DEUTSCHE BANK AKTIENGESELLSCHAFT
Form 20-F
March 16, 2018
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As filed with the Securities and Exchange Commission on March 16, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

or

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

or

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report .

Commission file number 1-15242

Deutsche Bank Aktiengesellschaft

(Exact name of Registrant as specified in its charter)

Deutsche Bank Corporation

(Translation of Registrant s name into English)

Federal Republic of Germany

(Jurisdiction of incorporation or organization)

Taunusanlage 12, 60325 Frankfurt am Main, Germany

(Address of principal executive offices)

Steve Morris, +44-207-54-75705, steve.morris@db.com, Taunusanlage 12, 60325 Frankfurt am Main, Germany

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

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

See following page

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

NONE

(Title of Class)

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

NONE

(Title of Class)

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

Ordinary Shares, no par value	2,066,402,041

(as of December 31, 2017)

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

Yes No

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

Yes No

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

Yes No

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

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of large accelerated filer , accelerated filer , and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards* provided pursuant to Section 13(a) of the Exchange Act.

*The term new or revised financial accounting standard refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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

U.S. GAAP	International Financial Reporting Standards as issued by the International Accounting Standards Board	Other

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

Item 17 Item 18

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

Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes No

Securities registered or to be registered pursuant to Section 12(b) of the Act (as of February 28, 2018)

Title of each class	Name of each exchange on which registered
Ordinary shares, no par value	New York Stock Exchange
6.55 % Trust Preferred Securities of Deutsche Bank Contingent Capital Trust II 6.55 % Company Preferred Securities of Deutsche Bank Contingent Capital LLC II* Subordinated Guarantees of Deutsche Bank AG in connection with Capital Securities*	New York Stock Exchange
8.05 % Trust Preferred Securities of Deutsche Bank Contingent Capital Trust V 8.05 % Company Preferred Securities of Deutsche Bank Contingent Capital LLC V* Subordinated Guarantees of Deutsche Bank AG in connection with Capital Securities*	New York Stock Exchange
Fixed to Fixed Reset Rate Subordinated Tier 2 Notes Due 2028	New York Stock Exchange
4.50 % Fixed Rate Subordinated Tier 2 Notes Due 2025	New York Stock Exchange
DB Agriculture Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Double Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Agriculture Double Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Base Metals Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Base Metals Double Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Base Metals Double Long Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Commodity Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Commodity Double Long Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Commodity Double Short Exchange Traded Notes due April 1, 2038	NYSE Arca
DB Crude Oil Short Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Crude Oil Long Exchange Traded Notes due June 1, 2038	NYSE Arca
DB Crude Oil Double Short Exchange Traded Notes due June 1, 2038	NYSE Arca

DB Gold Double Long Exchange Traded notes due February 15, 2038	NYSE Arca
DB Gold Double Short Exchange Traded notes due February 15, 2038	NYSE Arca
DB Gold Short Exchange Traded notes due February 15, 2038	NYSE Arca
ELEMENTS Dogs of the Dow Linked to the Dow Jones High Yield Select 10 Total Return Index due November 14, 2022	NYSE Arca
ELEMENTS Linked to the Morningstar® Wide Moat Focus(SM) Total Return Index due October 24, 2022	NYSE Arca
FI Enhanced Global High Yield Exchange Traded Notes Linked to the MSCI World High Dividend Yield USD Gross Total Return Index due October 12, 2023	NYSE Arca

* For listing purpose only, not for trading

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

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

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

Inclusion of Our Annual Report

We have included as an integral part of this Annual Report on Form 20-F our Annual Report 2017, to which we refer for the responses to certain items hereof. Certain portions of the Annual Report 2017 have been omitted, as indicated therein. The included Annual Report 2017 contains our consolidated financial statements, which we also incorporate by reference into this report, in response to Items 8.A and 18. Such consolidated financial statements differ from those contained in the Annual Report 2017 used for other purposes in that, for Notes 43 and 44 thereto, notes addressing non-U.S. requirements have been replaced with notes addressing U.S. requirements, and Note 45 thereto has been omitted. Such consolidated financial statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their Report of Independent Registered Public Accounting Firm included in the Annual Report 2017, which report is included only in the version of the Annual Report 2017 included in this Annual Report on Form 20-F.

Cautionary Statement Regarding Forward-Looking Statements

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

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

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

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

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

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

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

Use of Non-GAAP Financial Measures

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

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

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

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

CRR/CRD 4 Solvency Measures

Our regulatory assets, exposures, risk-weighted assets, capital and ratios thereof are calculated for regulatory purposes as of December 31, 2017, December 31, 2016 and December 31, 2015 and set forth throughout this document under the regulation on prudential requirements for credit institutions and investment firms (CRR) and the Capital Requirements Directive 4 (CRD 4) implementing Basel 3, which were published on June 27, 2013 and which apply on and after January 1, 2014. CRR/CRD 4 provides for transitional (or phase-in) rules, under which capital instruments that are no longer eligible under the new rules are permitted to be phased out as the new rules on regulatory adjustments are phased in, as well as regarding the risk weighting of certain categories of assets. In some cases, CRR/CRD 4 maintains transitional rules that had been adopted in earlier capital adequacy frameworks through Basel 2 or Basel 2.5. The transitional rules relate, e.g., to the risk weighting of certain categories of assets. Unless otherwise noted, our CRR/CRD 4 solvency measures as of December 31, 2017, December 31, 2016 and December 31, 2015 set forth in this document reflect these transitional rules.

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

The transitional rules 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 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 the Annual Report 2017, in particular the subsections thereof entitled Development of Regulatory Capital , Development of Risk-Weighted Assets and Leverage Ratio , and, with respect to the effect of the grandfathering rule on our fully loaded CRR/CRD 4 measures, to Supplementary Information: Non-GAAP Financial Measures: Fully loaded CRR/CRD 4 Measures in the Annual Report 2017, each of which are incorporated by reference herein.

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

Use of Internet Addresses

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

PART I

Item 1: Identity of Directors, Senior Management and Advisers

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

Item 2: Offer Statistics and Expected Timetable

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

Item 3: Key Information

Selected Financial Data

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

Income Statement Data

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.

Balance Sheet Data

	2017 in m.	2016 in m.	2015 in m.	2014 in m.	2013 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.

Certain Key Ratios and Figures

	2017	2016	2015	2014	2013
Share price at period-end[1]	15.88	15.40	20.10	22.30	29.52
Share price high[1]	17.82	19.72	29.83	34.05	32.97
Share price low[1]	13.11	8.83	18.46	20.22	25.04
Book value per basic share outstanding[2, 4]	30.16	38.14	40.31	44.02	45.34
Tangible book value per basic share outstanding[3, 4]	25.94	32.42	33.83	34.39	33.79
Post-tax return on average shareholders equity[5]	(1.2) %	(2.3) %	(9.8) %	2.7 %	1.2 %
Post-tax return on average tangible shareholders equity[6]	(1.4) %	(2.7) %	(12.3) %	3.5 %	1.6 %
Cost/income ratio[7]	93.4 %	98.1 %	115.3 %	86.7 %	89.0 %
Compensation ratio[8]	46.3 %	39.6 %	39.7 %	39.2 %	38.6 %
Noncompensation ratio[9]	47.0 %	58.5 %	75.7 %	47.5 %	50.3 %
Common Equity Tier 1 capital ratio (CRR/CRD 4)[10]	14.8 %	13.4 %	13.2 %	15.2 %	12.8 %
Common Equity Tier 1 capital ratio (CRR/CRD 4 fully loaded)[10]	14.0 %	11.8 %	11.1 %	11.7 %	12.8 %
Tier 1 capital ratio (CRR/CRD 4)[10]	16.8 %	15.6 %	14.7 %	16.1 %	16.9 %
Tier 1 capital ratio (CRR/CRD 4 fully loaded)[10]	15.4 %	13.1 %	12.3 %	12.9 %	16.9 %
Employees at period-end (full-time equivalent):					
In Germany	42,526	44,600	45,757	45,392	46,377
Outside Germany	55,009	55,144	55,347	52,746	51,877
Branches at period-end:					
In Germany	1,570	1,776	1,827	1,845	1,924
Outside Germany	855	880	963	969	983

1 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.
2 Shareholders equity divided by the number of basic shares outstanding (both at period-end).
3 Shareholders equity less goodwill and other intangible assets, divided by the number of basic shares outstanding (both at period-end).
4 The number of average basic shares outstanding has been adjusted for all periods before April 2017 in order to reflect the effect of the bonus element of the subscription rights issue in connection with the capital increase 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.
5 Net income attributable to our shareholders as a percentage of average shareholders equity.
6 Net income attributable to our shareholders as a percentage of average tangible shareholders equity.
7 Total noninterest expenses as a percentage of net interest income before provision for credit losses, plus noninterest income.
8 Compensation and benefits as a percentage of total net interest income before provision for credit losses, plus noninterest income.
9 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.
10

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.

Dividends

The following table shows the dividend per share in euro and in U.S. dollars for the years ended December 31, 2017, 2016, 2015, 2014 and 2013. We declare our dividends at our Annual General Meeting following each year. For 2017, the Management Board will propose to the Annual General Meeting to pay a dividend of 0.11 per share. Our dividends are based on the non-consolidated results of Deutsche Bank AG as prepared in accordance with German accounting principles. Because we declare our dividends in euro, the amount an investor actually receives in any other currency depends on the exchange rate between euro and that currency at the time the euros are converted into that currency.

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

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

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

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

			Payout ratio [2,3]	
		Dividends		
			Basic earnings	
	Dividends per share[1]	per share	per share	Diluted earnings per share
2017 (proposed)	$ 0.13	0.11	N/M	N/M
2016[4]	$ 0.12	0.11	N/M	N/M
2015[4]	$ 0.09	0.08	N/M	N/M
2014	$ 0.91	0.75	63 %	64 %
2013	$ 1.03	0.75	132 %	134 %

N/M Not meaningful
1 For your convenience, we present dividends in U.S. dollars for each year by translating the euro amounts at the period end rate for the last business day at each year end as described below under Exchange Rate and Currency Information .
2 We define our payout ratio as the dividends we paid per share in respect of each year as a percentage of our basic and diluted earnings per share for that year.
3 The number of average basic and diluted shares outstanding has been adjusted in order to reflect the effect of the bonus element of the subscription rights issue in connection with the capital increases in April 2017 and in June 2014. For 2017, 2016 and 2015, there is no dilutive effect as the Group reported a net loss.
4 Dividends for 2016 and 2015 were approved by the annual general meeting in 2017 and were paid simultaneously in 2017.

Exchange Rate and Currency Information

Germany s currency is the euro. For your convenience, we have translated some amounts denominated in euro appearing in this document into U.S. dollars. Unless otherwise stated, we have made these translations at U.S.$ 1.1993 per euro, the euro foreign exchange reference rate for U.S. dollars published by the European Central Bank (ECB) for December 31, 2017. ECB euro foreign exchange reference rates are based on a regular daily concertation procedure between central banks across Europe and worldwide, which normally takes place at 2.15 p.m. CET. You should not construe any translations as a representation that the amounts could have been exchanged at the rate used on December 31, 2017 or any other date.

The ECB euro foreign exchange reference rate for U.S. dollars for December 31, 2017 may differ from the actual rates we used in the preparation of the financial information in this document. Accordingly, U.S. dollar amounts appearing in this document may differ from the actual U.S. dollar amounts that we originally translated into euros in the preparation of our financial statements.

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

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

in U.S.$ per	Period-end[1]	Average[2]	High	Low
2018				
February	1.2214	0.0000	1.2493	1.2214
January	1.2457	0.0000	1.2457	1.1932
2017				
December	1.1993	0.0000	1.1993	1.1736
November	1.1849	0.0000	1.1952	1.1562
October	1.1638	0.0000	1.1856	1.1605
September	1.1806	0.0000	1.2060	1.1741
2016	1.0541	1.1032	1.1569	1.0364
2015	1.0887	1.1046	1.2043	1.0552
2014	1.2141	1.3211	1.3953	1.2141
2013	1.3791	1.3308	1.3814	1.2768

1 Period-end rate is the rate announced for the last business day of the period.
2 We calculated the average rates for each year using the average of exchange rates on the last business day of each month during the year. We did not calculate average exchange rates within months.

Capitalization and Indebtedness

Consolidated capitalization in accordance with IFRS as of December 31, 2017

	in m.
Debt:[1,2]	
Long-term debt	159,715
Trust preferred securities	5,491
Long-term debt at fair value through profit or loss	6,439
Total debt	**171,645**

Shareholders equity:	
Common shares (no par value)	5,291
Additional paid-in capital	39,918
Retained earnings	17,454
Common shares in treasury, at cost	(9)
Accumulated other comprehensive income, net of tax	
Unrealized net gains (losses) on financial assets available for sale, net of applicable tax and other	689
Unrealized net gains (losses) on derivatives hedging variability of cash flows, net of tax	18
Unrealized net gains (losses) on assets classified as held for sale, net of tax	0
Foreign currency translation, net of tax	(227)
Unrealized net gains (losses) from equity method investments	40
Total shareholders equity	**63,174**
Equity component of financial instruments	4,675
Noncontrolling interests	250
Total equity	**68,099**
Total capitalization	**239,744**

1 785 million (0.5 %) of our debt was guaranteed as of December 31, 2017. This consists of debt of a subsidiary which is guaranteed by the German government.

2 64,929 million (38 %) of our debt was secured as of December 31, 2017.

Reasons for the Offer and Use of Proceeds

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

Risk Factors

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

While the global economy was strong in 2017 as monetary policy remained generally accommodative, political risks, especially in Europe, did not materialize and election outcomes were broadly market-friendly, significant macroeconomic risks remain that could negatively affect the results of operations and financial condition in some of our businesses as well as our strategic plans. These include the possibility of an early recession in the United States, inflation risks, global imbalances, Brexit, the rise of Euroscepticism, and geopolitical risks, as well as the continuing low interest rate environment and competition in the financial services industry, which have compressed margins in many of our businesses. If these conditions persist or worsen, our business, results of operations or strategic plans could continue to be adversely affected.

The global economy was surprisingly strong in 2017 as monetary policy remained accommodative, despite the gradual tightening in the United States. Political risks, especially in Europe, did not materialize and election outcomes were broadly market-friendly. Against this backdrop, global economic growth increased to 3.8 % in 2017, following 3.2 % in 2016. This is the strongest economic expansion since 2011. Despite the higher growth momentum the global inflation rate remained at 2.9 %, as in 2016. GDP in industrialized countries grew by 2.2 % and consumer prices rose by 1.7 % while in emerging markets economies GDP increased by 4.8 % and inflation by 3.9 %.

The economic outlook for the euro area improved markedly. The Eurozone economy expanded by 2.5 %, roughly one percentage point above expectations at the start of the year. The economy gained momentum on the back of supportive fiscal and monetary policy. While monetary policy remains expansive, the European Central Bank (ECB) scaled back its asset purchases to 60 billion per month from April until December 2017. Consumer prices rose by 1.5 %. The German economy also surprised to the upside with a GDP growth of 2.2 % in 2017, almost solely driven by the domestic economy. As a result, Germany s current account surplus decreased.

The United States economy performed close to expectations and expanded by 2.3 % in 2017. Investment spending became a major driver as corporate sentiment has picked up strongly, probably in anticipation of the tax reform legislation that was enacted at the end of the year. The key driver of the U.S. economy remained consumer spending backed by a well-functioning labor market. In 2017 fears of a persistent low inflation scenario have started to ease. The inflation rate was at 2.1 % slightly above target. The Federal Reserve s monetary policy responded with three interest rate hikes in 2017. The Federal Reserve also started to cut back the reinvestment of bonds held on its balance sheets.

The Japanese economy showed a balanced growth mix with both the domestic and external sector contributing to the GDP growth of 1.8 % in 2017. The external sector benefitted from the depreciation of the yen and the higher momentum of global trade. The strong export performance also boosted capital expenditures. As the inflation rate continues to hover around zero, the Bank of Japan was not under pressure to act.

In 2017 GDP growth in the emerging markets increased by 4.9 %. With GDP growth of 6.1 %, the emerging markets in Asia were once again the global driving force, as intra-Asian trade was strengthened. The Chinese economy expanded by 6.9 %, slightly higher than expected. Official Chinese inflation was well under control with 1.6 %. Risks from the overvalued real estate sector did not materialize.

The heat-map of global risks has changed little from 2017. An early recession in the United States due to changes in the structure of the yield curve, the Italian parliamentary elections in March as Eurosceptic parties remain popular, populist movements in Europe as well as geopolitical risks, particularly with respect to the Middle East and North Korea, could potentially have substantial adverse effects. While higher economic momentum may work as a shock absorber, the impact on the economy and financial markets may nevertheless be severe if any of these materialize in 2018. Notably, inflation risks, not an issue for several years, have resurfaced and as a key economic risk. A faster than expected pick-up in inflation could surprise markets and lead to a sharp reset of central bank rate rise expectations, which could be disruptive for risk assets akin to 2013 s taper tantrum . Another risk is slowing growth in China, as we expect a deleveraging process to cool down the housing market. Authorities seem to have gotten more comfortable with slightly slower growth, and central banks are tightening monetary policy. We expect some policy easing in mid-2018 to support growth, but this option may be off the table if inflation is high, in which case the economy could then slow and could weigh on global growth.

Although economic data appear to have improved during the course of 2017 in many of the countries in which we operate, our business, financial results and strategic plans continue to be negatively impacted by the continued low interest rate environment, uneven and tepid economic growth, especially in our home markets in Europe, and elevated political uncertainty. Recent political events, including the notification by the UK of its withdrawal from European Union (EU) membership (Brexit), and the rather unpracticable political climate in the U.S. following the November 2016 presidential election, continue to contribute to considerable uncertainty concerning the current and future economic environment. Global economic growth also continues to be reliant on the supportive monetary policy stance of the major central banks, and could be harmed substantially if the current trend towards tightening overshoots the mark.

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

In 2017, our revenues declined in each of our corporate divisions, reflecting the negative impact of a challenging market environment characterized by low interest rates and low volatility, uncertain macro-economic and geopolitical conditions, lower levels of client activity and increased competition and regulation. The implementation of some of the strategic measures towards our financial targets also continued to negatively impact our revenues. The ultra-low interest rate environment, especially in the eurozone, has put pressure on our margins in our traditional banking business and our trading and markets businesses, and the low volatility in the market has had a negative impact on our trading and client-driven businesses that perform well in more volatile environments. These conditions have impacted our fixed income franchise, as well as our Equities franchise, where results have not matched those of many of our international peers.

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

Against this backdrop, we expect the costs to us arising from the resolution of litigation, enforcement and similar matters pending against us to continue to be significant in the near to medium term (although they vary considerably from period to period) and to adversely affect our business, financial condition and results of operations. In particular, these costs could substantially exceed the level of provisions that we established for our litigation, enforcement and similar matters, which can contribute to negative market perceptions about our financial health, costing us business. This, combined with the actual costs of litigation, enforcement and other matters, could in turn adversely affect our ability to maintain capital, liquidity and leverage at levels expected by market participants and our regulators. In particular, we suffered, at the end of the third quarter and beginning of the fourth quarter of 2016, some reduction in business volumes and outflows of funds, particularly in some parts of our Corporate & Investment Bank business and of our Wealth Management business, as a result of speculation about the potential magnitude of a settlement of civil claims then being negotiated with the U.S. Department of Justice (DOJ) in connection with our issuance and underwriting of residential mortgage-backed securities. Although these negative effects on our business have abated since then and in some cases have reversed, future market speculation about potential settlement demands with respect to litigation and enforcement matters could have persistent adverse effects on our revenue levels. Negative news about us, including our reporting of lower revenues, can also harm perceptions of us in the market and lead to further pressure on revenues. These factors have placed pressure on the markets for our securities, along with concerns regarding our ability to overcome the numerous headwinds facing us. As a result of the substantial uncertainties with respect to the potential outflows in respect of litigation and enforcement matters as well as the broader prospects for our business, we may find it necessary or desirable to raise additional capital in the future to maintain our capital, liquidity and leverage at levels required by our regulators or viewed by market participants as necessary for our businesses in comparison with our international peers, which would result in dilution to our current shareholders.

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

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

An escalation of political risks could have unpredictable consequences both for the financial system and the greater economy as a whole, potentially leading to declines in business levels, write-downs of assets and losses across our businesses. In particular, the UK voted on June 23, 2016 in a non-binding national referendum to withdraw from the EU (Brexit). Following an act of Parliament adopted in early 2017, on March 29, 2017, the UK formally gave notice of its withdrawal from the EU to the European Council. Pursuant to the Treaty of the European Union, withdrawal would be effective on the date of entry into force of a withdrawal agreement that remains to be negotiated or, failing that, two years after the withdrawal notification unless the EU Council and UK agree to extend the two-year period. Following the notice of withdrawal, potentially tense and highly uncertain negotiations regarding the UK s exit from the EU commenced. Given these and other uncertainties in connection with the UK s withdrawal from the EU, it is difficult to determine the exact impact on us over the long term. We are also unable to determine with any precision the impact of Brexit on our current UK structure or business model in the short term, as there remains no clarity into the details or timing of the changes. However, the UK s economy and those of the eurozone countries are very tightly linked as a result of EU integration projects other than the euro, and the scale of our businesses in the UK especially those dependent on activity levels in the City of London, to which we are heavily exposed and which may deteriorate as a result of Brexit means that even modest effects in percentage terms can have a very substantial adverse effect on our businesses. In addition, in a number of EU member states which had national elections in 2017, including France, Germany and the Netherlands, political parties disfavoring current levels of European integration, or espousing the unwinding of European integration to varying extents, have attracted support. The Brexit vote has also given a voice to some of these political parties to challenge European integration. The resulting uncertainty could have significant effects on the value of the euro and on prospects for member states financial stability, which in turn could potentially lead to a significant deterioration of the sovereign debt market, especially if Brexit or any other member country s exit did not result in the catastrophic effects on the exiting country that many have predicted. If one or more members of the eurozone defaults on their debt obligations or decides to leave the common currency, this would result in the reintroduction of one or more national currencies. Should a eurozone country conclude it must exit the common currency, the resulting need to reintroduce a national currency and restate existing contractual obligations could have unpredictable financial, legal, political and social consequences, leading not only to significant losses on sovereign debt but also on private debt in that country. Given the highly interconnected nature of the financial system within the eurozone, and the high levels of exposure we have to public and private counterparties around Europe, our ability to plan for such a contingency in a manner that would reduce our exposure to non-material levels is likely to be limited. If the overall economic climate deteriorates as a result of one or more departures from the eurozone, our businesses could be adversely affected, and, if overall business levels decline or we are forced to write down significant exposures among our various businesses, we could incur substantial losses.

