2018

2019
Financial Calendar

February 1, 2019
Preliminary results for the 2018 financial year

March 22, 2019
Annual Report 2018 and Form 20-F

April 25, 2019
Interim Report as of March 31, 2019

May 23, 2019
Annual General Meeting in the Festhalle Frankfurt am Main (Exhibition Center)

May 28, 2019
Dividend payment
(in case of a distributable profit and the decision of the AGM to pay a dividend)

July 25, 2019
Interim Report as of June 30, 2019

October 31, 2019
Interim Report as of September 30, 2019

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