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

The effects of the sovereign debt crisis have been especially evident in the financial sector, as a large portion of the sovereign debt of eurozone countries is held by European financial institutions, including us. As of December 31, 2017, we had a direct sovereign credit risk exposure of 2.8 billion to Italy, 1.7 billion to Spain, 709 million to Ireland and 55 million to Greece. Despite the apparent abatement of the crisis in recent years, it remains uncertain whether, in light of the current political environment, Greece or other eurozone sovereigns, such as Spain, Italy, Portugal and Cyprus, will be able to manage their debt levels in the future and whether Greece will attempt to renegotiate its past international debt restructuring. The rise of anti-austerity parties and populist sentiment in many of these countries poses a threat to the medium- to long-term measures recommended for these countries to alleviate the tensions in the eurozone caused by drastically differing economic situations among the eurozone states. In the future, negotiations or exchanges similar to the Greek debt restructuring in 2012 could take place with respect to the sovereign debt of these or other affected countries. The outcome of any negotiations regarding changed terms (including reduced principal amounts or extended maturities) of sovereign debt may result in additional impairments of assets on our balance sheet. Any negotiations are highly likely to be subject to political and economic pressures that we cannot control, and we are unable to predict their effects on the financial markets, on the greater economy or on ourselves.

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

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

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

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

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

Additionally, under many of the contracts governing derivative instruments to which we are a party, a downgrade could require us to post additional collateral, lead to terminations of contracts with accompanying payment obligations for us or give counterparties additional remedies. We take these effects into account in our liquidity stress testing analysis, as further described in Management Report: Risk Report: Liquidity Risk: Stress Testing and Scenario Analysis in the Annual Report 2017.

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

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

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

In addition, regulatory scrutiny of compliance with existing laws and regulations has become more intense and supervisory expectations remain significant. The specific effects of a number of new laws and regulations remain uncertain because the drafting and implementation of these laws and regulations are still on-going and supervisory expectations continue to develop.

As a core element of the reform of the regulatory framework, in December 2010, the Basel Committee on Banking Supervision (Basel Committee) published a set of comprehensive changes to minimum capital adequacy and liquidity standards, known as Basel 3, which have been implemented into European and national (in our case, German) law beginning in 2014, with the European legislative package also referred to as CRR/CRD 4 . In November 2016, the European Commission proposed a package (commonly referred to as CRR 2 and CRD 5 , and referred to herein as the November 2016 Package) of legislative reforms implementing various remaining elements of the regulatory framework agreed within the Basel Committee and the Financial Stability Board (FSB) to refine and supplement the Basel 3 framework/CRR/CRD 4 legislative package. The November 2016 Package includes more risk-sensitive capital requirements, in particular in the area of market risk, counterparty credit risk and for exposures to central counterparties, methodologies that reflect more accurately the actual risks to which banks may be exposed, a binding leverage ratio of 3 % of Tier 1 capital, a binding net stable funding ratio (NSFR), tighter regulation of large exposures, and the implementation of the FSB s standard on total loss-absorbing capacity (TLAC). It is expected that most of the proposed amendments will start being applied at the end of 2020 at the earliest, save for the TLAC requirements, which are expected to apply from January 2019.

Furthermore, in December 2017 the Basel Committee published its final agreement (December 2017 Agreement) on revisions to the Basel 3 framework that aim to increase consistency in risk-weighted asset calculations and improve the comparability of banks capital ratios. The December 2017 Agreement includes, among other things, changes to the standardized and internal ratings-based approaches for determining credit risk, revisions to the operational risk framework, and an output floor , set at 72.5 %. The output floor limits the amount of capital benefit a bank can obtain from its use of internal models relative to using the standardized approach. This package of reforms is intended to finalize the Basel 3 framework and would reduce the ability of banks to apply internal models, while making the standardized approaches more risk-sensitive and granular. In addition, the December 2017 Agreement introduces a leverage ratio buffer for global systemically important banks (G-SIBs), such as Deutsche Bank, to be met with Tier 1 capital and set at 50 % of the applicable risk-based G-SIB buffer requirement. The Basel Committee also reached agreement on an implementation date of this package of January 1, 2022, with a phase-in period of five years through January 1, 2027 for the output floor. The December 2017 Agreement also extends the implementation date for the final market risk framework resulting from the Basel Committee s Fundamental Review of the Trading Book to January 1, 2022.

The changes proposed by the November 2016 Package and the December 2017 Agreement must be implemented by the European Union and Germany, as the case may be, in order to become effective and binding on us. If implemented in their current form, the November 2016 Package and the December 2017 Agreement could lead to a significant increase of our risk-weighted assets and, as a result, a higher capital requirement, changes in our deductions from our regulatory capital and the imposition of additional capital charges. These requirements may be in addition to regulatory capital buffers that may also be increased or be in addition to those already imposed on us and could themselves materially increase our capital requirements.

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

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

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

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

The SRM Regulation and the German Recovery and Resolution Act require the preparation of recovery and resolution plans for banks and grant broad powers to public authorities to intervene in a bank which is failing or likely to fail. For a bank directly supervised by the ECB, such as Deutsche Bank, the Single Resolution Board (referred to as the SRB) assesses its resolvability and may require legal and operational changes to the bank s structure to ensure its resolvability. In the event that such bank is failing or likely to fail and certain other conditions are met, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (in Germany, since 2018, the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin)) in line with the national laws implementing the BRRD. Resolution measures that could be imposed upon a failing bank may include a range of measures including the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders of a failing bank or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank s outstanding debt instruments, for example by way of a deferral of payments or a reduction of the applicable interest rate. Furthermore, certain eligible unsecured liabilities, in particular certain senior unsecured debt instruments specified by the German Banking Act, as amended by the German Resolution Mechanism Act, may be written down, including to zero, or converted into equity (commonly referred to as bail-in) after the bank s regulatory capital has been exhausted.

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

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

The implementation of the CRR/CRD 4 legislative package resulted, among other things, in increased capital and tightened liquidity requirements, including additional capital buffer requirements which are being gradually phased into through January 1, 2019, and it also contained rules preparing the introduction of a binding non-risk based leverage ratio. Similarly, the U.S. federal bank regulators in 2013 issued final rules implementing elements of the Basel 3 capital adequacy framework that are applicable to U.S. banking organizations, such as DB USA Corporation. Further revisions, such as stricter rules on the measurement of risks and the changes proposed by the November 2016 Package and the December 2017 Agreement, could further increase risk-weighted assets and the corresponding capital demand for banks, as well as further tighten liquidity requirements.

Furthermore, under the SRM Regulation, the BRRD and the German Recovery and Resolution Act, banks in the European Union are required to meet at all times a robust minimum requirement for own funds and eligible liabilities (MREL) which is determined on a case-by-case basis by the competent resolution authority. In addition, on November 9, 2015, the Financial Stability Board (FSB) published a new standard applicable to all G-SIBs (and not only European G-SIBs), such as Deutsche Bank, that will require, when transposed as law, G-SIBs to meet a new firm-specific minimum requirement for total loss-absorbing capacity (TLAC) starting from January 2019. Also in order to facilitate the meeting of TLAC requirements by German banks, obligations of German banks under certain, specifically defined senior unsecured debt instruments issued by them (such as bonds that are not structured debt instruments) rank, since 2017, junior to all other outstanding unsecured unsubordinated obligations of such bank (such as deposits, derivatives, money market instruments and certain structured debt instruments), but continue to rank in priority to contractually subordinated debt instruments (such as Tier 2 instruments). Both the TLAC and MREL requirements are specifically designed to require banks to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers money.

As part of the November 2016 Package, the European Commission published a proposal to implement the FSB s TLAC standard in the European Union and align it with MREL and also harmonize national rules on the priority of claims of banks creditors in the European Union. This review comes as part of a broader review of the CRR/CRD 4 rules incorporating changes to the market risk framework, liquidity framework and leverage ratio calculation, amongst others. These rules are now subject to the EU co-decision process and will likely be subject to change over the coming months. As regards the harmonization of the national rules on the priority of claims, on December 27, 2017, the European Union published a directive amending the BRRD. The BRRD amendment will allow banks to issue senior non-preferred debt instruments ranking according to their terms (and not only statutorily) junior to the bank s other unsubordinated debt instruments (including bonds that are not treated as senior non-preferred debt instruments), but in priority to the bank s contractually subordinated liabilities (such as Tier 2 instruments). Any such senior non-preferred debt instruments issued by Deutsche Bank AG under the new rules are expected to rank pari passu with its then outstanding senior non-preferred debt instruments under the current rules. The BRRD amendment is required to be implemented into German law by December 29, 2018.

In the United States, on December 15, 2016, the Federal Reserve Board adopted final rules that implement the FSB s TLAC standard in the United States. The final rules, which apply beginning in 2019, require, among other things, the U.S. intermediate holding companies (IHCs) of non-U.S. G-SIBs, including our IHC, DB USA Corporation, to maintain a minimum amount of TLAC, and separately require them to maintain a minimum amount of long-term debt meeting certain requirements.

While the final impact of the MREL and TLAC requirements will depend on their final implementation, the need to comply with such requirements may affect our business, financial condition and results of operation and in particular may increase our financing costs.

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

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

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

In September 2014, the Federal Reserve Board and other U.S. regulators approved a final rule implementing liquidity coverage ratio (LCR) requirements for large U.S. banking holding companies and certain of their subsidiary depositary institutions that are generally consistent with the Basel Committee s revised Basel 3 liquidity standards. DB USA Corporation and our principal U.S. bank subsidiary Deutsche Bank Trust Company Americas (DBTCA) became subject to the full LCR on April 1, 2017.

On June 1, 2016, the Federal Reserve Board and other U.S. regulators proposed rules implementing the second element of the Basel 3 liquidity framework, the net stable funding ratio (NSFR), which measures whether an institution maintains sufficiently stable amounts of longer-term funding. Under the proposed rules, DB USA Corporation and DBTCA would be subject to the full NSFR, but this proposal has yet to be finalized and is not yet in effect.

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

DB USA Corporation is subject to enhanced prudential standards applicable to large U.S. bank holding companies, including the requirement to submit a capital plan detailing proposed capital distributions and showing how, under stressed economic conditions, it would still meet or exceed its minimum regulatory requirements. DB USA Corporation provided its first capital plan submission to the Federal Reserve Board in April 2017; however, the results of its first submission were not made public by the Federal Reserve Board. DB USA Corporation will make its second capital plan submission to the Federal Reserve Board in April 2018 as part of the Federal Reserve Board s annual Comprehensive Capital Analysis and Review (CCAR), the results of which will be made public by the Federal Reserve Board.

Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act) and the implementing regulations require each bank holding company with assets of U.S.$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the U.S. Resolution Plan). For foreign-based covered companies such as Deutsche Bank AG, the U.S. Resolution Plan only relates to subsidiaries, branches, agencies and businesses that are domiciled in or conducted in whole or in material part in the United States. Deutsche Bank AG filed its most recent U.S. Resolution Plan in July 2015 and, as a foreign-based covered company, was not required to file one in 2016 or 2017. Our next U.S. Resolution Plan filing is due on July 1, 2018. If the Federal Reserve Board and the FDIC were to jointly deem our U.S. Resolution Plan not credible and we failed to remedy the deficiencies in the required timeframe, we could be required to restructure or reorganize businesses, legal entities, operational systems and/or intra-company transactions in ways that may negatively impact our operations and strategy, or could be subject to restrictions on growth. We could also eventually be subjected to more stringent capital, leverage or liquidity requirements, or be required to divest certain assets or operations.

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

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

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

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

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

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

In addition, our annual profit and distributable reserves form an important part of the funds available for us to pay dividends on our shares and make payments on our other regulatory capital instruments, as determined in the case of each such instrument by its terms or by operation of law, and any adverse change in our financial prospects, financial position or profitability, or our distributable reserves, each as calculated on an unconsolidated basis, may have a material adverse effect on our ability to make dividend or other payments on these instruments. In addition, as part of the implementation of our strategy, we may record impairments that reduce the carrying value of subsidiaries on our unconsolidated balance sheet and reduce profits and distributable reserves. Future impairments or other events that reduce our profit or distributable reserves on an unconsolidated basis could lead us to be unable to make such payments in respect of future years in part or at all. In particular, the direct costs of our potential settlements of litigation, enforcement and similar matters, especially to the extent in excess of provisions we have established for them, and their related business impacts, if they occur, could impact such distributable amounts.

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

Consistent with our updated strategy, our Management Board intends to propose to our Annual General Meeting in May 2018 to resolve the payment of a dividend of 0.11 per share.

Legislation in the United States and in Germany regarding the prohibition of proprietary trading or its separation from the deposit-taking business has required us to modify our business activities to comply with applicable restrictions. This could adversely affect our business, financial condition and results of operations.

Rules implementing the U.S. Volcker Rule prohibit U.S. insured depository institutions and companies that control or are affiliated with U.S. insured depository institutions (such as Deutsche Bank) from engaging in proprietary trading of certain securities, derivatives, commodity futures and options on these instruments, for their own account. The final rules also impose limits or restrictions on investments in, and other relationships with, hedge funds, private equity funds and other private funds and limit the ability of banking entities and their affiliates to enter into certain transactions with such funds with which they or their affiliates have certain relationships. The Volcker Rule requires banking entities to establish comprehensive compliance programs designed to help ensure and monitor compliance with restrictions under the Volcker Rule.

In Germany, the German Act on the Separation of Risks and Recovery and Resolution Planning for Credit Institutions and Banking Groups (Trennbankengesetz), referred to as the Separation Act , provides that deposit-taking banks and their affiliates are prohibited from engaging in proprietary trading that does not constitute a service for others, high-frequency trading (with the exception of market-making activities), and credit or guarantee transactions with hedge funds and comparable enterprises, unless such activities are transferred to a separate legal entity. The separation requirement applies if certain thresholds are exceeded, which is the case for Deutsche Bank. In addition, the German Separation Act authorizes the BaFin, since July 1, 2016, to prohibit the deposit-taking bank and its affiliates, on a case-by-case basis, from engaging in market-making and other activities that are comparable to the activities prohibited by law, if these activities may put the solvency of the deposit-taking bank or any of its affiliates at risk. In the event that the BaFin orders such a prohibition, the respective activities must be discontinued or transferred to a separate legal entity (referred to as financial trading institution (Finanzhandelsinstitut)). The prohibition for deposit-taking banks and their affiliates to conduct activities associated with increased risks became effective on July 1, 2015, with a further transitional period of twelve months to accomplish the separation requirement, unless the BaFin extends this period. The German Separation Act became applicable to Deutsche Bank Group on July 1, 2017, after the extension of the period to cease or transfer the activities concerned expired on June 30, 2017. The German Separation Act requires ongoing surveillance of the activities of banks within the scope of the legislation and assessment of compliance and control frameworks to ensure that no prohibited activities are conducted. Non-compliance with the prohibitions set forth in the German Separation Act could ultimately result in civil and criminal liability.

The Volcker Rule and the German Separation Act have required us to modify our business activities to comply with their restrictions, as well as to implement detailed compliance programs. As a result, we no longer engage in certain business activities from which we once profited. This could adversely affect our business, financial condition and results of operations.

Other regulatory reforms adopted or proposed in the wake of the financial crisis for example, extensive new regulations governing our derivatives activities, compensation, bank levies, deposit protection or a possible financial transaction tax may materially increase our operating costs and negatively impact our business model.

Beyond capital requirements, recovery and resolution planning, separation of certain bank activities and other requirements discussed above, we are affected, or expect to be affected, by various additional regulatory reforms adopted or proposed in the wake of the financial crisis including, among other things, new regulations governing our derivatives activities, compensation, bank levies, deposit protection or a possible financial transaction tax.

On August 16, 2012, the EU Regulation on over-the-counter (OTC) derivatives, central counterparties and trade repositories, referred to as EMIR, entered into force. EMIR introduced a number of requirements, including clearing obligations for certain classes of OTC derivatives and various reporting and disclosure obligations. Although some of the particular effects brought about by EMIR are not yet fully foreseeable, many of its elements have led and may lead to changes which may negatively impact our profit margins, require us to adjust our business practices or increase our costs (including compliance costs). The revised Markets in Financial Instruments Directive (MiFID 2) and the corresponding Regulation (MiFIR) became applicable to us on January 3, 2018 and provide for, among other things, a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized. We will also be impacted by the BCBS-IOSCO final minimum standards for margin requirements for non-centrally cleared derivatives, for which enabling legislation exists in the EU (EMIR and implementing regulations) but where much of the impact depends on how these requirements are further implemented.

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

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

Following the financial crisis, bank levies have been introduced in some countries including, among others, Germany and the United Kingdom. We accrued 596 million for bank levies in 2017, 547 million in 2016 and 653 million in 2015. Also, we are required to contribute substantially to the Single Resolution Fund (SRF) under the SRM (which is intended to reach a target level of 1 % of insured deposits of all banks in member states participating in the SRM by the end of 2023) and the statutory deposit guarantee and investor compensation schemes under the recast European Union directive on deposit guarantee schemes (DGS Directive) and the European Union directive on investor compensation schemes. The DGS Directive defines a 0.8 % target level of prefunding by 2024 (similar to resolution funds), which has significantly increased the costs of the statutory deposit protection scheme. In addition, in this context, on November 24, 2015, the European Commission proposed a regulation to establish a European Deposit Insurance Scheme, or EDIS for bank deposits of all credit institutions that are members of any of the current national statutory deposit guarantee schemes of member states participating in the banking union. While the total impact of these future levies cannot currently be quantified, they may have a material adverse effect on our business, financial condition and results of operations in future periods.

Separately, on January 22, 2013, the Council of the European Union adopted a decision authorizing eleven EU member states (Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain) to proceed with the introduction of a financial transaction tax under the European Union s enhanced cooperation procedure . The European Commission on February 14, 2013 adopted a draft directive for the implementation of the financial transaction tax. Following several rounds of political discussions there is currently no timetable for the conclusion of an agreement. If a financial transaction tax is ultimately adopted, depending on its final details, it could result in compliance costs as well as market consequences and have a material adverse effect on our profit and business.

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

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

Specifically, our investment banking revenues, in the form of financial advisory and underwriting fees, directly relate to the number and size of the transactions in which we participate and are susceptible to adverse effects from sustained market downturns. These fees and other income are generally linked to the value of the underlying transactions and therefore can decline with asset values. In addition, periods of market decline and uncertainty tend to dampen client appetite for market and credit risk, a critical driver of transaction volumes and investment banking revenues, especially transactions with higher margins. In recent and other times in the past, decreased client appetite for risk has led to lower levels of activity and lower levels of profitability in our Corporate & Investment Bank corporate division. Our revenues and profitability could sustain material adverse effects from a significant reduction in the number or size of debt and equity offerings and merger and acquisition transactions.

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

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

We announced the next phase of our strategy in April 2015, gave further details on it in October 2015 and announced an update in March 2017. If we are unable to implement our strategic plans successfully, we may be unable to achieve our financial objectives, or we may incur losses or low profitability or erosions of our capital base, and our financial condition, results of operations and share price may be materially and adversely affected.

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

Our strategic goals are subject to various internal and external factors including market, regulatory, economic and political uncertainties, and to limitations relating to our operating model. These could negatively impact or prevent the implementation of our strategic goals or the realization of their anticipated benefits. Economic uncertainties such as the recurrence of extreme turbulence in the markets; potential weakness in global, regional and national economic conditions; the continuation of a market environment characterized by low interest rates and low volatility; increased competition for business; and political instability, especially in Europe, may impact our ability to achieve our strategic goals.

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

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

In March 2017, we announced an adjusted costs target of approximately 22 billion for 2018 including approximately 900 million of planned cost savings through business disposals. While we have made some progress on planned disposals, some of them have been delayed or in some cases suspended. As a result, we currently do not expect to achieve the planned 900 million of cost savings in 2018. Furthermore, we expect higher costs from Brexit and MiFID II implementation in 2018 than we had anticipated when we set our adjusted costs target. Additionally, some of the cost synergies we expected to realize in 2018 from the merger of Postbank into our German banking entity have been delayed as we now expect this merger to be completed in the second quarter of 2018. Those savings are now expected to be realized in 2019. Therefore, we now expect our adjusted costs in 2018 will be about 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 to 21 billion. This target, however, depends in part on our ability to execute those business disposals that we do expect to complete by 2021 successfully and within the timeframes we now plan for them. We may be unable to complete those business disposals we intend to complete on a delayed basis due to market developments or an inability to achieve dispositions on sufficiently attractive terms. Our achievement of our adjusted costs targets may also be hindered if our efforts to improve our internal control environment and enhance our regulatory compliance functions prove to be more expensive than we anticipate.

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

Our strategic objectives are also subject to the following assumptions and risks:

- We assume that we will be able to overcome significant challenges arising from our business model. We continue to rely on our trading and markets businesses as a significant source of profit. However, these businesses, in particular our fixed income securities franchise, have continued to face an extremely challenging environment, caused by uncertainty about the duration of the market environment characterized by low interest rates and low volatility, low levels of client activity, negative perceptions about our business and central bank intervention in markets and the gradual cessation thereof. We are substantially dependent on the performance of these businesses, and this dependency exceeds that of many of our competitors. Many of our businesses dependent on client flow are increasingly challenged in the current market environment. In addition, some of our businesses may be resistant to change, posing risks to the implementation of changes to our business model. Should we be unable to implement this new business model successfully, or should the new business model fail to be profitable, we may not be able to achieve some or all of our strategic goals.
- While asset and client levels have largely rebounded from the impact of the negative market perceptions in the fourth quarter 2016, a renewed negative market focus on Deutsche Bank could result in new client and asset outflows.
- Given the operating environment in 2016, the Management Board decided to cancel the discretionary bonus element of the compensation for the Bank s senior employees for that year. Across all our businesses, we need to attract and retain highly qualified staff. The decision to cancel the discretionary bonus element for 2016 may adversely affect our ability to succeed in attracting or retaining highly qualified employees. We

restored this element of compensation for 2017 even though our operating environment remains challenging. If our efforts to attract and/or retain employees should fail, this may have a material adverse effect on our ability to implement our strategy and may reduce our future compensation flexibility.

We currently operate a highly complex infrastructure, which can compromise the quality of the overall control environment. Establishing a more efficient bank with a strong control environment depends on successfully streamlining and simplifying the IT landscape as well as cultural change. Furthermore, capital and execution plans require robust monitoring and tracking that is dependent on accurate, timely and relevant data. We have undertaken initiatives designed to address existing challenges in our IT and data architecture as well as in our data aggregation capabilities. Potential delays and challenges to implementing these initiatives would impact our ability to achieve efficiency improvements and enhance the control environment, thereby affecting our ability to implement our strategy successfully.

A robust and effective internal control environment is necessary to ensure that we conduct our business in compliance with the laws and regulations applicable to us. We are undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen our controls and manage non-financial risks, in particular as a response to the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which the Bank has been subject in recent years. However, we may be unable to complete these initiatives as quickly as we intend or as our regulators demand, and our efforts may be insufficient to prevent all future deficiencies in our control environment or to result in fewer litigations or regulatory and enforcement investigations and proceedings in the future. Furthermore, implementation of enhanced controls may result in higher than expected costs of regulatory compliance that could offset efficiency gains. Any of these factors could affect our ability to implement our strategy in a timely manner or at all.

The buffers that we have provided for in our financial targets may prove to be insufficient in a downside scenario. We have already seen challenges to our adjusted costs target for 2018 due to delays and suspensions in planned business disposals. Should we exhaust buffers we have included in other financial targets, whether as a result of the macroeconomic, regulatory, litigation or other factors discussed above or for reasons we have not yet anticipated, we may fail to meet our strategic targets.

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

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

As part of our strategic initiatives announced in March 2017, we reconfigured our Global Markets, Corporate Finance and Transaction Banking businesses into a single Corporate & Investment Bank division. The combination, which took effect in the second quarter of 2017, is intended to promote a more seamless and aligned offering of products to clients, meaningfully enhance cross selling opportunities, ensure better client rationalization with resources being focused on higher return relationships, and achieve greater cost and asset efficiencies to drive improved returns. Our clients product needs, business plans and general willingness to engage into a deeper banking relationship with us will ultimately determine whether we are successful in capturing this anticipated spending. Should we be unable to deliver on the cross-selling efforts due to either lack of client demand, product availability or quality or delivery, there is a risk that this could negatively influence our ability to capitalize on these opportunities. The aforementioned macroeconomic, geo-political and regulatory risks also pose a challenge to the operating models of our Corporate & Investment Bank clients, and our ability to capture the incremental opportunity.

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

As part of our March 2017 updates to our strategy, we announced our intention to retain and combine Postbank with our existing retail and commercial operations, both of which are part of our Private & Commercial Bank division, after earlier having announced our intention to dispose of Postbank. This shift from the prior strategy reflects a number of evolving factors, including our belief that growth in small and mid-sized German corporate clients and private banking clients will continue, changes in the expected regulatory requirements and market expectations for leverage ratios of European banks, the positive impact on the business model of retaining a large and stable business with a substantial deposit base, our revised view on the possible degree of integration of Postbank and the resulting scale and incremental synergies, and future growth opportunities we have identified, reflecting a potential improvement in the macroeconomic outlook and the changing dynamics in private and commercial banking, the growing likelihood of eventual industry consolidation in German retail banking and the continued positive opportunities presented by digitization.

To this end, Postbank and Deutsche Bank Privat- und Geschaeftskunden AG will be merged into one single legal entity by the end of the second quarter of 2018. We expect that the integration of Postbank will create Germany s largest private and commercial bank. This integration is intended to achieve cost efficiencies by more readily permitting rationalization of central functions, improved efficiency across technology platforms and infrastructure and more efficient investment in areas including digitization, distribution channels and regulatory change.

We estimate that the total cost of the planned restructuring measures to integrate Postbank into the Group and other investments will be 1.9 billion, with restructuring and severance costs estimated to be approximately 1.0 billion by 2022 and the remainder related to IT and other costs, and we are targeting substantial synergies, gradually rising to about 0.9 billion annually by 2022. Unforeseen difficulties may emerge in connection with the integration efforts, including potential difficulties due to differing IT systems, difficulties in integrating personnel, the commitment of management resources in connection with the integration process and the potential loss of key personnel. The benefits, cost and timeframe of the integration could be adversely affected by any of these factors, as well as a variety of factors beyond our and Postbank s control, such as negative market developments. Should any of these risks materialize, the cost savings and other benefits we expect to realize from the integration may only come at a higher cost than anticipated, or may not be realized within the period we anticipate or to the extent we plan, or at all.

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

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

We may, however, have difficulties selling a stake in Deutsche AM at a favorable price or timing, or at all. Our ability to sell a stake in Deutsche AM will, among other things, depend on economic, regulatory and market conditions, particularly those relevant to the asset management business in Germany. Our ability to sell a stake in Deutsche AM will also depend on the financial position, results of operations and business prospects of Deutsche AM. If economic, regulatory or market conditions, or the financial position, results of operations and business prospects of Deutsche AM, are unfavorable, we may not be able to sell a stake in Deutsche AM at a favorable price or timing, or at all. Additionally, we may not be able to capitalize upon the expected benefits that we believe a more operationally segregated Deutsche AM has to offer. Furthermore, an IPO of Deutsche AM may not entirely mitigate the market concerns about Deutsche Bank that impacted Deutsche AM s business in 2016 or that may arise from new circumstances with a similar impact.

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

As part of our strategy, we are seeking to continue to reduce our assets, including in particular those of our CIB corporate division, as described above. We also have other assets that are not part of our core business, and we may seek to sell them or otherwise reduce the amount and the risk of our exposure to them. These reductions are part of our strategy to simplify and focus our business and to meet or exceed the new capital and leverage requirements by reducing risk-weighted assets and leverage exposures and thereby improving our capital and leverage ratios, as well as to help us meet our return on tangible equity target. This strategy may prove difficult in the current and future market environment as many of our competitors are also seeking to dispose of assets to improve their capital and leverage ratios and returns on equity. We have already sold a substantial portion of our non-core assets, and our remaining non-core assets may be particularly difficult for us to sell as quickly as we have expected at prices we deem acceptable. Also, we are often a passive investor in such investments and as such we are reliant on the actions of third parties. Where we sell companies or businesses, we may remain exposed to certain of their losses or risks under the terms of the sale contracts, and the process of separating and selling such companies or businesses may give rise to operating risks or other losses. Unfavorable business or market conditions may make it difficult for us to sell companies, businesses or assets at favorable prices, or may preclude a sale altogether. If we cannot reduce our assets according to plan, we may not be able to achieve the capital targets set out under our strategy.

A robust and effective internal control environment and adequate infrastructure (comprising people, policies and procedures, controls testing and IT systems) are necessary to ensure that we conduct our business in compliance with the laws, regulations and associated supervisory expectations applicable to us. We have identified the need to strengthen our internal control environment and infrastructure and have embarked on initiatives to accomplish this. If these initiatives are not successful or are delayed, our reputation, regulatory position and financial condition may be materially adversely affected, and our ability to achieve our strategic ambitions may be impaired.

Our businesses are highly dependent on our ability to maintain a robust and effective internal control environment. This is needed for the Bank to process and monitor, on a daily basis, a wide variety of transactions, many of which are highly complex and occur at high speeds, volumes and frequencies, and across numerous and diverse markets and currencies. Such a robust and effective control environment is in turn dependent on the sufficiency of our infrastructure to support that environment. This infrastructure consists broadly of internal policies and procedures, testing protocols, and the IT systems and employees needed to enforce and enable them. An effective control environment is dependent on infrastructure systems and procedures that cover the processing and settling of transactions; the valuation of assets; the identification, monitoring, aggregation, measurement and reporting of risks and positions against various metrics; the evaluation of counterparties and customers for legal, regulatory and compliance purposes; the escalation of reviews; and the taking of mitigating and remedial actions where necessary. They are also critical for regulatory reporting and other data processing and compliance activities.

Both our internal control environment and the infrastructure that underlies it fall short in a number of areas of our standards for completeness and comprehensiveness and are not well integrated across the Bank. Our IT infrastructure, in particular, is fragmented, with numerous distinct platforms, many of which need significant upgrades, in operation across the Bank. Our business processes and the related control systems often require manual procedures and actions that increase the risks of human error and other operational problems that can lead to delays in reporting information to management and to the need for more adjustments and revisions than would be the case with more seamlessly integrated and automated systems and processes. As a result, it is often difficult and labor-intensive for us to obtain or provide information of a consistently high quality and on a timely basis to comply with regulatory reporting and other compliance requirements or to meet regulatory expectations on a consistent basis and, in certain cases, to manage our risk comprehensively. Furthermore, it often takes intensive efforts to identify, when possible, inappropriate behavior by our staff and attempts by third parties to misuse our services as a conduit for prohibited activities, including those relating to anti-financial crime laws and regulation.

In addition, we may not always have the personnel with the appropriate experience, seniority and skill levels to compensate for shortcomings in our processes and infrastructure, or to identify, manage or control risks, and it often has been difficult to attract and retain the requisite talent. This has impacted our ability to remediate existing weaknesses and manage the risks inherent in our activity.

Against this backdrop, our regulators, our Management Board and our Group Audit function have increasingly and more intensively focused on our internal controls and infrastructure through numerous formal reviews and audits of our operations. These reviews and audits have identified various areas for improvement relating to a number of elements of our control environment and infrastructure. These include the infrastructure relating to transaction capturing and recognition, classification of assets, asset valuation frameworks, data and process consistency, risk identification, measurement and management and other processes required by laws, regulations, and supervisory expectations. They also include regulatory reporting, anti-money laundering (AML), know your customer and other internal processes that are aimed at preventing use of our products and services for the purpose of committing or concealing financial crime. As one example, our January 2017 settlement with the UK Financial Conduct Authority (FCA) relating to trading activities involving our Russian operations stemmed in part from the FCA s review of the AML control functions in our investment bank.

Our principal regulators, including the ECB and the Federal Reserve Board, have also conducted numerous reviews focused on various aspects of our internal controls and the related infrastructure, including among others, controls around AML and around valuation. These regulators have required us formally to commit to remediate our AML and other weaknesses, including the fragmented and manual nature of our infrastructure. Local regulators in other countries in which we do business also review the sufficiency of our control environment and infrastructure with respect to their jurisdictions. While the overall goals of the various prudential regulators having authority over us in the many places in which we do business are broadly consistent, and the general themes of our deficiencies in internal controls and the supporting infrastructure are similar, the regulatory frameworks applicable to us in the area of internal controls are generally applicable at a national or EU-wide level and are not always consistent across the jurisdictions in which we operate around the world. This adds complexity and cost to our efforts to reduce fragmentation and put in place automated systems that communicate seamlessly and quickly with one another.

In order to improve in the areas discussed above, we are undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen our controls and infrastructure, manage non-financial risks and enhance the skill set of our personnel. We believe that these initiatives will better enable us to avoid the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which we have recently been subject, and will improve our ability to comply with laws and regulations and meet supervisory expectations. In particular, we are making efforts to reduce the complexity of our business and to integrate and automate processes and business and second-line controls. We have also exited certain businesses, for example in Russia, selectively off-boarded a number of clients, worked to strengthen our compliance culture and control functions and increased the size of and strengthened our Group Audit function. However, we may be unable to complete these initiatives as quickly as we intend or as our regulators demand, and our efforts may be insufficient to remediate existing deficiencies and prevent future deficiencies or to result in fewer litigations or regulatory and enforcement investigations, proceedings and criticism in the future. We may also, when faced with the considerable expense of these initiatives, fail to provide sufficient resources for them quickly enough or at all, especially during periods when our operating performance and profitability are challenged. If we are unable to significantly improve our infrastructure and control environment in a timely manner, some of our regulators may require us to reduce our exposure to or terminate certain kinds of products or businesses, counterparties or regions, which could, depending on the extent of such requirement, significantly challenge our ability to operate profitably under our current business model.

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

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

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

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

We are under continuous examination by tax authorities in the jurisdictions in which we operate. Tax laws are increasingly complex. In the current political and regulatory environment, tax administrations and courts interpretation of tax laws and regulations and their application are evolving, and scrutiny by tax authorities has become increasingly intense. On December 22, 2017, the new U.S. tax legislation, known as the Tax Cuts and Jobs Act or TCJA , was signed into law. The TCJA includes a number of provisions, such as the Base Erosion Anti-Abuse Tax, that are subject to interpretation and for which further interpretative guidance through technical corrections or treasury regulations may be issued over the coming months and years. In addition, wide ranging changes in the principles of international taxation emanating from the OECD s Base Erosion and Profit Shifting agenda are generating significant uncertainties for us and our subsidiaries and may result in an increase in instances of bilateral tax disputes going forward, as member states may take different approaches in transposing these requirements into national law. Tax administrations have also been focusing on the eligibility of taxpayers for reduced withholding taxes on dividends in connection with certain cross-border lending or derivative transactions with the German Federal Ministry of Finance having issued administrative guidance in this area. As a result, the cost to us arising from the conclusion and resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes, as well as from rapidly changing and increasingly complex and uncertain tax laws and principles, may increase and may adversely affect our business, financial condition and results of operation.

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

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

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

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

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

As previously reported, we reached a settlement with the European Commission in 2013 as part of a collective settlement to resolve its investigations in relation to anticompetitive conduct in the trading of Euro and Yen interest rate derivatives, pursuant to which we agreed to pay 725 million in total. Also as previously reported, on April 23, 2015, we reached settlements with the DOJ, the CFTC, FCA, and the New York State Department of Financial Services (DFS) to resolve investigations into misconduct concerning the setting of LIBOR, EURIBOR, and TIBOR. Under the terms of these agreements, we agreed to pay penalties of U.S.$ 2.175 billion to the DOJ, CFTC and DFS and GBP 226.8 million to the FCA. As part of the resolution with the DOJ, DB Group Services (UK) Ltd. (an indirectly-held, wholly-owned subsidiary of ours) pled guilty to one count of wire fraud in the U.S. District Court for the District of Connecticut and we entered into a Deferred Prosecution Agreement with a three year term. On October 25, 2017, we entered into a settlement with a working group of U.S. state attorneys general resolving their interbank offered rate investigation. Among other conditions, we made a settlement payment of U.S.$ 220 million. Factual admissions we have made in connection with these settlements could make it difficult for us to defend against pending and future claims.

Other investigations of us concerning the setting of various interbank offered rates remain ongoing, and we remain exposed to further action.

In addition, we are party to 43 U.S. civil actions concerning alleged manipulation relating to the setting of various Interbank Offered Rates, 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 us 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 us 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).

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

Regulators and law enforcement authorities are investigating, among other things, our compliance with the U.S. Foreign Corrupt Practices Act and other laws with respect to our hiring practices related to candidates referred by clients, potential clients and government officials, and its engagement of finders and consultants.

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, our compliance with the U.S. Foreign Corrupt Practices Act and other laws with respect to our hiring practices related to candidates referred by clients, potential clients and government officials, and our engagement of finders and consultants. We are responding to and continuing to cooperate with these investigations. Certain regulators in other jurisdictions have also been briefed on these investigations. In the event that any violations of law or regulation are found to have occurred or are alleged to have occurred, and an enforcement action is filed, legal and regulatory sanctions in respect thereof may materially and adversely affect our results of operations, financial condition and reputation.

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

We or our affiliates have been sued by investors in civil litigation concerning their roles as trustees of over 600 residential mortgage backed securities (referred to as RMBS) trusts. Investor plaintiffs in these cases assert claims for alleged violation of the U.S. Trust Indenture Act, violation of New York s Streit Act, breach of contract, breach of fiduciary duty, breach of trust, negligence and/or negligent misrepresentation based on alleged failures to perform duties as trustees for the trusts. More specifically, the investor plaintiffs allege that we or our affiliates failed to perform purported duties as trustee to enforce, for the benefit of investors, claims that (a) loan sellers breached representations and warranties made in respect of mortgage loans backing the RMBS and (b) loan servicers breached obligations to service mortgage loans in accordance with RMBS contracts. The investor plaintiffs allege that realized and future RMBS trust losses, which in the aggregate may exceed U.S.$ 100 billion, have been exacerbated by our or our affiliates alleged failure, as trustee, to enforce such claims. The investor plaintiffs have brought similar suits against other banks that acted as trustees for RMBS. Such pending RMBS litigations are in various stages and we continue to defend these actions vigorously.

From 2005 to 2008, as part of our U.S. residential mortgage loan business, we sold large volumes of loans into private label securitizations and via whole loan sales. We have been, and may in the future be, presented with demands to repurchase loans from purchasers, investors and financial insurers based on alleged material breaches of representations and warranties or to indemnify such persons with respect to losses allegedly caused thereby. Our general practice is to process valid repurchase claims that are presented in compliance with contractual rights and applicable statutes of limitations.

In addition, we have been named as defendant in numerous civil litigations brought by private parties in connection with our various roles, including issuer or underwriter, in offerings of RMBS and other asset-backed securities. We have also received subpoenas and requests for information from certain regulators and government entities concerning our activities regarding the origination, purchase, securitization, sale, valuation and/or trading of mortgage loans, RMBS, commercial mortgage-backed securities (CMBS), collateralized debt obligations (CDOs), other asset-backed securities and credit derivatives. Though we have resolved some of these civil litigation and regulatory and governmental matters, including entering into a settlement in January 2017 with the DOJ to resolve potential claims related to our RMBS business under which we paid a civil monetary penalty of U.S.$ 3.1 billion and agreed to provide U.S.$ 4.1 billion in consumer relief, others remain outstanding.

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

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

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

In November 2010, a former shareholder of Postbank, Effecten-Spiegel AG, which had accepted the takeover offer, brought a claim against us alleging that the offer price was too low and was not determined in accordance with the applicable law of the Federal Republic of Germany. The plaintiff alleges that we had been obliged to make a mandatory takeover offer for all shares in 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 us pursuant to Section 30 of the German Takeover Act. Based thereon, the plaintiff alleges that the consideration offered by us for the shares in 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 we 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 large 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.

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

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

We have investigated the circumstances around equity trades entered into by certain clients with us in Moscow and London that offset one another. The total volume of transactions reviewed is significant. Our internal investigation of potential violations of law, regulation and policy and into the related internal control environment has concluded, and we are assessing the findings identified during the investigation; to date we have identified certain violations of our policies and deficiencies in our control environment. We have advised regulators and law enforcement authorities in several jurisdictions (including Germany, Russia, the UK and U.S.) of this investigation and have taken disciplinary measures with regards to certain individuals in this matter and will continue to do so with respect to others as warranted.

On January 30 and 31, 2017, the DFS and FCA announced settlements with the Bank related to their investigations into this matter. The settlements conclude the DFS and the FCA s investigations into the bank s anti-money laundering (AML) control function in its investment banking division, including in relation to the equity trading described above. Under the terms of the settlement agreement with the DFS, Deutsche Bank entered into a consent order, and agreed to pay civil monetary penalties of U.S.$ 425 million and to engage an independent monitor to conduct a comprehensive review of its existing AML compliance programs that pertain to or affect activities conducted by or through our U.S. bank subsidiary DBTCA and our New York branch for a term of up to two years. Under the terms of the settlement agreement with the FCA, Deutsche Bank agreed to pay civil monetary penalties of approximately GBP 163 million. On May 30, 2017, the Federal Reserve announced its settlement with us resolving this matter as well as additional AML issues identified by the Federal Reserve. We paid a penalty of U.S.$ 41 million. We also agreed to retain independent third parties to assess our Bank Secrecy Act/AML program and review certain foreign correspondent banking activity of DBTCA. We are also required to submit written remediation plans and programs.

We continue to cooperate with regulators and law enforcement authorities, including the DOJ, which has its own ongoing investigation into these securities trades. In the event that violations of law or regulation are found to have occurred, legal and regulatory sanctions in respect thereof may materially and adversely affect our results of operations, financial condition and reputation.

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

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

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

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

We sponsor a number of post-employment benefit plans on behalf of our employees. In Germany, the pension assets that fund the obligations under these pension plans are held by Benefit Trust GmbH. The German tax authorities are challenging the tax treatment of certain income received by Benefit Trust GmbH in the years 2010 to 2013 with respect to its pension plan assets. For the year 2010 Benefit Trust GmbH paid the amount of tax and interest assessed of 160 million to the tax authorities and is seeking a refund of the amounts paid in litigation with the relevant lower fiscal court. For 2011 to 2013 the matter is stayed pending the outcome of the 2010 tax litigation. The amount of tax and interest under dispute for years 2011 to 2013, which also has been paid to the tax authorities, amounts to 456 million. In March 2017, the lower fiscal court ruled in favor of Benefit Trust GmbH and in September 2017 the tax authorities appealed the decision to the German supreme fiscal court (Bundesfinanzhof). A decision by the supreme fiscal court is not expected for a number of years. An ultimate decision by the courts that is unfavorable to us could materially and adversely affect our comprehensive income and financial condition.

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

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

Guilty pleas or convictions against us or our affiliates could lead to our ineligibility to use an important trading exemption under ERISA. In particular, such guilty pleas or convictions could cause our affiliates to no longer qualify as a qualified professional asset manager (QPAM) under the QPAM Prohibited Transaction Exemption, which exemption is relied on to provide asset management services to certain pension plans in connection with certain asset management strategies. Loss of QPAM status could cause customers who rely on such status (whether because they are legally required to do so or because we have agreed contractually with them to maintain such status) to cease to do business or refrain from doing business with us and could negatively impact our reputation more generally. In addition, other clients may mistakenly see the loss as a signal that we are somehow no longer approved by the U.S. Department of Labor (DOL), the agency responsible for ERISA, and cease to do business or refrain from doing business with us for that reason. This could have a material adverse effect on our results of operations, particularly those of our asset management business in the United States. On December 9, 2017, the DOL published an individual exemption permitting certain of our affiliates to retain their QPAM status despite both the guilty plea of DB Group Services (UK) Ltd. and the conviction of Deutsche Securities Korea Co. The exemption applies through April 17, 2021 and would terminate immediately if, among other things, we or our affiliates are convicted of crimes in other matters. The disqualification period arising from the guilty plea and conviction extends until April 17, 2027, and so we would need to obtain a further exemption by April 18, 2021 to avoid a loss of QPAM status at that time, with the potential for the adverse effects described above.

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

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

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

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

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

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

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

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

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

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

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

In addition, our more qualitative approach to managing those risks not taken into account by our quantitative methods could also prove insufficient, exposing us to material unanticipated losses. Also, if existing or potential customers or counterparties believe our risk management is inadequate, they could take their business elsewhere or seek to limit their transactions with us. This could harm our reputation as well as our revenues and profits. See Management Report: Risk Report in the Annual Report 2017 for a more detailed discussion of the policies, procedures and methods we use to identify, monitor and manage our risks.

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

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

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

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

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

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

We utilize a variety of vendors in support of our business and operations. Services provided by vendors pose risks to us comparable to those we bear when we perform the services ourselves, and we remain ultimately responsible for the services our vendors provide. Furthermore, if a vendor does not conduct business in accordance with applicable standards or our expectations, we could be exposed to material losses or regulatory action or litigation or fail to achieve the benefits we sought from the relationship.

We utilize a variety of vendors in support of our business and operations. We do so in order to focus on our core competencies and to seek improvements in costs, efficiency and effectiveness in our operations, for instance in connection with our IT modernization efforts. Services provided by vendors pose risks to us comparable to those we bear when we perform the services ourselves, and we remain ultimately responsible for the services our vendors provide. We depend on our vendors to conduct their delivery of services in compliance with applicable laws, regulations and generally accepted business standards and in accordance with the contractual terms and service levels they have agreed with us. If our vendors do not conduct business in accordance with these standards, we may be exposed to material losses and could be subject to regulatory action or litigation as well as be exposed to reputational damage. More generally, if a vendor relationship does not meet our expectations, we could be exposed to financial risks, such as the costs and expenses associated with migration of the services to another vendor and business and operational risks related to the transition, and we could fail to achieve the benefits we sought from the relationship.

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

Among the operational risks we face is the risk of breaches of the security of our or our vendors computer systems due to unauthorized access to networks or resources, the introduction of computer viruses or malware, or other forms of cybersecurity attacks or incidents. Such breaches could threaten the confidentiality of our or our clients data and the integrity of our systems. We devote significant resources toward the protection of our computer systems against such breaches and toward ensuring that our vendors employ appropriate cybersecurity safeguards. To address the evolving cyber threat risk, we have expended significant resources to modify and enhance our protective measures and to investigate and remediate any information security vulnerabilities. These measures, however, may not be effective against the many security threats we face.

The increasing frequency and sophistication of recent cyber-attacks has resulted in an elevated risk profile for many organizations around the world, and significant attention by our management has been paid to the overall level of preparedness against such attacks. Cybersecurity is growing in importance due to factors such as the continued and increasing reliance on our technology environment. We and other financial institutions have experienced attacks on computer systems, including attacks aimed at obtaining unauthorized access to confidential company or customer information or damaging or interfering with company data, resources or business activities, or otherwise exploiting vulnerabilities in our infrastructure. We expect to continue to be the target of such attacks in the future. Although we have to date not experienced any material business impact from these attacks, we may not be able to effectively anticipate and prevent more material attacks from occurring in the future. A successful attack could have a significant negative impact on us, including as a result of disclosure or misappropriation of client or proprietary information, damage to computer systems, financial losses, remediation costs (such as for investigation and re-establishing services), increased cybersecurity costs (such as for additional personnel, technology, or third-party vendors), reputational damage, customer dissatisfaction and potential regulatory or litigation exposure.

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

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

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

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

If we avoid entering into additional business combination transactions or fail to identify attractive companies to acquire, market participants may perceive us negatively. We may also be unable to expand our businesses, especially into new business areas, as quickly or successfully as our competitors if we do so through organic growth alone. These perceptions and limitations could cost us business and harm our reputation.

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

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

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

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

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

We engage or have engaged in a limited amount of business with counterparties, including government-owned or -controlled counterparties, in certain countries or territories that are subject to comprehensive U.S. sanctions, including Iran and Cuba (referred to as Sanctioned Countries), or with persons targeted by U.S. economic sanctions (referred to as Sanctioned Persons). U.S. law generally prohibits U.S. persons or any other persons acting within U.S. jurisdiction from doing business with Sanctioned Countries or Sanctioned Persons. Additionally, U.S. indirect or secondary sanctions threaten retaliation against certain activities, including categories of transactions with certain entities and countries, by non-U.S. persons entirely outside of U.S. jurisdiction. Thus, U.S. regulations may extend to activities in other geographic areas and by non-U.S. persons depending on the circumstances. Our U.S. subsidiaries, branch offices, and employees are, and our non-U.S. subsidiaries, branch offices, and employees may become, subject to those prohibitions and other regulations.

We are a German bank and our activities with respect to Sanctioned Countries and Sanctioned Persons have been subject to policies and procedures designed to avoid the involvement of persons acting within U.S. jurisdiction in any managerial or operational role and to ensure compliance with United Nations, European Union and German sanctions and embargoes; in reflection of legal developments in recent years, we have further developed our policies and procedures with the aim of ensuring compliance with regulatory requirements extending to other geographic areas regardless of jurisdiction. However, should our policies prove to have been ineffective, we may be subject to regulatory or enforcement action that could materially and adversely affect our reputation, financial condition, or business. We have taken action to reduce the risk of compliance violations. In 2007, our Management Board decided that we will not engage in new business with counterparties in countries such as Iran, Syria, Sudan and North Korea and to exit existing business to the extent legally possible. It also decided to limit our business with counterparties in Cuba. Iran, North Korea Sudan and Syria are currently designated as state sponsors of terrorism by the U.S. State Department.

We had a representative office in Tehran, Iran, which we discontinued on December 31, 2007. Our remaining business with Iranian counterparties consists mostly of participations as lender and/or agent in a few large trade finance facilities arranged before 2007 to finance the export contracts of exporters in Europe and Asia. The lifetime of most of these facilities is ten years or more and we are legally obligated to fulfil our contractual obligations. We do not believe our business activities with Iranian counterparties are material to our overall business, with the outstanding loans to Iranian borrowers representing substantially less than 0.01 % of our total assets as of December 31, 2017 and the revenues from all such activities representing less than 0.01 % of our total revenues for the year ended December 31, 2017.

In recent years, the United States has taken steps to deter foreign companies from dealing with Iran by providing for a variety of secondary sanctions against companies engaged in targeted activities there. The bulk of these secondary sanctions were suspended following the occurrence on January 16, 2016 of Implementation Day of the Joint Comprehensive Plan of Action (referred to as the JCPOA) between the P5+1 parties and Iran, pursuant to which Iran agreed to limits on its nuclear program and the P5+1 parties agreed to provide certain sanctions relief. However, non-U.S. persons remain exposed to secondary sanctions for knowingly engaging in significant transactions with any specially designated nationals (SDNs) in Iran or any SDNs outside of Iran designated in connection with Iranian weapons of mass destruction, terrorism, or the Iranian Revolutionary Guard Corps. Following the Implementation Day, we engage in new activities with respect to Iran, but only to a limited extent. We execute cash payments in Euro from or to Iran on behalf of our own non-Iranian clients with enhanced due diligence. In principle, we remain restrictive towards any new trade finance activities and do not plan to engage in loan arrangements with Iranian counterparties. We do not believe we have engaged in activities sanctionable under Iran-related secondary sanctions, but the U.S. authorities have considerable discretion in applying the statutes, and any imposition of sanctions against us could be material. It is also possible that primary and secondary sanctions imposed by the U.S. and other jurisdictions against Iran could be expanded in the future, particularly if the JCPOA with Iran is abandoned. The JCPOA and U.S. sanctions against Iran remain a contentious issue in the United States and proposals for expanded sanctions are discussed on a continuing basis in the U.S. Administration, the U.S. Congress and elsewhere. On October 13, 2017, President Trump declined to certify Iran s compliance with the terms of the JPCOA but did not take any action to reimpose suspended U.S. sanctions on Iran. In January

2018, President Trump extended U.S. sanctions relief under the JCPOA but threatened to terminate the agreement unless it is amended by the end of the extension period in May 2018. Given the substantial uncertainty surrounding the JCPOA, there is a risk that the U.S. secondary sanctions suspended under the JCPOA could be reimposed were the United States to declare that Iran is in violation of the JCPOA or otherwise abandon the agreement. If the suspended sanctions against Iran were reimposed, it is possible that our ongoing activities related to Iran may need to be terminated on short notice. However, we do not believe that such activities are material to our business.

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

We are also engaged in a limited amount of business with counterparties domiciled in Cuba, which is not subject to any United Nations, European Union or German embargo. The business consists of a limited number of letters of credit, as well as claims resulting from letters of credit, and it represented substantially less than 0.01 % of our assets as of December 31, 2017. The transactions served to finance commercial products such as machinery as well as medical products.

We are aware of and quickly adapted to other substantial changes in United States economic sanctions that occurred in 2017. On August 2, 2017, the United States signed into law the Countering America s Adversaries Through Sanctions Act (referred to as CAATSA), which codifies existing U.S. sanctions against Russia (including designation of Russian entities under U.S. sanctions), expands U.S. secondary sanctions against Russia, tightens existing sectoral sanctions (targeting specific sectors of the Russian economy), and permits the imposition of sectoral sanctions against additional sectors of the Russian economy. In particular, expanded U.S. secondary sanctions under CAATSA now allow for the imposition of U.S. sanctions on non-U.S. entities who engage in significant transactions with Russian SDNs or specific entities in the Russian defense and intelligence sectors. We have set up appropriate processes and procedures aimed at complying with the expanded U.S. sanctions under CAATSA to the extent that such sanctions are applicable to our activities. We do not believe we have engaged or are currently engaged in any transactions with Russian entities that violate, or are sanctionable under, U.S. sanctions. However, given the broad discretion U.S. authorities have in interpreting and enforcing U.S. sanctions, there can be no assurances that U.S. authorities will not bring enforcement actions against us, or impose secondary sanctions on us for our ongoing activities. Any such actions could have a material impact on our business and harm our reputation. It is also possible that the United States could impose broader sanctions on Russia or Russian entities in the future and that such sanctions could have a material impact on our business activities.

Additionally, on August 24, 2017, the U.S. Administration imposed sanctions on the Government of Venezuela. These sanctions prohibit transactions or other dealings by U.S. persons or within the United States involving new debt of and certain bonds issued by the Government of Venezuela or the direct or indirect purchases of securities from the Government of Venezuela. While the U.S. Administration has provided several general licenses to mitigate the impact of these sanctions, a substantial portion of economic activity within U.S. jurisdiction involving the Government of Venezuela is now prohibited by U.S. sanctions. We have taken appropriate steps and established appropriate processes and procedures aimed at complying with the new U.S. sanctions against the Government of Venezuela. In response to these new U.S. sanctions, we have wound down several client relationships. With respect to entities of the Government of Venezuela, we are currently only engaged in legacy transactions. We do not believe that any of our remaining activities related to the Government of Venezuela violate U.S. sanctions. However, given the broad discretion U.S. authorities have in interpreting and enforcing U.S. sanctions, there can be no assurances that U.S. authorities do not allege that our ongoing activities violate U.S. sanctions.

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

Business Overview

Our Organization

Please see Management Report: Operating and Financial Review: Deutsche Bank Group: Our Organization in the Annual Report 2017. For information on net revenues by geographic area and by corporate division please see Note 4 Business Segments and Related Information: Entity-Wide Disclosures to the consolidated financial statements and Management Report: Operating and Financial Review: Results of Operations: Segment Results of Operations in the Annual Report 2017.

Management Structure

Please see Management Report: Operating and Financial Review: Deutsche Bank Group: Management Structure in the Annual Report 2017.

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 Hua Xia Bank and the sales of Abbey Life and the U.S. Private Client Services business unit. Furthermore, we prepared or completed previously announced country exits and accelerated the wind down of the 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,
- with our Corporate & Investment Bank (CIB), having a leading 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.

Our Financial Targets

Our financial targets:

- Adjusted costs of 22 billion in 2018, and 21 billion by 2021, which includes the adjusted costs of Postbank; we now 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
- Target 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. Therefore, 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
  - The 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 was transferred under a common German Asset Management holding company, DWS SE, during 2017 and the first quarter of 2018, with the remaining Asset Management legal entities, including the U.S. holding company, to be transferred in the first half of 2018. The conversion of the holding company DWS SE into a partnership limited by shares, named DWS Group GmbH & Co. KGaA, has been completed successfully in the first quarter 2018. The partnership, DWS Group GmbH & Co. KGaA, is managed by a general partner (DWS Management GmbH) whose managing directors were 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

Strategy in Corporate & Investment Bank

The combined Corporate & Investment Bank (CIB) division was created in 2017 to closely align product and sales efforts across Global Markets, Corporate Finance and Global Transaction Banking with the intent to deliver better service to our clients and to drive asset and cost efficiency.

We believe there are substantial opportunities to capture market share and revenue growth in our core client proposition through the reorganised CIB. The combined CIB is intended to support a more efficient and seamless client coverage and product offering, meaningfully enhance cross selling opportunities and improve the ability to direct resources to the highest return relationships, and ultimately increase our share of clients wallet (amounts they spend on banking products). CIB is focused on reinvigorating its client-led franchise through more effective coverage and has made progress in selectively hiring to capture key strategic opportunities. As of 2017, CIB is the largest division in Deutsche Bank, with net revenues of 14.2 billion.

CIB also intends to target further cost efficiencies, eliminate complexity and streamline internal processes to contribute to our adjusted costs targets and has made progress towards better front-to-back alignment of certain infrastructure functions, in particular business-aligned technology functions.

We continue to see a clear opportunity for CIB to occupy an attractive position as one of the handful of globally relevant European participants in the Global CIB market. CIB intends to pursue a number of objectives to achieve revenue growth:

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

Strategy in Private & Commercial Bank

The Private & Commercial Bank (PCB) combines operations in Postbank, Private & Commercial Clients Germany (PCC Germany), Private & Commercial Clients International (PCC International) and Wealth Management. PCB is focused on offering high quality advice as well as a wide range of financial services to private individuals and small and medium-sized businesses. In terms of products, PCB focuses on three key offerings: current account & transaction banking (including trade finance and cash management for our Mittelstand clients in cooperation with our Corporate & Investment Bank), lending products and tailor-made investment and insurance advice to our private and wealth clients. All of these come with a comprehensive digital offering as well as onsite branch advice to provide a full omni-channel banking experience.

Our objective is to offer a seamless client experience including standard retail and advisory banking with a global network, strong expertise in capital markets and financing solutions and cutting-edge digital services.

PCC Germany & Postbank

In March 2017, we announced that we will retain Postbank and combine it with our existing Private & Commercial Client Business in Germany over the next three to five years. This strategic decision reflects a number of evolving factors. The integration of Postbank is expected to strengthen the position in our home market and will create Germany s largest private and commercial bank with over 20 million clients and 224 billion of assets under management.

Despite the challenging environment from low interest rates and competitive pressure in Germany, we believe that growth in the small and medium-sized German corporate clients segment and the private banking clients segment will continue. These two client segments represent a majority of the identified fee pool in Germany and both are client segments that we believe we are well positioned to serve. In the more standard retail banking segment where fee pools are expected to be flat, we will respond with continued efficiency efforts and seek market share gains through digitalization.

To this end, Deutsche Postbank AG and Deutsche Bank Privat- und Geschäftskunden AG will be merged into one single legal entity, and we currently expect to complete this by the end of the second quarter of 2018. The entity will have a joint head office and combined service units and a shared IT platform. We expect the reorganization to provide substantial synergies, which we estimate will gradually rise to approximately 900 million annually by 2022. The total cost of the planned restructuring measures and other investments is estimated to be 1.9 billion.

The combined business will continue to operate with two distinct brands in Germany, which are to be further enhanced for private and commercial clients: while Deutsche Bank is focusing on its role as partner and risk manager providing intensive advisory services to its private and commercial clients, Postbank will cover day-to-day banking needs providing financial services for retail, business and corporate clients as well as for other financial service providers.

Additionally, digitalization remains a dominant theme. We intend to further expand our digital market leadership in Germany. At the end of 2018, we plan to launch a new digital bank aimed primarily at younger and self-directed clients.

PCC International

In PCC International, we provide advisory and relationship banking services to retail and affluent clients, private banking clients as well as small and medium-sized companies in five European countries (Italy, Spain, Portugal, Belgium and Poland) and India. In these markets, we offer a comprehensive range of products, comprising investment and insurance products, deposits, current accounts, cards and transaction services as well as loans and business banking products.

In December 2017, we entered into an agreement to sell most of our PCC business in Poland in order to sharpen the focus of our bank and reduce complexity. Deutsche Bank will remain present in Poland with its Corporate & Investment Bank operations, including Global Transaction Banking. While we are aiming for a finalization of the transaction in the fourth quarter of 2018, the transaction remains subject to required approvals from regulators, corporate consents and other conditions.

Wealth Management

In Wealth Management, we combine long experience and high expertise with a global investment approach and an innovative investment process to seek to generate solid risk-adjusted performance according to the individual needs for our clients. We serve high-net-worth (HNW) and ultra-high-net-worth (UHNW) individuals and family offices and offer a broad range of traditional and alternative investment products and solutions, as well as lending and deposit products.

In Germany, we have decided to realign our Wealth Management unit. Consequently, in the course of 2018, Sal. Oppenheim s Wealth Management business will be absorbed into Deutsche Bank s Wealth Management. This will give clients better access to the entire range of advisory services, combined with Deutsche Bank s global investment and capital market expertise. Sal. Oppenheim s asset management operations and comprehensive quantitative investment expertise are planned to be transferred to Deutsche Asset Management on April 1, 2018, depending on relevant preconditions.

Strategy in Deutsche Asset Management

Deutsche AM is a core business of Deutsche Bank that has generated stable income and relatively high returns by earning recurring fee-based revenues. We realized 16 billion of net flows in 2017. Deutsche AM has a market-leading position as the largest retail asset manager in Germany and the number five retail asset manager in Europe and with the number two position in Europe and number six position globally in passive/ETFs, all based on publicly disclosed assets under management. Deutsche AM is also a leading alternatives manager, being the number eleven real estate manager globally and number three for infrastructure securities.

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.

Over the long-term, the industry s global assets under management are expected to increase substantially, 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 beta (passive) products, alternative investments, next generation active products and multi-asset solutions, areas where we believe we can grow market share both in our home market and abroad. Deutsche AM s diversified business across asset class, geography, and client type and channel should further support the growth potential. However, we anticipate industry revenue pools to be challenged by fee compression and competitive dynamics in addition to our expectation of rising costs of compliance with regulations. 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. We believe Deutsche AM will be able to leverage the investments made in creating a scalable operating platform (investment management platform via Aladdin and customer relationship management via salesforce) with digital capabilities and will continue to drive efficiency.

In 2018 we intend to undertake strategic initiatives in client coverage and product and digital capabilities. We also intend to achieve efficiency gains from a target operating model review primarily across the business support organization with the aim of simplifying business operations to enhance client service, business controls and efficiency.

Our Corporate Divisions

Please see Management Report: Operating and Financial Review: Deutsche Bank Group: Corporate Divisions in the Annual Report 2017.

The Competitive Environment

2017 The Global Economy

The global economy surprised to the upside as monetary policy remained accommodative, despite the gradual tightening in the U.S. Political risks, especially in Europe, did not materialize and election outcomes were broadly market-friendly. Against this backdrop, global economic growth increased to 3.8 % in 2017, following 3.2 % in 2016. This is the strongest economic expansion since 2011. Despite the higher growth momentum the global inflation rate remained at 2.9 %, as in 2016. The industrialized countries GDP grew by 2.2 % and consumer prices rose by 1.7 % while in emerging markets economies GDP increased by 4.9 % and inflation by 3.8 %.

The economic outlook for the euro area improved markedly. The economy expanded by 2.5 %, roughly one percentage point above expectations at the start of the year. The economy gained momentum on the back of supportive fiscal and monetary policy. While monetary policy remains expansive, the ECB scaled back its asset purchases to 60 billion from April until December 2017. Consumer prices rose by 1.5 %. The German economy also surprised to the upside with a GDP growth of 2.2 % in 2017, almost solely driven by the domestic economy. As a result, the current account surplus decreased.

The US economy performed almost as expected and expanded by 2.3 % in 2017. Investment spending became a major driver as corporate sentiment has picked up strongly, probably in anticipation of the tax reform, which got enacted towards year end. The key driver of the US economy remained consumer spending backed by a well-functioning labor market. In 2017 fears of a persistent low inflation scenario have started to ease. The inflation rate was at 2.1 % slightly above target. The Federal Reserve s monetary policy responded with three interest rate hikes in 2017. The Fed also started to cut back the reinvestment of bonds held on its balance sheets.

The Japanese economy showed a balanced growth mix with both the domestic and external sector contributing to the GDP growth of 1.8 % in 2017. The external sector benefitted from the depreciation of the yen and the higher momentum of global trade. The strong export performance also boosted capital expenditures. As the inflation rate continues to hover around zero, the Bank of Japan was not under pressure to act.

In 2017 GDP growth in the emerging markets increased by 4.9 %. With GDP growth of 6.1 %, the emerging markets in Asia were once again the global driving force, as intra-Asian trade was strengthened. The Chinese economy expanded by 6.9 %, slightly higher than expected. Official Chinese inflation was well under control with 1.6 %. Risks from the overvalued real estate sector did not materialize.

2018 Outlook

The global outlook seems to be based on a solid foundation. Leading indicators suggest that that the economic momentum will carry over well into 2018. Labor markets in several large economies are close to full employment. The investment activity has markedly improved. Central banks are considering to gradually tighten the still very accommodative monetary policy. The mood on the financial markets also contributes to the positive economic assessment, as risk assets are at or close to multi-year highs. We forecast a GDP expansion of 3.9 %, slightly above the 2017 growth rate. The better economic environment may also drive up prices, in particular in commodity markets. The 2018 global inflation rate is forecasted to be at 3.3 %, 0.3 % pp above the 2017 inflation rate.

In the euro area we expect GDP growth to remain at 2.3% and above trend. With the output gap getting closed during the course of the year, inflation is expected to start rising albeit slowly. German wage settlements could add to the price pressure. It will take a few more years for inflation to fully normalize the economy. We expect the ECB hawks to grow in number over the next year. The end of ECB net asset purchases should come about at the end of 2018, we expect the first ECB policy rate hike by mid-2019. As a key political event in Europe, the result of the elections in Italy did not bring a majority for a single party or an electoral alliance. From an arithmetical point of view, however, a coalition of anti-establishment and eurosceptic parties would have an absolute majority. With at best a transitional deal in the near term, the risks of the Brexit to the UK economy do not appear to easily or quickly dissipate.

In the U.S., economic growth should accelerate to 2.7 % which is above potential. Modest positive impulses for corporates and households are expected from the US tax reform. Repatriation tax holiday may lead to a pick-up in demand, a tighter labor market with potentially higher wages and a stronger investment activity. These may have positive impulses on inflation which may partly be counter-balanced by four Fed rate hikes in 2018. Accordingly, we expect inflation to remain slightly above 2 % as in 2017.

The Japanese economy is expected to slow to 1.2 %. We expect both the domestic and the external sector to add to GDP growth. The Inflation rate should remain almost flat at 0.4 %. Therefore, the Bank of Japan is not under pressure to act. The control of the yield curve should remain the key monetary target. No change of rates is expected. In 2018, growth in emerging markets is projected to slightly rise to 4.9 % and economic growth in Asia (excluding Japan) is expected to expand by 6.0 %. Inflation in emerging markets is expected to move higher to 4.3 % after 3.8 % in 2017. In 2018, the Chinese economy growth should slow down but only moderately to 6.3 % (6.9 % in 2017). However, this would be the lowest growth rate since 1990. The slowdown is expected to be driven by policies as the government plans to mark the beginning of a deleveraging process. The tightening cycles in Chinese monetary, fiscal, and property market policies are expected to continue in 2018. Inflation is expected to increase to 2.7 %.

The heat-map of global risks has changed little from 2017. An early recession in the U.S. due to changes in the structure of the yield curve, the elections in Italy which resulted in a possible coalition of anti-establishment and eurosceptic parties, populist movements in Europe as well as geopolitical risks, particularly with respect to the Middle East and North Korea, could potentially have a substantial adverse effect on our forecasts. However, if any of these materialize in 2018 the impact on the economy and financial markets might be less severe than in it would have been previous years, as the higher economic momentum worked as a shock absorber. But inflation risks, not an issue for several years, have resurfaced and as a key 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. Another risk is China growth as we expect a deleveraging process to cool down the housing market. Authorities seem to have gotten more comfortable with slightly slower growth, and central banks are tightening monetary policy. We expect some policy easing in mid-2018 to support growth. But this option may be off the table if inflation is high. The economy would then slow and could weigh on global growth.

Competitor Landscape

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

The European banking industry s performance improved in 2017. On the macroeconomic front, higher growth has helped an expansion in revenues and a further reduction in loan loss provisions, while at the same time the low rate environment continues to keep the net interest margin under pressure. At the microeconomic level, several European banks are still running complex restructuring programs, while also delivering on sizeable regulatory requirements. Good progress has been made on all these fronts, however this has also led to management distraction and the loss of market share to U.S. competitors within Europe.

The uncertainty around the outcome and timing of key regulations has declined in 2017 with the finalization of the Basel III package and the entry into force of MiFID II and PSD II at the start of 2018. Looking forward, we believe that the European banking sector will benefit from both a continuing benign and improving macroeconomic environment and with increased clarity on major regulatory initiatives in 2018. The single biggest remaining political and regulatory risk for European banks remains Brexit, while on the business side the speed and timing of the exit from quantitative easing by central banks also poses a material risk.

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

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

Regulatory Reform

The flow of new legislative proposals under the post crisis global regulatory reform agenda has slowed, but as the focus of regulators turns to implementation and supervision, in many instances there remains a lack of clarity around the final rules and the impact that they might have on banks in different regions.

While a number of regulatory reforms impacting Deutsche Bank are already in force, others continue to be developed on an international level and implemented regionally. Where primary legislation has been agreed on by lawmakers, regulators have yet to develop detailed rules, or determine their cross-border application, which might lead to a fragmented and inconsistent landscape. Moreover, certain post-crisis reforms which have already been implemented are or have been subject to reviews that might lead to additional changes in legislation in the coming years. The impact of the implementation of such final or revised standards on specific institutions remains uncertain.

During 2017, a number of international developments in the area of banking regulation and supervision have been implemented and will continue to be further refined, in particular with a view to strengthening international standards to create financially resilient institutions and ensuring resolvability of banks.

Regulatory developments in the area of market structure, securities and derivatives regulation also remained subject to change during 2017 and will continue to be a focus for 2018 with the entry into force of the (revised) European Markets in Financial Instruments Directive (MiFID 2) and Regulation (MiFIR , together MiFID 2/MiFIR) with implications for Deutsche Bank globally.

Additional legal uncertainty and operational complexity for the banking sector globally has been created by the decision of the United Kingdom to leave the European Union on March 29, 2019, so called Brexit . This will require ongoing contingency planning during 2018 and is likely to have implications for the structure and operations of all banks currently operating cross-border from entities or branches in the United Kingdom. Whilst political negotiations continue, there is no clarity yet around precisely what constraints on cross-border banking activity may emerge and what the implications will be for us or our peers. A Brexit with no relief assumption has therefore been factored into DB s preparations for a potential transition of clients, products and services.

Banking Regulation and Supervision

Capital, liquidity and leverage requirements In the area of banking regulation and supervision, core elements of the Basel 3 capital adequacy, liquidity and leverage requirements have been defined and implemented in 2017, with such process expected to continue in 2018 and beyond. In the European Union, the Capital Requirements Regulation and the Capital Requirements Directive (CRR/CRD 4), which implemented the Basel 3 framework, became effective on January 1, 2014. However a number of requirements, such as capital buffers, continue to be phased in through 2019.

On November 23, 2016, following a routine review of the CRR/CRD 4 legislative package and other major legal acts in the area of banking regulation and supervision, the European Commission published a comprehensive package of reforms (commonly referred to as CRR 2 and CRD 5) to further strengthen the resilience of European Union banks. If implemented, the proposals will amend, among others, CRR/CRD 4, in order to incorporate various remaining elements of the regulatory framework agreed within the Basel Committee on Banking and Supervision (Basel Committee) and the Financial Stability Board (FSB) to refine and supplement the Basel 3 framework. This includes more risk-sensitive capital requirements, in particular in the area of market risk, counterparty credit risk, and for exposures to central counterparties, methodologies that reflect more accurately the actual risks to which banks may be exposed, a binding leverage ratio, a binding net stable funding ratio, tighter regulation of large exposures, and a requirement for global systemically important banks (G-SIBs), such as us, to hold certain minimum levels of capital and other instruments which are capable of bearing losses in resolution (Total Loss-Absorbing Capacity or TLAC). Other proposed measures are aimed at improving banks lending capacity to support the European Union economy and further facilitate the role of banks in achieving deeper and more liquid European Union capital markets. It is expected that most of the proposed amendments will start being applied at the end of 2020 at the earliest, save for the TLAC requirements, which are expected to apply from January 2019.

At the international level, the Basel Committee published its final agreement (December 2017 Agreement) on revisions to the Basel 3 framework that aim to increase consistency in risk-weighted asset calculations and improve the comparability of banks capital ratios. The December 2017 Agreement includes, among other things, changes to the standardized and internal ratings-based approaches for determining credit risk, revisions to the operational risk framework, and an output floor , set at 72.5 %. The output floor limits the amount of capital benefit a bank can obtain from its use of internal models relative to using the standardized approach. This package of reforms is intended to finalize the Basel 3 framework and would reduce the ability of banks to apply internal models, while making the standardized approaches more risk-sensitive and granular. In addition, the December 2017 Agreement introduces a leverage ratio buffer for G-SIBs, such as us, to be met with Tier 1 capital and sets it at 50 % of the applicable risk-based G-SIB buffer requirement. The Basel Committee also reached agreement on an implementation date for this package of January 1, 2022, with a phase-in period of five years through January 1, 2027 for the output floor. The December 2017 Agreement also extends the implementation date for the final market risk framework resulting from the Basel Committee s Fundamental Review of the Trading Book to January 1, 2022.

While the expected impacts on capital requirements of the proposed new standardized approaches have been factored into our strategy projections and objectives to the extent possible, their ultimate impact and competitive implications on us will depend on how they are implemented through binding legislation and regulation.

Capital planning and stress testing In 2017, Deutsche Bank Trust Corporation (DBTC) submitted its third capital plan and related information to the Federal Reserve Board. In its supervisory stress tests, the Federal Reserve Board projected that DBTC s capital ratios would exceed the quantitative minimum requirements even under the supervisor s hypothetical severely adverse stress scenario. DBTC s capital plan received a non-objection from the Federal Reserve Board. In 2017, our intermediate holding company, DB USA Corporation, did not participate in the Federal Reserve Board s Comprehensive Capital Analysis and Review (CCAR) process. DB USA Corporation did, however, provide its first capital plan submission to the Federal Reserve Board in April 2017; but the results of its first submission were not made public by the Federal Reserve Board. DB USA Corporation will participate in the 2018 CCAR, while DBTC will no longer participate in CCAR pursuant to the Federal Reserve Board s regulations. Capital planning and stress testing will continue to be a focus in 2018.

The EBA has updated its Supervisory Review and Evaluation Process in 2017 and will continue to do so in 2018 and beyond. The revisions comprise, among other things, updating guidelines on common procedures, technical aspects and stress testing, further revising the Pillar 2 guidance and integrating it with supervisory stress testing, and generally elaborating further on the way the EBA assesses certain aspects of regulatory requirements.

Recovery and resolution The major jurisdictions where we have significant group operations have now finalized the implementation of the FSB s Key Attributes for Effective Resolution Regimes. However, the European Union Bank Recovery and Resolution Directive (BRRD), which grants far-reaching powers to competent resolution authorities to impose resolution measures upon failing banks, is subject to a review as part of a broader package of measures targeting risk reduction (see Capital, liquidity and leverage requirements above). This review includes proposals to implement the FSB s TLAC requirements within the EU (see below), the harmonization of the creditor hierarchy in resolution and an extension to the period of contractual stays (both pre and during resolution). As regards the already finalized creditor hierarchy proposals, please see Regulation and Supervision - Recovery and Resolution Planning, Restructuring Powers below.

In the U.S., Deutsche Bank AG expects to file a U.S. Resolution Plan on or before July 1, 2018, after the Federal Reserve and FDIC issued guidance that extended the date by which four foreign banking organizations must submit their next resolution plans to July 1, 2018.

Loss-absorbing capacity Following the FSB s final term-sheet on TLAC in November 2015, several jurisdictions have started to implement the TLAC standard in their regulatory frameworks. The TLAC standard is designed to ensure that G-SIBs, such as Deutsche Bank, maintain enough capital and long-term debt instruments that can be effectively bailed-in to absorb losses and recapitalize the bank. Our TLAC requirements will be determined by the European Union implementation of the FSB s TLAC standard and a corresponding proposal is expected to apply from January 1, 2019. We also expect that we may be subject to TLAC requirements in other jurisdictions. For example, in December 2016, the Federal Reserve Board finalized rules implementing the TLAC standard in the United States, with TLAC requirements that would apply to U.S. intermediate holding companies (such as ours) of non-U.S. G-SIBs. Compliance with these rules, including a minimum long term debt requirement and clean holding company requirements, is required from January 1, 2019.

Regulation of Financial Markets

Markets Regulation A major regulatory project for European Union banks in 2017 was, the implementation of the (revised) Markets in Financial Instruments Directive (MiFID 2) and Regulation (MiFIR , together MiFID 2/MiFIR) which became applicable on January 3, 2018. MiFID 2/ MiFIR is a cornerstone of financial markets regulation in the European Union and is designed to strengthen the functioning, transparency and competitiveness of European financial markets, as well as enhancing investor protection. MiFID 2/MiFIR will impact Deutsche Bank s branches globally through the application of pre- and post-trade transparency for equities, fixed income, currency and commodities transactions, and through the application of investor protection requirements. MiFID 2/MiFIR will also introduce a trading obligation on certain venues for shares and for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized and liquid. A number of equivalence decisions for trading venues in the United States, Australia and Hong Kong, which have been made by the European Commission in December 2017, will allow us to continue to trade on these third-country venues and access liquidity globally. It is expected that during 2018, guidance from European regulators will result in a further refinement and clarity of the legislative measures for all market participants.

Regulation of Securities and Derivatives Markets The requirements for non-centrally cleared derivatives to exchange initial and variation margin, which had been deferred in a number of jurisdictions, including the European Union, Hong Kong, Australia and Singapore in the Asia Pacific region, became effective in early 2017. The mandatory clearing obligation for certain standardized derivatives will continue to be phased in for specific counterparties in the United States and the European Union over the next few years.

The European Markets Infrastructure Regulation (EMIR) has also undergone a review with proposals to establish enhanced supervision for the most systemic third country central counterparties (CCPs) and targeted amendments to reduce compliance burdens, currently being negotiated. The proposals also include a mechanism by which EU central banks, supervisors and the European Commission may refuse the recognition of a third country CCP which is deemed to be too systemically important. This would have the effect of requiring EU based counterparties to move risk positions to a CCP recognized under EMIR, or face increased capital requirements. A loss of equivalence for a systemically important CCP could also lead to a fragmentation of clearing liquidity in certain products, with longer-term implications for costs and competitiveness.

Work has also continued in the EU on efforts to develop more granular international standards relating to the recovery and resolution of CCPs with legislative proposal currently subject to political negotiations.

Benchmarks Following a number of conduct-related scandals involving financial benchmarks, regulatory initiatives by, among others, the International Organization of Securities Commissions (IOSCO) have resulted in changes to the way benchmarks are being used, authorized and regulated globally. Financial benchmarks comprise a wide range of interest rate, currency, securities, commodity and other indices and reference prices. In the European Union, the EU Financial Benchmarks Regulation became fully applicable in January 2018. In addition, the FSB has recommended that existing global interbank benchmarks are replaced by risk-free rates (RFR) which are considered to be more robust and less susceptible to market manipulation. Regulators globally, in particular in the European Union, the United States and Japan are currently starting to identify RFRs to replace existing benchmarks going forward.

Further measures to harmonize legislation in the European Union After the coming into force of the fourth European anti-money laundering directive and its implementation in Germany in 2017, revised European Union legislation on anti-money laundering, payment services, and distribution of bank products are also in the process of being finalized and will be implemented through the course of 2018.

The update to the Payment Services Directive (PSD 2), which came into effect in January 2018, has the potential to significantly change the existing payments landscape in the EU. The directive aims to open up the EU payment market to companies offering consumer- or business-oriented payment services based on access to information about the payment account. The directive sets out rules on strict security requirements for electronic payments and the protection of consumers financial data, guaranteeing safe authentication and reducing the risk of fraud, the transparency of conditions and information requirements for payment services as well as the rights and obligations of users and providers of payment services.

In January 2018, a new regulation addressing Packaged Retail and Insurance-based Investment Products (PRIIPs) came into effect within the European Union. This regulation aims to enhance retail investors access to information by obliging those who produce or sell investment products to provide investors with standardized key information documents (KIDs). A person who advises a retail investor on a PRIIP or sells a PRIIP to a retail investor must provide the retail investor with a KID in good time before any transaction is concluded. In addition to advisers, this will impact intermediaries such as distributors.

Other Key Post-Crisis Reforms

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

- **Further structural changes**, as a result of changes in the bank organization potentially required by the Single Resolution Board to ensure resolvability.
- **Focus on enhancing the Capital Markets Union (CMU) will** continue in 2018 in particular with a view to reforming and strengthening the governance and power of the European Supervisory Authorities (ESA) which include the European Securities Markets Authority (ESMA) and the European Banking Authority (EBA).
- **Completion of the European Banking Union (EBU)** is envisaged for 2018. The EBU consists of a number of measures to place the European banking sector on a sounder footing and restore confidence in the euro and includes, among other things, a proposal for a European Deposit Insurance Scheme (EDIS), which is currently under negotiation.
- **Addressing Non-Performing Loans (NPL) in the European Union** with a view to reducing NPLs on banks, balance sheets, establishing secondary markets for NPLs, and ensuring comprehensive supervision.
- **Additional direct costs as a result of financial sector specific tax and levies**, for example the European Union enhanced cooperation financial transaction tax, which is still under negotiation.
- **Digital Transformation** and the increased recognition of risks posed by new technologies as well as cyber risk and data protection will shape regulatory discussions in 2018.
- **Sustainable Finance** with the European Commission developing recommendations to facilitate green and sustainable investment and to ensure an increase in capital flow towards long-term projects that help the orderly transition to a low-carbon economy.

Climate change, environmental and social issues

The Sustainable Development Goals address the most pressing economic, social and environmental challenges of our time. These challenges include issues closely related to global warming and climate change, whose impacts remain a topic of public discourse. For example, 19 out of the 20 developed and emerging countries confirmed their commitment to the Paris Agreement on Climate Change during the G20 summit in Hamburg. Additionally, during the United Nations Framework Convention on Climate Change, COP 23 (Conference of the Parties, COP), participants negotiated measures to achieve the so-called 2°C goal. Public and private-sector collaboration will be critical in shaping the shift towards a low-emissions global economy and in forging a climate-resilient development pathways .

Another enduring global trend is poverty and migration. More than 800 million people around the world live in extreme poverty, while 65 million people are refugees (half of them children). Around 57 million children below the age of 10 have no access to schooling or education, and many youngsters are disenfranchised, even in the Western world. Goal 17 of the United Nations 2030 agenda aims to revitalize the global partnership for sustainable development by promoting effective public-private and civil society cooperation to tackle worlds greatest challenges. Leveraging their corporate citizenship, global firms like Deutsche Bank have the opportunity to make a tangible difference especially when they join forces with others to promote impactful initiatives that create shared value.

Regulation and Supervision

Overview

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

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

On November 23, 2016, following a routine review of the CRR/CRD 4 legislative package and other major legal acts in the area of banking regulation and supervision, the European Commission published a comprehensive package of reforms (commonly referred to as CRR 2 and CRD 5) to further strengthen the resilience of European Union banks. If implemented, the proposals will amend, among others, CRR/CRD 4, in order to incorporate various remaining elements of the regulatory framework agreed within the Basel Committee and the Financial Stability Board (FSB) to refine and supplement Basel 3. This includes more risk-sensitive capital requirements, in particular in the area of market risk, counterparty credit risk, and for exposures to central counterparties, methodologies that reflect more accurately the actual risks to which banks may be exposed, a binding leverage ratio, a binding net stable funding ratio, tighter regulation of large exposures, and a requirement for global systemically important banks (G-SIBs), such as Deutsche Bank, to hold certain minimum levels of capital and other instruments which are capable of bearing losses in resolution (Total Loss-Absorbing Capacity or TLAC). Other proposed measures are aimed at improving banks lending capacity to support the European Union economy and further facilitate the role of banks in achieving deeper and more liquid European Union capital markets. It is expected that most of the proposed amendments will start being applied at the end of 2020 at the earliest, save for the TLAC requirements, which are expected to apply from January 2019.

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

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

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

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

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

Regulation and Supervision in Germany Basic Principles

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

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

The BaFin is our principal supervisor for regulatory matters with respect to which we are not supervised by the ECB. These include the rules on business conduct in the securities markets, in particular when providing securities services to clients, the regulation of anti-money laundering, terrorist financing and payment services, as well as certain special areas of bank regulation, such as those related to the issuance of covered bonds (Pfandbriefe) and the supervision of German home loan banks (Bausparkassen) with regard to certain regulatory requirements specifically applicable to such home loan banks. Generally, the BaFin also supervises us with respect to those requirements under the German Banking Act that are not based upon European law. The Bundesbank supports the BaFin and the ECB and closely cooperates with them. The cooperation includes the ongoing review and evaluation of reports submitted by us and of our audit reports as well as assessments of the adequacy of our capital base and risk management systems. The ECB, the BaFin and the Bundesbank receive comprehensive information from us in order to monitor our compliance with applicable legal requirements and to obtain information on our financial condition. Generally, supervision by the ECB (together with the BaFin and the Bundesbank) applies on an unconsolidated basis (company only) and on a consolidated basis (the company and the entities consolidated with it for German regulatory purposes) (see Consolidated Regulation and Supervision below). However, banks forming part of a consolidated group may be allowed to waive the application of specific regulatory requirements on an unconsolidated basis if certain conditions are met. As of December 31, 2017, Deutsche Bank AG was allowed to waive the application of provisions on own funds (Part Two CRR), capital requirements (Part Three CRR), large exposures (Part Four CRR), exposures to transferred credit risk (Part Five CRR), leverage (Part Seven CRR) and disclosure by institutions (Part Eight CRR) as well as certain risk management requirements on a stand-alone basis.

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

Banking Legislation

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

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

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

Securities Trading Legislation

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

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

The European Union enacted several legislative proposals which resulted in further regulation of securities trading and the trading in derivatives in particular. Notably, the European Union adopted the European Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (EMIR), which became effective on August 16, 2012. EMIR introduced requirements for standardized over-the-counter derivatives to be centrally cleared and derivative transactions to be reported to trade repositories. EMIR also includes additional capital and margin requirements for non-cleared trades.

In addition, the revised Markets in Financial Instruments Directive (MiFID 2) and the new Markets in Financial Instruments Regulation (MiFIR) became applicable on January 3, 2018 and provide for, among other things, greater regulation and oversight of financial firms providing investment services or activities in the European Union by covering additional markets and instruments, the extension of pre- and post-trade transparency rules from equities to all financial instruments, greater restrictions on operating trading platforms, and greater sanctioning powers. The trading venues under supervision now also include organized trading facilities. In addition, MiFID 2/MiFIR, introduced a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized, and new investor protection rules which significantly impact the way we distribute products. Whereas MiFIR is a directly applicable European Union regulation, MiFID 2, as a European Union directive, needed to be transposed into national law. In Germany in particular, the German Securities Trading Act implements MiFID 2 and supplements MiFIR.

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

Capital Adequacy Requirements

Minimum Capital Adequacy Requirements (Pillar 1)

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

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

Capital Buffers

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

Leverage Ratio

The Basel 3 framework also proposes a non-risk based leverage ratio as a complement to the risk-based capital requirements. While the CRR, as currently in effect, does not require banks to comply with a specific leverage ratio, banks are required to report and publish their leverage ratios for a future assessment and calibration of the leverage ratio. Among the package of reforms published by the European Commission on November 23, 2016 (see Overview above) is a proposal to introduce a binding minimum leverage ratio requirement of 3 % of Tier 1 capital as part of CRR 2. In addition, in December 2017, the Basel Committee adopted a leverage ratio buffer for G-SIBs (such as Deutsche Bank) to be applied from January 2022 onwards, which must be met with Tier 1 capital and is set at 50 % of a G-SIB s risk-weighted capital buffer. In order for the Basel standards to become binding on banks, they must be implemented in the laws of the European Union and the individual member jurisdictions. In the EU, such implementation is done through amendments to the CRR/CRD 4 legislative package as well as corresponding national laws.

Supervisory Review and Evaluation Process or SREP (Pillar 2)

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

The EBA has updated its SREP framework in 2017 and will continue to do so in 2018 and beyond. The revisions comprise, among other things, updating guidelines on common procedures, technical aspects and stress testing, further revising the Pillar 2 guidance and integrating it with supervisory stress testing, and generally elaborating further on the way the EBA assesses certain aspects of regulatory requirements.

For details of Deutsche Bank s regulatory capital, see Management Report: Risk Report: Risk and Capital Performance in our Annual Report 2017.

Limitations on Large Exposures

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

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

Consolidated Regulation and Supervision

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

Liquidity Requirements

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

In addition, Basel 3 contains a proposal to introduce a net stable funding ratio (NSFR) to reduce medium- to long-term funding risks by requiring banks to fund their activities with sufficiently stable sources of funding over a one-year period. The CRR contains interim reporting requirements on stable funding but does not yet include substantive provisions relating to the NSFR. Among the package of reforms published by the European Commission on November 23, 2016 (see Overview above) is a proposal to introduce a binding NSFR as part of CRR 2. According to this proposal, the NSFR is defined as the ratio of a bank s available stable funding relative to the amount of required stable funding over a one-year period. According to the proposal, banks must maintain an NSFR of at least 100 %.

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

Financial Statements and Audits

As required by the German Commercial Code (Handelsgesetzbuch), Deutsche Bank AG prepares its non-consolidated financial statements in accordance with German GAAP. Deutsche Bank Group s consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS), and our compliance with capital adequacy requirements and large exposure limits is determined solely based upon such consolidated financial statements.

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

Investigative and Enforcement Powers

Investigations and Supervisory Audits

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

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

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

Supervisory and Enforcement Powers

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

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

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

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

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

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

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

Recovery and Resolution Planning, Restructuring Powers

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

In the event that a bank is failing or likely to fail and certain other conditions are met, in particular where there is no reasonable prospect that any alternative private sector measures would prevent the failure and resolution measures are necessary in the public interest, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (in Germany, since 2018, the BaFin).

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

To prevent banks from structuring their liabilities in a way that impedes the effectiveness of the bail-in or other resolution tools, the SRM Regulation and the German Recovery and Resolution Act, implementing the BRRD, introduced a requirement for banks to meet minimum requirements for own funds and eligible liabilities (MREL). The MREL is to be determined by the competent resolution authorities for each supervised bank individually. MREL applies to all banks across the European Union. In addition, on November 9, 2015, the FSB published a similar new standard applicable to all G-SIBs (and not only European G-SIBs), such as Deutsche Bank, to meet a new minimum requirement for TLAC as from January 1, 2019. The FSB has proposed that competent authorities determine a firm-specific minimum TLAC requirement for each G-SIB of at least 16 % of risk-weighted assets as from January 1, 2019, rising to at least 18 % from January 1, 2022. In addition, the FSB has proposed that minimum TLAC must be at least 6 % of the Basel 3 leverage ratio denominator from January 1, 2019, rising to at least 6.75 %

of the Basel 3 leverage ratio denominator from January 1, 2022. Among the package of reforms published by the European Commission on November 23, 2016 (see Overview above) is a proposal to implement the FSB s TLAC proposal in the European Union and harmonize it with MREL through amendments to CRR/CRD 4, the BRRD and the SRM Regulation. The ultimate impact of any TLAC requirements on us will depend on how the proposals will be implemented into binding legislation.

With effect from January 1, 2017, the German Banking Act as amended by the German Resolution Mechanism Act subordinates non-structured senior unsecured debt instruments issued by German banks (such as bank bonds), including debt instruments issued prior to January 1, 2017 (statutory subordination). These new senior non-preferred debt instruments rank junior to a bank s other unsubordinated liabilities (including deposits, derivatives, money market instruments and debt instruments that are structured as defined in the German Banking Act), but in priority to the bank s contractually subordinated liabilities, such as those qualifying as Tier 2 instruments. Thus, in the event of insolvency or resolution proceedings affecting Deutsche Bank AG, senior non-preferred debt instruments would bear losses after the bank s contractually subordinated liabilities but before the bank s other unsubordinated liabilities.

On December 27, 2017, the European Union published a directive amending the BRRD in order to harmonize the ranking of unsecured debt instruments issued by banks in the European Union. The new directive needs to be implemented into national law of EU member states by December 29, 2018, at the latest. The BRRD amendment will create a harmonized class of non-structured senior non-preferred debt instruments at European Union level by allowing a bank to determine in the contractual documentation and, where applicable, the prospectus that its non-structured debt instruments with an original contractual maturity of at least one year rank in the senior non-preferred category junior to the bank s other unsubordinated liabilities but in priority to the bank s contractually subordinated liabilities, such as those qualifying as Tier 2 instruments (contractual subordination). Once implemented in Germany, it is expected that Deutsche Bank AG will be able to issue non-structured senior non-preferred debt instruments ranking pari passu with its existing senior non-preferred debt instruments as well as non-structured senior preferred debt instruments ranking pari passu with Deutsche Bank AG s other unsecured and unsubordinated liabilities, such as structured debt instruments, money market instruments, derivatives and corporate deposits (with the exception of certain preferred deposits that are more senior under the German Banking Act).

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

Separation of Proprietary Trading Activities by Universal Banks

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

Remuneration Rules

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

Finally, we are required to comply with certain disclosure requirements relating to the remuneration we pay to, and our remuneration principles in respect of, our material risk takers and other affected employees. The German Credit Institution Remuneration Regulation was amended in 2017, including in respect of the definition of fixed remuneration and to introduce further requirements relating to determining the variable remuneration of material risk takers.

For details of Deutsche Bank s remuneration system, see Management Report: Compensation Report in our Annual Report 2017.

Deposit Protection and Investor Compensation in Germany

The Deposit Protection Act and the Investor Compensation Act

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

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

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

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

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

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

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

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European Deposit Insurance Scheme

On November 24, 2015, the European Commission proposed a regulation to establish a European Deposit Insurance Scheme, or EDIS for bank deposits of all credit institutions which are members of any of the current national statutory deposit guarantee schemes of member states participating in the banking union (see Overview above). The Commission s proposal envisages a progressive integration of existing national deposit guarantee schemes in three stages, from a reinsurance of national deposit guarantee schemes, to a coinsurance system, and then to the final stage, which would be reached in 2024, when EDIS would fully insure all relevant national deposit guarantee schemes in case of a bank failure. EDIS would be administered by the SRB in all stages jointly with participating national deposit guarantee schemes or, where a deposit guarantee scheme does not administer itself, by the national designated authority responsible for administering the respective participating deposit guarantee scheme. Noting that the political discussion on setting up EDIS has not made any progress in the last two years, on October 11, 2017, the European Commission published a communication suggesting to introduce EDIS via a more gradual process. In the reinsurance phase, EDIS could provide liquidity to national deposit guarantee schemes in case of a bank failure, which would have to be paid back by the national deposit guarantee schemes. In the coinsurance phase, EDIS could also cover losses, without recouping them from the national deposit guarantee schemes. However, moving to this second phase would be conditional on progress achieved in reducing the level of nonperforming loans and other legacy assets in the banking sector assets through an asset quality review. These proposals are currently being negotiated at the European Union level and the ultimate impact on us is uncertain.

Voluntary Deposit Protection System

Liabilities to creditors that are not covered by a statutory compensation scheme may be covered by one of the various protection funds set up by the banking industry on a voluntary basis. Deutsche Bank AG takes part in the Deposit Protection Fund (Einlagensicherungsfonds) set up by the Association of German Banks (Bundesverband deutscher Banken e. V.). The Deposit Protection Fund protects deposits, i.e., generally credit balances credited to an account or resulting from interim positions which the bank is required to repay, subject to the exclusions described below, up to an amount equal to 20 % of the bank s own funds (Eigenmittel) as further specified in the Deposit Protection Fund s by-laws. This limit will be reduced to 15 % from January 1, 2020 onwards and to 8.75 % from January 1, 2025 onwards.

Not protected are, among other liabilities, deposits forming part of the bank s own funds, liabilities resulting from bearer or order bonds, as well as deposits made by other banks. Following a reform of the Deposit Protection Fund s becoming effective on October 1, 2017, further liabilities are no longer protected, subject to certain grandfathering provisions. In particular, deposits of federal, regional and local governmental agencies as well as certain bank-like clients (certain investment firms and financial institutions) are no longer protected. Also, promissory notes (Schuldscheindarlehen) and registered bonds (Namensschuldverschreibungen) held by companies, institutional investors and semi-governmental agencies are no longer protected. In addition, from January 1, 2020, deposits with a term of over 18 months held by companies, institutional investors and semi-governmental agencies will no longer be protected. The detailed scope of deposit protection and the full list of exclusions as well as any applicable grandfathering provisions are set out in the Deposit Protection Fund s by-laws.

To the extent the Deposit Protection Fund makes payments to customers of a bank, it will be subrogated to their claims against the bank.

The financial resources of the Deposit Protection Fund are funded by contributions of participating banks. If the resources of the Fund are insufficient, banks may be required to make special contributions. If one or more German banks are in financial difficulties, we may participate in their restructuring even where we have no business relationship or strategic interest, in order to avoid making special contributions to the Deposit Protection Fund in case of an insolvency of such bank or banks, or we may be required to make such special contributions.

Further Regulation and Supervision in the European Economic Area

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

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

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

On September 20, 2017, the European Commission proposed certain amendments to the ESAs and the ESRB s governance and powers. The proposals seek, among other things, to strengthen the ESAs role in coordinating supervision of national supervisor authorities, to bring certain areas of capital markets under direct supervision of ESMA, and to ensure that supervisory decisions are more independent from EU member states national interests. The proposals are currently being negotiated at EU level and the impact on us is uncertain.

Regulation and Supervision in the United States

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

In 2010, the United States enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), which provides a broad framework for significant regulatory changes that extend to almost every area of U.S. financial regulation. While rulemaking in respect of many of the provisions of the Dodd-Frank Act has already taken place, full implementation of the Dodd-Frank Act will require further detailed rulemaking and uncertainty remains about the final details, timing and impact of many of the rules. In addition, the substance and impact of the Dodd-Frank Act may be affected by changes in the U.S. political landscape.

The Dodd-Frank Act provisions known as the Volcker Rule limit the ability of banking entities and their affiliates to engage as principal in certain types of proprietary trading unrelated to serving clients and to sponsor or invest in private equity or hedge funds or similar funds (covered funds), subject to certain exclusions and exemptions. In the case of non-U.S. banking entities such as Deutsche Bank AG, these exemptions permit certain activities conducted outside the United States, provided that certain criteria are satisfied. The Volcker Rule also limits the ability of banking entities and their affiliates to enter into certain transactions with covered funds with which they or their affiliates have certain relationships. The Volcker Rule requires banking entities to establish comprehensive compliance programs designed to help ensure and monitor compliance with restrictions under the Volcker Rule.

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

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

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

Title I of the Dodd-Frank Act and the implementing regulations issued by the Federal Reserve Board and the Federal Deposit Insurance Corporation (FDIC) require each bank holding company with assets of U.S.$ 50 billion or more, including Deutsche Bank AG, to prepare and submit annually a plan for the orderly resolution of subsidiaries and operations in the event of future material financial distress or failure (the 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), 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.

In addition to the U.S. Resolution Plan, in 2014, DBTCA, one of our insured depository institutions (IDIs) in the United States, became subject to the FDIC s rule requiring IDIs with total assets of U.S.$ 50 billion or more to submit periodically to the FDIC a plan for resolution in the event of failure (the IDI Plan). DBTCA last submitted an IDI Plan in September 2015 and was not required to submit one in 2016 or 2017. Because DBTCA did not have average total asssets of U.S.$ 50 billion or more for the four quarter ends through December 31, 2017, it is not required to submit an IDI Plan in 2018.

During 2017 our other U.S. bank holding company subsidiary, Deutsche Bank Trust Corporation, was subject to risk-based and leverage capital requirements, liquidity requirements, and other enhanced prudential standards applicable to large U.S. bank holding companies; however, as of January 1, 2018, it is no longer subject to the Federal Reserve Board s enhanced prudential standards, because DB USA Corporation became subject to the enhanced prudential standards requirements applicable to our combined U.S. operations, including our U.S. subsidiaries such as Deutsche Bank Trust Corporation. Deutsche Bank Trust Corporation was subject to the Federal Reserve Board s Comprehensive Capital Analysis and Review (CCAR) for 2017. On June 28, 2017, the Federal Reserve Board publicly indicated that it had not objected to Deutsche Bank Trust Corporation s 2017 capital plan. Deutsche Bank Trust Corporation s stressed Common Equity Tier 1 capital ratio was forecast by the Federal Reserve Board to fall to as low as 62.3 % under the supervisory severely adverse scenario. This hypothetical stressed ratio would be substantially above the minimum required ratio of 4.5 %. Stress testing results are based on hypothetical adverse scenarios and should not be viewed or interpreted as forecasts of expected outcomes or capital adequacy or of the actual financial condition of Deutsche Bank Trust Corporation. Deutsche Bank Trust Corporation will no longer be subject to CCAR. DB USA Corporation provided its first capital plan submission to the Federal Reserve Board in April 2017; however, the results of its first submission were not made public by the Federal Reserve Board. DB USA Corporation will make its second capital plan submission to the Federal Reserve Board in April 2018, the results of which will be made public by the Federal Reserve Board.

In September 2014, the Federal Reserve Board and other U.S. regulators approved a final rule implementing liquidity coverage ratio (LCR) requirements for large U.S. banking holding companies and certain of their subsidiary depositary institutions that are generally consistent with the Basel Committee s revised Basel 3 liquidity standards. Deutsche Bank Trust Corporation, as a U.S. bank holding company with total assets of U.S.$ 50 billion or more that is not an advanced approaches bank holding company, became subject to a modified, less stringent version of the LCR beginning in January 2016. Since DB USA Corporation is a U.S. bank holding company that had more than U.S.$ 10 billion in foreign exposure as of December 31, 2016, it became subject to the full LCR on April 1, 2017. At the same time, DBTCA as an IDI with more than U.S.$ 10 billion in total consolidated assets, became subject to the full LCR. Following DB USA Corporation becoming subject to the full LCR on April 1, 2017, Deutsche Bank Trust Corporation is no longer subject to a standalone LCR requirement.

On June 1, 2016, the Federal Reserve Board and other U.S. regulators proposed rules implementing the second element of the Basel 3 liquidity framework, the net stable funding ratio (NSFR). Under the proposed rules, DB USA Corporation and DBTCA would be subject to the full NSFR; however, this proposal has yet to be finalized and, accordingly, such entities are not currently subject to the proposed requirements.

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

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

The Dodd-Frank Act also requires broader regulation of hedge funds and private equity funds, as well as credit rating agencies, and imposes new requirements with respect to securitization activities. The federal regulatory agencies have issued final rules, which became effective in 2015 and 2016, to implement the credit risk retention requirements of Section 941 of the Dodd-Frank Act, which generally require securitizers of different types of asset-backed securitizations, including transactions backed by residential mortgages, commercial mortgages, and commercial, credit card and auto loans, to retain at least five percent of the credit risk of the assets being securitized, with an exemption for securitizations that are wholly composed of qualified residential mortgages.

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

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

Regulatory Authorities

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

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

Restrictions on Activities

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

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

In addition to the business of banking, and managing or controlling banks, so long as we are a financial holding company under U.S. law, we may also engage in nonbanking activities in the United States that are financial in nature, or incidental or complementary to such financial activity, including securities, merchant banking, insurance and other financial activities, subject to certain limitations on the conduct of such activities and to prior regulatory approval in some cases. As a non-U.S. bank, Deutsche Bank AG and our non-U.S. subsidiaries are generally authorized under U.S. law and regulations to acquire a non-U.S. company engaged in nonfinancial activities as long as that company s U.S. operations do not exceed certain thresholds and certain other conditions are met. On January 14, 2014, the Federal Reserve Board sought comment on the appropriateness of further restrictions on the physical commodity and merchant banking activities conducted by financial holding companies under several provisions of the Bank Holding Company Act in order to address various prudential considerations, including the potential risks of such activities to the safety and soundness of financial holding companies and financial stability more broadly. In September 2016, the Federal Reserve Board proposed a rule that would limit the commodities activities of financial holding companies by, among other things, imposing additional capital charges in relation to activities involving environmentally hazardous commodities, tightening quantitative limits on certain commodities activities and establishing new public reporting requirements. There has been no further action by the Federal Reserve Board on its request for comments on the appropriateness of further restrictions on physical commodity and merchant banking activities or its proposal to limit commodity activities.

In August 2017, the Federal Reserve Board issued a proposal to revise its supervisory rating system for bank holding companies with U.S.$ 50 billion or more in total consolidated assets and for IHCs, including DB USA Corporation. Under the proposal, covered companies would receive separate ratings from the Federal Reserve Board for (i) capital planning and positions, (ii) liquidity risk management and positions and (iii) governance and controls. Each of these component areas would receive one of the following four ratings: (i) Satisfactory, (ii) Satisfactory Watch, (iii) Deficient-1, and (iv) Deficient-2. As proposed, a covered company would have to maintain a rating of Satisfactory or Satisfactory Watch for each of the three components to be considered well managed. Also in August 2017, the Federal Reserve Board issued proposed guidance intended to enhance the effectiveness of boards of directors and refocus the Federal Reserve Board s supervisory expectations for boards of directors on their core responsibilities, and also to delineate between roles and responsibilities for boards of directors and for senior management. Although the proposed guidance would not directly apply to DB USA Corporation, the Federal Reserve Board indicated that it expects to issue a separate proposal on governance specific to IHCs.

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

Bank Trust Corporation, the well-capitalized thresholds are a Tier 1 capital ratio of 6 % and a Total capital ratio of 10 %, both of which are calculated for Deutsche Bank AG under its home country standards.

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

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

The lending limits applicable to our FDIC-insured state-chartered bank subsidiaries take into account credit exposures arising from derivative transactions, and the lending limits applicable to our New York branch take into account both credit exposures arising from derivative transactions as well as securities borrowing and lending transactions and repurchase and reverse repurchase agreements with counterparties.

Also, under the so-called swap push-out provisions of the Dodd-Frank Act, certain structured finance derivatives activities of FDIC-insured banks and U.S. branch offices of foreign banks (including our New York branch) are restricted.

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

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

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

New York Branch

The New York branch of Deutsche Bank AG is licensed by the Superintendent of the New York State Department of Financial Services to conduct a commercial banking business and is required to maintain eligible high-quality assets with banks in the State of New York (up to a maximum of U.S.$ 100 million of assets pledged so long as the New York branch remains well-rated by the Superintendent of Financial Services). Should our New York branch cease to be well-rated , we may need to maintain substantial additional amounts of eligible assets. The

Superintendent of Financial Services may also establish asset maintenance requirements for branches of foreign banks. In addition, the Federal Reserve Board is authorized to establish asset maintenance requirements for our New York branch under certain conditions, pursuant to the FBO Rules. Currently, no such requirements have been imposed upon our New York branch.

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

Deutsche Bank Trust Company Americas

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

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

Other

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

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

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

Organizational Structure

We operate our business along the structure of our three corporate divisions. Deutsche Bank AG is the direct or indirect holding company for our subsidiaries. The following table sets forth the significant subsidiaries we own, directly or indirectly, as of December 31, 2017. We used the three-part test set out in Section 1-02 (w) of Regulation S-X under the U.S. Securities Exchange Act of 1934 to determine significance. We do not have any other subsidiaries we believe are material based on other, less quantifiable, factors.

We own 100 % of the equity and voting interests in these subsidiaries. These subsidiaries prepare financial statements as of December 31, 2017 and are included in our consolidated financial statements. Their principal countries of operation are the same as their countries of incorporation.

Subsidiary	Place of Incorporation
DB USA Corporation[1]	Delaware, United States
Deutsche Bank Americas Holding Corporation[2]	Delaware, United States
Deutsche Investment Management Americas Inc.[3]	Delaware, United States
DB U.S. Financial Markets Holding Corporation[4]	Delaware, United States
Deutsche Bank Securities Inc.[5]	Delaware, United States
DB Structured Products Inc.[6]	Delaware, United States
Deutsche Bank Trust Corporation[7]	New York, United States
Deutsche Bank Trust Company Americas[8]	New York, United States
Deutsche Bank Luxembourg S.A.[9]	Luxembourg
Deutsche Bank Privat- und Geschäftskunden Aktiengesellschaft[10]	Frankfurt am Main, Germany
DB Beteiligungs-Holding GmbH[11]	Frankfurt am Main, Germany
Deutsche Postbank AG[12]	Bonn, Germany
DWS Group SE[13]	Frankfurt am Main, Germany

1 DB USA Corporation is the top-level holding company for our subsidiaries in the United States.
2 Deutsche Bank Americas Holding Corporation is a second tier holding company for subsidiaries in the United States.
3 The company provides investment and advisory services to clients (individuals, institutions and others) on a discretionary and nondiscretionary basis. These services are provided through separately managed accounts, registered investment companies, and a variety of pooled investment vehicles.
4 DB U.S. Financial Markets Holding Corporation is a second tier holding company for subsidiaries in the United States.
5 Deutsche Bank Securities Inc. is a U.S. company registered as a broker dealer and investment advisor with the Securities and Exchange Commission and as a futures commission merchant with the Commodities Futures Trading Commission.
6 DB Structured Products, Inc. is a U.S. subsidiary that has ceased engaging in new business and has surrendered the licenses it holds in respect of mortgage-related activities.
7 Deutsche Bank Trust Corporation is a bank holding company under Federal Reserve Board regulations.
8 Deutsche Bank Trust Company Americas is a New York State-chartered bank and member of the Federal Reserve System. It originates loans and other forms of credit, accepts deposits, arranges financings and provides numerous other commercial banking and financial services.
9 The company s primary business model comprises loan business with international clients (Corporate & Investment Banking), where the bank acts globally as lending office and as risk transfer hub for the Credit Portfolio Strategies Group of Deutsche Bank, as well as structured finance activities covering long-term infrastructure projects and high quality investment goods (Global Markets). Furthermore, the bank offers tailor-made solutions with a wide range of products and services to their Wealth Management clients.

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

11 The company holds the majority stake in Deutsche Postbank AG (the remainder is held by Deutsche Bank AG) and is the parent company of DWS Group SE (formerly Deutsche Asset Management Holding SE).

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

13 Effective from February 6, 2018, Deutsche Asset Management Holding SE has been renamed to DWS Group SE. The business purpose of the company is the acquisition, the maintenance and administration, the usage and exploitation of participations of any kind, in particular of asset management companies, as well as all necessary kinds of associated business. In March 2017, Deutsche Bank AG announced its plan to separate its asset management division into a new subsidiary and list the shares of this subsidiary on the stock exchange. DWS Group SE was established to act as the parent company of the separated Deutsche Bank Asset Management business. All Deutsche Bank Group Asset Management related operations will be transferred to DWS Group SE and its subsidiaries. These transfers were carried out in stages, but not all of them were completed in 2017.

Property and Equipment

As of December 31, 2017, we operated in 60 countries out of 2,425 branches around the world, of which 65 % were in Germany. We lease a majority of our offices and branches under long-term agreements.

We continue to review our property requirements worldwide taking into account cost containment measures as well as growth initiatives in selected businesses. Please see Note 23 Property and Equipment to the consolidated financial statements for further information.

Information Required by Industry Guide 3

Please see pages S-1 through S-13 of the Supplemental Financial Information, which pages are incorporated by reference herein, for information required by SEC Industry Guide 3.

Item 4A: Unresolved Staff Comments

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

Item 5: Operating and Financial Review and Prospects

Overview

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

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

Significant Accounting Policies and Critical Accounting Estimates

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

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

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

Recently Adopted Accounting Pronouncements and New Accounting Pronouncements

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

Operating Results

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

Executive Summary

Please see Management Report: Operating and Financial Review: Executive Summary in the Annual Report 2017.

Trends and Uncertainties

For insight into the trends impacting our performance please see the Management Report: Operating and Financial Review section of the Annual Report 2017. Key risks and uncertainties for the Bank are discussed in Item 3: Key Information Risk Factors .

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

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

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

In accordance with our strategy update announced in March 2017, we reorganized our business operations under a new divisional structure comprising the divisions Corporate & Investment Bank (CIB), Private & Commercial Bank (PCB), and Deutsche Asset Management (Deutsche AM) in the second quarter of 2017.

Risks to CIB outlook include the impact of the implementation of MiFID 2 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 favourably to capitalize on future opportunities.

Uncertainties that could affect PCB s earnings situation in 2018 include slower economic growth in our main operating countries, a 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 the European Financial Markets Directive (MiFID 2) and the revised Payment Services Directive (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.

Risks to Deutsche AM outlook include the pace of global net flows growth, equity market development, currency movement, interest rates, exposure to global macroeconomic growth and 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.

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

Our effective tax rate was impacted primarily by a one-time charge resulting from the U.S. tax reform. The effective tax rate in future periods may be influenced by other changes in tax laws or interpretative guidance, the occurrence of non-tax deductible goodwill impairment and litigation charges, or the resolution of tax examinations and investigations.

Results of Operations

Please see Management Report: Operating and Financial Review: Results of Operations in the Annual Report 2017 and our discussion of non-GAAP financial measures in the Supplementary Financial Information .

Financial Position

Please see Management Report: Operating and Financial Review: Financial Position in the Annual Report 2017.

Liquidity and Capital Resources

For a detailed discussion of our liquidity risk management, see Management Report: Risk Report: Liquidity Risk Management in the Annual Report 2017.

For a detailed discussion of our capital management, see Management Report: Risk Report: Capital Management in the Annual Report 2017.

Post-Employment Benefit Plans

Please see Management Report: Employees: Post-Employment Benefit Plans in the Annual Report 2017.

Off-Balance Sheet Arrangements

For information on the nature, purpose and extent of our off-balance sheet arrangements, please see Note 40 Structured Entities to the consolidated financial statements. For further information on off-balance sheet arrangements, including allowances for off-balance sheet positions, please refer to Management Report: Risk Report: Asset Quality: Allowance for Credit Losses in the Annual Report 2017 and Note 20 Allowance for Credit Losses to the consolidated financial statements. For information on irrevocable lending commitments and contingent liabilities with respect to third parties, please see Note 30 Credit related Commitments to the consolidated financial statements.

Tabular Disclosure of Contractual Obligations

Please see Management Report: Operating and Financial Review: Tabular Disclosure of Contractual Obligations in the Annual Report 2017.

Research and Development, Patents and Licenses

Not applicable.

Item 6: Directors, Senior Management and Employees

Directors and Senior Management

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

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

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

- granting general powers of attorney (Generalvollmachten). A general power of attorney authorizes its holder to represent the company in substantially all legal matters without limitation to the affairs of a specific office;
- acquisitions and disposals (including transactions carried out by a dependent company) of real estate in so far as the object involves more than 500.000;
- granting of credits and the acquisition of participations in other companies, where the German Banking Act (Kreditwesen-gesetz) requires approval by the Supervisory Board. In particular, the German Banking Act requires the approval of the Supervisory Board if we grant a loan (to the extent legally permissible) to a member of the Management Board or the Supervisory Board or one of our employees who holds a procuration (Prokura) or general power of attorney; and
- acquisitions and disposals (including transactions carried out by a dependent company) of other participations, insofar as the object involves more than 1 billion. The Supervisory Board must be informed without delay of any acquisition or disposal of such participations involving more than 500.000.

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

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

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

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

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

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Supervisory Board and Management Board

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

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

Supervisory Board

Our Articles of Association require our Supervisory Board to have twenty members. In the event that the number of members on our Supervisory Board falls below twenty and remains below twenty for more than three months or falls below ten, upon application to a competent court, the court must appoint replacement members to serve on the board until official appointments are made.

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

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

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

For additional information on our Supervisory Board, including a table providing the names of and biographical information for the current members, see Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Supervisory Board in the Annual Report 2017.

Standing Committees

For information on the standing committees of our Supervisory Board, please see Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Standing Committees in the Annual Report 2017.

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

Management Board

Our Articles of Association require the Management Board to have at least three members. Our Management Board currently has twelve members. The Supervisory Board has also appointed a Chairman (CEO) and two Deputy Chairmen (Presidents) of the Management Board.

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

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

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

- appointing key personnel at the level directly below the Management Board, in particular, appointing the Global Key Function Holders employed by us;
- making decisions regarding significant credit exposures or other risks which have not been delegated to individual risk management units;
- acquisition and disposal of equity investments, including capital measures in all cases in which (i) the law or our Articles of Association require approval by the Supervisory Board, or (ii) the equivalent of 100 million is exceeded;
- acquisition and disposal of real estate directly or by separate legal entities in all cases in which: (i) the law or our Articles of Association require approval by the Supervisory Board, or (ii) the real estate s equivalent exceeds 100 million;
- individual vendor or intra Group-outsourcings (or material changes to those outsourcings) in all cases in which the equivalent of 100 million is exceeded on an annual basis or include the delegation of core organizational duties of the Management Board;
- calling shareholders meetings;
- filing petitions to set aside shareholders resolutions;
- preparing and executing shareholders resolutions; and
- reporting to the Supervisory Board.

For additional information on our Management Board, including the names of and biographical information for the current members, see Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Management Board in the Annual Report 2017. The Terms of Reference of the Management Board are published on our website www.db.com/ir/en/documents.htm.

Board Practices of the Management Board

The Terms of Reference for the Management Board are in accordance with the Supervisory Board resolution of March 16, 2017. These Terms of Reference provide that the members of the Management Board have the collective responsibility for managing Deutsche Bank. Notwithstanding this principle, the allocation of functional responsibilities to the individual members of the Management Board and their substitution (in case of temporary absence) are set out in the business allocation plan for the Management Board in accordance with the Supervisory Board resolution of February 1, 2018. The allocation of functional responsibilities does not exempt any member of the Management Board from collective responsibility for the management of the business. The members of the Management Board have primary responsibility for the proper performance and/or delegation of their duties and the clear allocation of accountabilities and responsibilities within the area of own functional responsibility (so-called *Ressort*).

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

Section 161 of the German Stock Corporation Act requires that the management board and supervisory board of any German stock exchange-listed company declare annually that the company complies with the recommendations of the German Corporate Governance Code or, if not, which recommendations the company does not comply with (so-called comply or explain -principle). These recommendations go beyond the requirements of the German Stock Corporation Act. The Management Board and Supervisory Board issued a new Declaration of Conformity in accordance with Section 161 of the German Stock Corporation Act on October 26, 2017, which is available on our internet website at www.db.com/ir/en/documents.htm under the heading Declaration of Conformity pursuant to § 161 German Stock Corporation Act (AktG), Oct 2017 .

For information on the Management Board s terms of office, please see Corporate Governance Statement/Corporate Governance Report: Management Board and Supervisory Board: Management Board in the Annual Report 2017. For details of the Management Board s service contracts providing benefits upon termination, please see Compensation Report: Pension and Transitional Benefits and Compensation Report: Other Benefits upon Premature Termination in the Management Report of the Annual Report 2017.

Compensation

For information on the compensation of the members of our Management Board, see Management Report: Compensation Report: Management Board Compensation Report in the Annual Report 2017.

For information on the compensation of the members of our Employees, see Management Report: Compensation Report: Employee Compensation Report in the Annual Report 2017.

For information on the compensation of the members of our Supervisory Board, see Management Report: Compensation Report: Compensation System for Supervisory Board Members in the Annual Report 2017.

Employees

For information on our employees, see Management Report: Employees in the Annual Report 2017.

Share Ownership

For the share ownership of the Management Board, see Management Report: Compensation Report: Management Board Share Ownership in the Annual Report 2017.

For the share ownership of the members of the Supervisory Board, see Corporate Governance Statement/Corporate Governance Report: Reporting and Transparency: Directors Share Ownership in the Annual Report 2017.

For a description of our employee share programs, please see Note 35 Employee Benefits to the consolidated financial statements.

Item 7: Major Shareholders and Related Party Transactions

Major Shareholders

On December 31, 2017, our issued share capital amounted to 5,290,939,215 divided into 2,066,773,131 no par value ordinary registered shares.

On December 31, 2017, we had 592,977 registered shareholders. 1,095,022,305 of our shares were registered in the names of 581,751 shareholders resident in Germany, representing 52.73 % of our share capital. 323,273,946 of our shares were registered in the names of 735 shareholders resident in the United States, representing 15.57 % of our share capital.

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

BlackRock, Inc., Wilmington, DE, has notified us that as of February 23, 2018 it held 6.55 % of our shares. It had previously notified us that as of March 1, 2017, it held 5.95 % of our shares. We have received no further notification by BlackRock, Inc., Wilmington, DE, through March 1, 2018.

C-QUADRAT Special Situations Dedicated Fund, Cayman Islands (C-QUADRAT), has notified us that as of February 13, 2018 it held 3.50 % of our shares (total percentage of voting rights: 9.06 % (voting rights attached to shares: 3.50 %, voting rights through financial instruments: 5.56 %)). A number of persons have beneficial ownership of the Deutsche Bank shares held by C-QUADRAT because of their relationship with C-QUADRAT, including BL Capital Holdings Limited (BVI) and HNA Innovation Finance Group Co. Limited, who are investors in C-QUADRAT. Such investors are controlled by Hainan Jiaoguan Holding Co., Ltd., City of Haikou, which had previously notified us that as of February 15, 2017 it held 3.04 % of our shares. We have received no further notification by C-QUADRAT Special Situations Dedicated Fund, Cayman Islands, through March 1, 2018.

Stephen A. Feinberg (Cerberus), has notified us that as of November 14, 2017 he held 3.001 % of our shares. We have received no further notification by Stephen A. Feinberg (Cerberus), through March 1, 2018.

Paramount Services Holdings Ltd., British Virgin Islands, has notified us that as of August 20, 2015 it held 3.05 % of our shares. We have received no further notification by Paramount Services Holdings Ltd., British Virgin Islands, through March 1, 2018.

Supreme Universal Holdings Ltd., Cayman Islands, has notified us that as of August 20, 2015 it held 3.05 % of our shares. We have received no further notification by Supreme Universal Holdings Ltd., Cayman Islands, through March 1, 2018.

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

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

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

Related Party Transactions

We have business relationships with a number of the companies in which we own significant equity interests. We also have business relationships with a number of companies where members of our Management Board also hold positions on boards of directors. Our business relationships with these companies cover many of the financial services we provide to our clients generally. For more detailed information, refer to Note 38 Related Party Transactions to the consolidated financial statements.

We conduct our business with these companies on terms equivalent to those that would prevail if we did not have equity holdings in them or management members in common, and we have conducted business with these companies on that basis in 2017 and prior years. None of these transactions is or was material to us.

Among our business with related party companies in 2017, there have been and currently are loans, guarantees and commitments, which totaled 313 million (including loans amounting to 213 million) as of December 31, 2017, compared to 364 million (including loans amounting to 212 million) as of December 31, 2016.

All these credit exposures

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

Related Party Impaired Loans

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

Impaired loans to related parties which may exhibit more than normal risk of collectability or present other unfavorable features compared to performing loans to related parties increased by 6 million to 6 million, from December 31, 2016. The following table presents an overview of the impaired loans we hold of some of our related parties as of December 31, 2017.

in m.	Amount outstanding as of December 31, 2017	Largest amount outstanding January 1, to December 31, 2017	Provision for loan losses in 2017 [1]	Allowance for loan losses as of December 31, 2017 [1]	Nature of the loan and transaction in which incurred
Customer A	10	39	(4)[2]	4	Company was put into a court-supervised debt moratorium process in 2016. This triggered a debt to equity swap for 70% of our loans and a 25 milion write-off in 2017. Received shares are currently not valued due to debt moratorium and 1-year trading lock-up period.
Total	**10**	**39**	**(4)**	**4**	

[1] The allowance for loan losses is calculated by subtracting the net present value of future expected cash flows from the current outstanding. The year-end balance of the loan loss allowance is in most cases lower than the amount of provision for credit losses required for the recognition due to unwinding effects based upon passage of time which are recognized in interest income.
[2] Including FX effect of (4) milion, not including write-offs (25 milion).

In the above table, customer A is a company in which we hold a minority share and which is not consolidated at equity.

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

Interests of Experts and Counsel

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

Item 8: Financial Information

Consolidated Statements and Other Financial Information

Consolidated Financial Statements

The Financial Statements of this Annual Report on Form 20-F consist of the Consolidated Financial Statements including Notes 1 to 44 thereto, which are set forth as Part 2 of the Annual Report 2017, and, as described in Note 1 Significant Accounting Policies and Critical Accounting Estimates thereto in the third paragraph under Basis of Accounting , certain parts of the Management Report set forth as Part 1 of the Annual Report 2017. Such Consolidated Financial Statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their Report of Independent Registered Public Accounting Firm included in the Annual Report 2017.

Legal Proceedings

General. We and our subsidiaries operate in a legal and regulatory environment that exposes us to significant litigation risks. As a result, we are involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States. Please refer to Note 29 Provisions to the Consolidated Financial Statements for descriptions of certain significant legal proceedings. Additional legal proceedings that may have, or have had in the recent past, significant effects on our financial position or profitability are described below.

Bank Bill Swap Rate Claims. On August 16, 2016, a putative class action was filed in the U.S. District Court for the Southern District of New York against Deutsche Bank and other defendants, bringing claims based on alleged collusion and manipulation in connection with the Australian Bank Bill Swap Rate (BBSW). The complaint alleges that the defendants, among other things, engaged in money market transactions intended to influence the BBSW fixing, made false BBSW submissions, and used their control over BBSW rules to further the alleged misconduct. Plaintiffs bring suit on behalf of persons and entities that engaged in U.S.-based transactions in BBSW-linked financial instruments from 2003 through the present. An amended complaint was filed on December 16, 2016, and is the subject of fully briefed motions to dismiss. The court held argument on January 23, 2018. On February 23, 2018, defendants filed a renewed motion to dismiss on certain grounds that had been previously raised.

Canadian Dealer Offered Rate Matter. On January 12, 2018, the Fire & Police Pension Association of Colorado filed a putative class action lawsuit in the U.S. District Court for the Southern District of New York relating to the Canadian Dealer Offered Rate (CDOR), a Canadian dollar-denominated interest rate benchmark, against numerous financial institutions including Deutsche Bank and its subsidiaries Deutsche Bank Securities Inc. and Deutsche Bank Securities Limited. The complaint alleges that the defendants, members of the panel of banks that provided CDOR submissions and their affiliates, suppressed their CDOR submissions from at latest August 9, 2007 through at earliest June 30, 2014 in order to benefit their positions in CDOR-referencing financial instruments. The complaint asserts claims under the U.S. Sherman Act, U.S. Commodity Exchange Act, and the U.S. Racketeer Influenced and Corrupt Organizations Act, as well as state common law contract and unjust enrichment claims.

Contestation of the General Meeting s Resolution Not to Pay a Dividend for the 2015 Fiscal Year. In May 2016, Deutsche Bank AG s General Meeting resolved that no dividend was to be paid to Deutsche Bank s shareholders for the 2015 fiscal year. Some shareholders filed a lawsuit with the Frankfurt am Main District Court (Landgericht), contesting (among other things) the resolution on the grounds that Deutsche Bank was required by law to pay a minimum dividend in an amount equal to 4 % of Deutsche Bank s share capital. In December 2016, the district court ruled in favor of the plaintiffs. Deutsche Bank initially appealed the court s decision. However, consistent with Deutsche Bank s updated strategy, Deutsche Bank withdrew the appeal, as this decision is concerned, prior to Deutsche Bank s 2017 General Meeting, whereupon the contested resolution became void. Deutsche Bank s General Meeting in May 2017 resolved the payment of a dividend of approximately 400 million from Deutsche Bank s distributable profit for 2016 which amount contains a component reflecting the distributable profit carried forward from 2015 of approximately 165 million. Such dividend was paid to the shareholders shortly after the annual General Meeting. The decision meanwhile was contested at court, again, claiming that the way the decision was taken was not correct. On January 18 2018, the Frankfurt am Main District Court dismissed the shareholder actions as regards the dividend resolution taken in May 2017. The plaintiffs have appealed the decision to the Higher Regional Court Frankfurt am Main.

CO2 Emission Rights. The Frankfurt am Main Office of Public Prosecution (the OPP) is investigating alleged value-added tax (VAT) fraud in connection with the trading of CO2 emission rights by certain trading firms, some of which also engaged in trading activity with Deutsche Bank. The OPP alleges that certain employees of Deutsche Bank knew that their counterparties were part of a fraudulent scheme to avoid VAT on transactions in CO2 emission rights, and it searched Deutsche Bank in April 2010 and December 2012. On June 13, 2016, the Frankfurt am Main District Court sentenced seven former Deutsche Bank employees for VAT evasion and for aiding and abetting VAT evasion in connection with their involvement in CO2 emissions trading. Appeals are pending with respect to some of such former employees. Investigations by the OPP with respect to other employees are ongoing.

The insolvency administrators of three German traders who sold emission certificates to Deutsche Bank in 2009/2010 were trying to refute the transactions as a voidable preference under German insolvency law and, in some cases, started civil litigation. In mid-2015, the Frankfurt am Main District Court dismissed the insolvency administrator s claim in full in one of the cases. An appeal was filed against the decision. In July 2017, a settlement was agreed with the three insolvency administrators.

In 2015, five insolvent English companies, which are alleged to have been involved in VAT fraud in connection with trading CO2 emission rights in the UK, and their respective liquidators, started civil proceedings in London against four defendants including Deutsche Bank AG claiming that the defendants dishonestly assisted directors of the insolvent companies in breaching duties, and alternatively that the defendants were party to carrying on the companies business with fraudulent intent (giving rise to a claim under Section 213 of the Insolvency Act 1986). On September 29, 2017, Deutsche Bank agreed a settlement with the claimants.

Deutsche Bank Shareholder Litigation. Deutsche Bank and certain of its current and former officers and management board members are the subject of a purported class action, filed in the U.S. District Court for the Southern District of New York, asserting claims under Sections 10(b) and 20(a) of the U.S. Securities Exchange Act of 1934 on behalf of persons who purchased or otherwise acquired securities of Deutsche Bank on a United States exchange or pursuant to other transactions within the United States between January 31, 2013 and July 26, 2016. Plaintiffs allege that Deutsche Bank s SEC Annual Reports on Form 20-F for the years 2012, 2013, 2014 and 2015 were materially false and misleading in failing to disclose (i) serious and systemic failings in controls against financing terrorism, money laundering, aiding organizations subject to international sanctions and committing financial crime and (ii) that the Bank s internal control over financial reporting and its disclosure controls and procedures were not effective. On February 21, 2017, Deutsche Bank and the individual defendants served at the time with the summons and complaint moved to dismiss the consolidated amended complaint. On June 28, 2017, the court granted the motion to dismiss as to all defendants, without leave to replead. On June 30, 2017, the court entered judgment dismissing the lawsuit. On July 14, 2017, plaintiffs moved to alter or amend the court s order and judgment, and for leave to file an amended complaint. On August 16, 2017, the court denied plaintiffs motion. Plaintiffs filed a notice of appeal and the appeal has been fully briefed as of January 22, 2018.

ISDAFIX. On February 1, 2018, the Bank entered into a settlement with the U.S. Commodity Futures Trading Commission (CFTC) to resolve the CFTC s investigation concerning the Bank s involvement in the setting of U.S. dollar ISDAFIX benchmark. The Bank agreed to pay a civil monetary penalty of U.S.$ 70 million and to remedial undertakings, including maintaining systems and controls reasonably designed to prevent potential manipulation of interest rate swaps benchmarks.

In addition, the Bank has been named as a defendant in five putative class actions that were consolidated in the U.S. District Court for the Southern District of New York asserting antitrust, fraud, and other claims relating to an alleged conspiracy to manipulate the U.S. dollar ISDAFIX benchmark. On April 8, 2016, Deutsche Bank settled the class actions for U.S.$ 50 million, which is subject to final court approval. The settlement was preliminarily approved by the court on May 11, 2016.

Life Settlements Investigation. On May 2, 2017, the U.S. Attorney s Office for the Southern District of New York notified the Bank that it has closed its investigation of the Bank s historical life settlements business, which included the origination and purchase of investments in life insurance assets during the 2005 to 2008 period. As is customary, the U.S. Attorney s Office further informed the Bank that the it may reopen its investigation if it obtains additional information or evidence.

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

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

Parmalat Litigation. Following the bankruptcy of the Italian company Parmalat, prosecutors in Parma conducted a criminal investigation against various bank employees, including employees of Deutsche Bank, and brought charges of fraudulent bankruptcy and usury against a number of Deutsche Bank employees and others. The trial commenced in September 2009 and a verdict was recently delivered in July 2017. The Deutsche Bank employees were acquitted and, as a result thereof, Deutsche Bank will not be held to have vicarious liability in connection with the actions of the bank employees. The court published its reasoning in January 2018, and the matter currently remains open to the prosecutors to consider the possibility of an appeal.

Pas-de-Calais Habitat. On May 31, 2012, Pas-de-Calais Habitat (PDCH), a public housing office, initiated proceedings before the Paris Commercial Court against Deutsche Bank in relation to four swap contracts entered into in 2006, restructured on March 19, 2007 and January 18, 2008 and subsequently restructured in 2009 and on June 15, 2010. PDCH asks the Court to declare the March 19, 2007 and January 18, 2008 swap contracts null and void, or terminated, or to grant damages to PDCH in an amount of approximately 170 million on the grounds, inter alia, that Deutsche Bank committed fraudulent and deceitful acts, manipulated the LIBOR and EURIBOR rates which are used as a basis for calculating the sums due by PDCH under the swap contracts and breached its obligations to warn, advise and inform PDCH. A decision on the merits is not expected until the second quarter of 2018 at the earliest.

Pension Plan Assets. The Group sponsors a number of post-employment benefit plans on behalf of its employees. In Germany, the pension assets that fund the obligations under these pension plans are held by Benefit Trust GmbH. The German tax authorities are challenging the tax treatment of certain income received by Benefit Trust GmbH in the years 2010 to 2013 with respect to its pension plan assets. For the year 2010 Benefit Trust GmbH paid the amount of tax and interest assessed of 160 million to the tax authorities and is seeking a refund of the amounts paid in litigation. For 2011 to 2013 the matter is stayed pending the outcome of the 2010 tax litigation. The amount of tax and interest under dispute for years 2011 to 2013, which also has been paid to the tax authorities, amounts to 456 million. In March 2017, the lower fiscal court ruled in favor of Benefit Trust GmbH and in September 2017 the tax authorities appealed the decision to the German supreme fiscal court (Bundesfinanzhof). A decision by the supreme fiscal court is not expected for a number of years.

Precious Metals Investigations and Litigations. Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to investigations of precious metals trading and related conduct. Deutsche Bank is cooperating with these investigations, and engaging with relevant authorities, as appropriate. On January 29, 2018, the Bank entered into a U.S.$ 30 million settlement with the CFTC to resolve the CFTC s investigation concerning spoofing, manipulation and attempted manipulation in precious metals futures, as well as the manipulation and attempted manipulation of stop loss orders. The order requires that the Bank, among other things, maintain systems and controls reasonably designed to detect spoofing, and maintain training regarding spoofing, manipulation and attempted manipulation. The Order also requires the Bank to continue to cooperate with the CFTC.

Deutsche Bank is a defendant in two consolidated class action lawsuits pending in the U.S. District Court for the Southern District of New York. The suits allege violations of U.S. antitrust law, the U.S. Commodity Exchange Act and related state law arising out of the alleged manipulation of gold and silver prices through participation in the Gold and Silver Fixes, but do not specify the damages sought. Deutsche Bank has reached agreements to settle the Gold action for U.S.$ 60 million and the Silver action for U.S. $ 38 million. The agreements remain subject to final court approval.

In addition, Deutsche Bank is a defendant in Canadian class action proceedings in the provinces of Ontario and Quebec concerning gold and silver. Each of the proceedings seeks damages for alleged violations of the Canadian Competition Act and other causes of action.

Sebastian Holdings Litigation. Litigation with Sebastian Holdings Inc. (SHI) in respect of claims arising from FX trading activities concluded in the UK Commercial Court in November 2013 when the court awarded Deutsche Bank approximately U.S.$ 236 million plus interest and dismissed all of SHI s claims. On January 27, 2016, a New York court dismissed substantially similar claims by SHI against Deutsche Bank when it granted Deutsche Bank s motion for summary judgment based on the UK Commercial Court s judgment. The New York court also denied SHI s motion for leave to file an amended complaint. The New York court s decisions were affirmed on appeal on February 28, 2017. The New York State Court of Appeals denied SHI s motion for leave to appeal on June 6, 2017. The time for SHI to seek review by the U.S. Supreme Court has expired, and the decision is now final.

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

Dividend Policy

For 2017, the Management Board will propose to the General Meeting to pay a dividend of 0.11 per share. In 2015, we did not pay a dividend. In 2016, we paid a dividend of 0.19 in the aggregate out of the distributable profit for 2016, reflecting the payout of 0.08 per share eligible for a dividend for the 2015 financial year out of the distributable profit carried forward from 2015 of approximately 165 million and a dividend of 0.11 per share eligible for a dividend for the 2016 financial year from the remaining distributable profit for 2016. Historically, however, we have paid dividends at higher levels, including dividends per share of 0.75 for 2014, and we intend to pay competitive dividends beginning in 2018 (paid after the annual General Meeting in 2019). However, we cannot assure investors that we will pay dividends as for 2014 or previous years, or at any other level, or at all, in any future period. If the company is not profitable, we may not pay dividends at all.

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

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

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

German corporate law provided that, should the annual General Meeting resolve to carry forward profits or to allocate profits to the reserves, shareholders may contest the resolution of the General Meeting if such carrying forward or allocation is not, on the basis of a reasonable commercial assessment, deemed necessary to ensure the viability or economic resilience of the company and the shareholders do not receive a minimum dividend in the amount equal to 4 % of the share capital. On these grounds, shareholders challenged the resolution of the 2016 annual General Meeting not to pay a dividend for 2015. Meanwhile, according to Section 10 (5) of the German Banking Act (Kreditwesengesetz) as amended in July 2017, this provision of German corporate law is no longer applicable to credit institutions subject to the CRR, i.e. the minimum dividend requirement no longer applies to Deutsche Bank AG.

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

General Meeting at which such dividends or other distributions are declared.

Significant Changes

Except as otherwise stated in this document, there have been no significant changes subsequent to December 31, 2017.

Item 9: The Offer and Listing

Offer and Listing Details and Markets

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

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

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

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

	Price per share (Xetra)[1]			Price per share (NYSE)[2]		
	High (in)	Low (in)	Period-end (in)	High (in U.S.$)	Low (in U.S.$)	Period-end (in U.S.$)
Monthly 2018:						
February	15.04	12.37	13.20	18.65	15.07	15.94
January	16.46	14.78	14.79	19.98	17.97	18.34
Monthly 2017:						
December	17.13	15.66	15.88	20.23	18.47	19.03
November	16.44	13.83	15.86	19.23	16.26	18.86
October	14.82	13.93	13.95	17.35	16.20	16.27
September	14.64	13.11	14.63	17.29	15.59	17.28
Quarterly 2017:						
Fourth Quarter	17.13	13.83	15.88	20.23	16.20	19.03
Third Quarter	16.91	13.11	14.63	19.34	15.59	17.28
Second Quarter	17.69	14.70	15.53	19.48	15.79	17.79
First Quarter	17.82	15.12	16.15	20.93	16.46	17.16
Quarterly 2016:						
Fourth Quarter	16.63	10.22	15.40	19.30	12.60	18.10
Third Quarter	12.35	8.83	10.33	15.43	11.19	13.09
Second Quarter	15.66	10.76	11.00	19.70	13.40	13.73
First Quarter	19.72	11.63	13.34	23.62	14.79	16.94

Annual:						
2017	17.82	13.11	15.88	20.93	15.59	19.03
2016	19.72	8.83	15.40	23.62	11.19	18.10
2015	29.83	18.46	20.10	36.20	22.83	24.15
2014	34.05	20.22	22.30	54.48	29.35	30.02
2013	32.97	25.04	29.52	52.92	38.18	48.24

Note: Data is based on Bloomberg.

[1] Historical share prices have been adjusted on June 5, 2014 with retroactive effect to reflect a capital increase by multiplying a correcting factor of 0.9538 and on March 20, 2017 with retroactive effect to reflect a capital increase by multiplying a correcting factor of 0.8925.

[2] Historical share prices are not adjusted for the capital increase in June 2014.

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

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

Plan of Distribution

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

Selling Shareholders

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

Dilution

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

Expenses of the Issue

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

Item 10: Additional Information

Share Capital

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

Memorandum and Articles of Association

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

Our Business Objectives

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

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

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

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

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

Supervisory Board and Management Board

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

Voting Rights and Shareholders Meetings

Each of our shares entitles its registered holder to one vote at our General Meeting. Our Annual General Meeting takes place within the first eight months of our fiscal year. Pursuant to our Articles of Association, we may hold the meeting in Frankfurt am Main, Düsseldorf or any other German city with over 500,000 inhabitants. Unless a shorter period is permitted by law, we must give the notice convening the General Meeting at least 30 days before the last day on which shareholders can register their attendance of the General Meeting (which is the fifth day immediately preceding that General Meeting). Shorter periods apply if the General Meeting is called to adopt a resolution on a capital increase in the context of early intervention measures pursuant to the Act on the Recovery and Resolution of Institutions and Financial Groups (Gesetz zur Sanierung und Abwicklung von Instituten und Finanzgruppen). We are required to include details regarding the shareholder attendance registration process and the issuance of admission cards in our invitation to the General Meeting.

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

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

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

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

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

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

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

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

- amendments to our Articles of Association changing our business objectives;
- capital increases that exclude subscription rights;

- capital reductions;
- creation of authorized or conditional capital;
- our dissolution;
- transformations under the German Transformation Act such as mergers, spin-offs and changes in our legal form;
- transfer of all our assets;
- integration of another company; and
- intercompany agreements (in particular, domination and profit-transfer agreements).

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

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

Share Register

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

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

Dividend Rights

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

Increases in Share Capital

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

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

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

Liquidation Rights

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

Preemptive Rights

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

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

Notices and Reports

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

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

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

Charges of Transfer Agents

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

Liability of Transfer Agents

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

Notification Requirements

Disclosure of Interests in a Listed Stock Corporation

Disclosure Obligations under the German Securities Trading Act

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

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

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

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

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

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

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

Disclosure Obligations under the German Securities Acquisition and Takeover Act

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

Other Disclosure Obligations

Notification requirements to the competent regulatory authority exist with respect to regulated subsidiaries where the local laws applicable to the subsidiary deem the acquisition of shares in Deutsche Bank AG as the indirect acquisition of a stake in the subsidiary and the applicable threshold under local law is reached or exceeded. This applies in particular to subsidiaries in a member state of the European Economic Area where the CRR provides for a threshold of 10 %. Other jurisdictions may apply lower thresholds. For example, because we control Deutsche Bank (Malaysia) Berhad, Section 87(1) of Malaysian Financial Services Act 2013 requires approval of Bank Negara Malaysia (the Malaysian central bank) of any acquisition of 5 % or more. Also, because Deutsche Bank AG controls bank subsidiaries in the United States, including Deutsche Bank Trust Company Americas, and has securities registered under the U.S. Securities Exchange Act of 1934, the U.S. Change in Bank Control Act requires approval of the Federal Reserve Board and other U.S. regulators for a person or persons acting in concert to control 10 % or more of our ordinary shares.

Disclosure of Participations in a Credit Institution

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

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

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

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

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

Pursuant to the German Foreign Trade Act (Außenwirtschaftsgesetz) and the German Foreign Trade Regulation (Außenwirtschaftsverordnung), the direct or indirect acquisition of 25 % or more of the voting rights in a German company by investors from outside the European Union and the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) or by entities which are owned by 25 % or more by investors from outside the aforementioned region may be reviewed by the German Federal Ministry of Economics and Technology. If the Ministry determines that the acquisition poses a threat to the public policy or public security of Germany, it may impose conditions on or suspend the acquisition or require that it is unwound. The conclusion of an acquisition contract for critical infrastructure and security-related technologies has to be notified to the German Federal Ministry of Economics and Technology in writing. The decision to review an acquisition must be made within three months following the Ministry s knowledge of the conclusion of the contract, of the publication of the decision to launch a take-over bid or of the publication of the acquisition of control. The review must be completed within four months following receipt of the complete acquisition documents. A review is precluded if more than 5 years have passed since the acquisition. The acquirer may seek pre-clearance of a proposed acquisition from the Federal Ministry of Economics and Technology.

EU Short Selling Regulation (ban on naked short selling)

Regulation (EU) No 236/2012 of the European Parliament and of the Council of March 14, 2012 on short selling and certain aspects of credit default swaps (the EU Short Selling Regulation) came into force on November 1, 2012. The EU Short Selling Regulation, the regulations adopted by the EU Commission implementing it, and the German act implementing the EU Short Selling Regulation replace the previously applicable German federal provisions governing the ban on naked short selling of shares and certain debt securities. (Short sales are sales of securities that the seller does not own, with the intention of buying back an identical security at a later point in time in order to be able to deliver the security. A short sale is naked when the seller has not borrowed the securities at the time of the short sale, or ensured they can be borrowed.) Under the EU Short Selling Regulation, short sales of shares are permitted only under certain conditions. Significant net short positions in shares must be reported to the BaFin and, if a certain threshold is exceeded, they must also be publicly disclosed. Net short positions are calculated by netting the long and short positions held by a natural or legal person in the issued capital of the company concerned. The details are set forth in the EU Short Selling Regulation and the regulations adopted by the EU Commission implementing it. In certain situations described in greater detail in the EU Short Selling Regulation, the BaFin is permitted to limit short selling and comparable transactions.

Disclosure of Transactions of Managers

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

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

Material Contracts

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

Exchange Controls

As in other member states of the European Union, regulations issued by the competent European Union authorities to comply with United Nations resolutions have caused freeze orders on assets of certain legal and natural persons designated in such regulations. In addition, the European Union maintained a wide range of autonomous economic and financial sanctions on Iran. While all nuclear-related economic and financial EU sanctions against Iran were repealed on January 16, 2016, some restrictions remain in force.

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

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

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

Taxation

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

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

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

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

On December 22, 2017, the U.S. enacted significant changes to the U.S. tax system (the Act). Shareholders should consult their own advisors regarding the tax consequences of the ownership and disposition of shares in light of their particular circumstances, including under the Act, as well as the effect of any state, local or other national laws.

Taxation of Dividends

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

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

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

Refund Procedures

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

Claims for refunds are made on a special German claim for refund form (Form E-USA), which must be filed with the German tax authorities: Bundeszentralamt für Steuern, An der Küppe 1, D-53225 Bonn, Germany. The German claim for refund forms may be obtained inter alia from the German tax authorities at the same address where the applications are filed or can be downloaded from the homepage of the Bundeszentralamt für Steuern (www.bzst.bund.de). A U.S. resident must also submit to the German tax authorities a certification (on IRS Form 6166) with respect to its last filed U.S. federal income tax return. Requests for IRS Form 6166 are made on IRS Form 8802, which requires payment of a user fee. IRS Form 8802 and its instructions can be obtained from the IRS website at www.irs.gov. Instead of the individual refund procedure described above, a U.S. resident may use an IT-supported quick-refund procedure (Datenträgerverfahren DTV / Data Medium

Procedure DMP). If the U.S. resident s bank or broker elects to participate in the DMP, it will perform administrative functions necessary to claim the Treaty refund for the beneficiaries. The refund beneficiaries must provide specified information to the DMP participant and confirm to the DMP participant that they meet the conditions of the Treaty provisions and that they authorize the DMP participant to file applications and receive notices and payments on their behalf.

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

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

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

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

Taxation of Capital Gains

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

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

United States Information Reporting and Backup Withholding

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

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

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

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

German Gift and Inheritance Taxes

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

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

Other German Taxes

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

Dividends and Paying Agents

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

Statement by Experts

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

Documents on Display

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

Subsidiary Information

Not applicable.

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

For Quantitative and Qualitative Disclosures about Credit, Market and Other Risk, please see Management Report: Risk Report in the Annual Report 2017.

Please see pages S-1 through S-13 of the Supplemental Financial Information, which pages are incorporated by reference herein, for information required by SEC Industry Guide 3.

Item 12: Description of Securities other than Equity Securities

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

PART II

Item 13: Defaults, Dividend Arrearages and Delinquencies

Not applicable.

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

As described in Item 4: Information on the Company Regulation and Supervision Recovery and Resolution Planning, Restructuring Powers , with effect from January 1, 2017, the German Banking Act as amended by the German Resolution Mechanism Act subordinates non-structured senior unsecured debt instruments issued by German banks (such as bank bonds), including debt instruments issued prior to January 1, 2017 (statutory subordination). The non-structured senior debt instruments issued under our SEC registration statements would generally be subject to this statutory subordination, even if issued prior to January 1, 2017. These senior non-preferred debt instruments rank junior to a bank s other unsubordinated liabilities (including deposits, derivatives, money market instruments and debt instruments that are structured as defined in the German Banking Act), but in priority to the bank s contractually subordinated liabilities, such as those qualifying as Tier 2 instruments. Thus, in the event of insolvency or resolution proceedings affecting Deutsche Bank AG, senior non-preferred debt instruments would bear losses after the Bank s contractually subordinated liabilities but before the Bank s other unsubordinated liabilities.

In December 2016, Delaware Trust Company succeeded to the corporate trust business of Law Debenture Trust Company of New York (Law Debenture) and became the successor trustee to Law Debenture under the Bank s Senior Indenture, dated as of November 22, 2006, as amended and supplemented, with respect to all existing and outstanding securities issued thereunder. Delaware Trust Company s address is 2711 Centerville Road, Wilmington, DE 19808, Attn: Corporate Trust Administration.

Item 15: Controls and Procedures

Disclosure Controls and Procedures

An evaluation was carried out under the supervision and with the participation of our management, including our Chairman and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of December 31, 2017. There are, as described below, inherent limitations to the effectiveness of any control system, including disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon such evaluation, our Chairman and Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures were effective as of December 31, 2017.

Management s Annual Report on Internal Control over Financial Reporting

Management of Deutsche Bank Aktiengesellschaft, together with its consolidated subsidiaries, is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed under the supervision of our principal executive officer and our principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the firm s financial statements for external reporting purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and as endorsed by the European Union. As of December 31, 2017, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the assessment performed, management has determined that our internal control over financial reporting as of December 31, 2017 was effective based on the COSO framework (2013).

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

Repor t of Independent Registered Public Accounting Firm

To the Supervisory Board of

Deutsche Bank Aktiengesellschaft:

Opinion on Internal Control over Financial Reporting

We have audited Deutsche Bank Aktiengesellschaft s and subsidiaries (the Company or Deutsche Bank) internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes, and the specific disclosures described in Note 1 to the consolidated financial statements as being part of the financial statements (collectively, the consolidated financial statements) and our report dated March 12, 2018 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Annual Report on Internal Control over Financial Reporting . Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

Frankfurt am Main, Germany

March 12, 2018

KPMG AG

Wirtschaftsprüfungsgesellschaft

Change in Int ernal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation referred to above that occurred during the year ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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

Item 16A: Audit Committee Financial Expert

Please see Corporate Governance Statement/Corporate Governance Report: Auditing and Controlling: Audit Committee Financial Expert in the Annual Report 2017.

Item 16B: Code of Ethics

Please see Corporate Governance Statement/Corporate Governance Report: Values and Leadership Principles of Deutsche Bank AG and Deutsche Bank Group: Code of Business Conduct and Ethics in the Annual Report 2017.

Item 16C: Principal Accountant Fees and Services

Please see Management Report: Corporate Governance Statement/Corporate Governance Report: Auditing and Controlling: Principal Accountant Fees and Services in the Annual Report 2017.

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

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

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

In 2017, we repurchased a total of 28,000,000 shares of which 4,614,358 via derivatives, for group purposes pursuant to share buybacks authorized by the General Meeting. During the period from January 1, 2017 until the 2017 Annual General Meeting on May 18, 2017, we repurchased 13,912,002, of which 240,000 via derivatives, of our ordinary shares pursuant to the authorization granted by the Annual General Meeting on May 19, 2016, at an average price of 16.88 and for a total consideration of 235 million. This authorization was replaced by a new authorization to buy back shares approved by the Annual General Meeting on May 18, 2017. Under the new authorization, up to 206,677,313 shares may be repurchased through April 30, 2022. Of these, 103,338,656 shares may be purchased by using derivatives. During the period from the 2017 Annual General Meeting until December 31, 2017, we repurchased 14,087,998 shares at an average price of 14.71 and for a total consideration of 207 million (excluding option premium). At December 31, 2017, the number of shares held in Treasury from buybacks totalled 103,000 shares. This figure stems from 0 shares at the beginning of the year, plus 28 million shares from buybacks in 2017, less 27.9 million shares which were used to fulfill delivery obligations in the course of share-based compensation of employees. We did not cancel any shares in 2017.

In addition to these share buybacks for group purposes, pursuant to a shareholder authorization approved at our 2013 Annual General Meeting, we are authorized to buy and sell, for the purpose of securities trading, our ordinary shares through April 30, 2018, provided that the net number of shares held for this purpose at the close of any trading day may not exceed 5 % of our share capital on that day. A new authorization until April 30, 2022 was approved by the Annual General Meeting on May 18, 2017. The gross volume of these securities trading transactions is often large, and even the net amount of such repurchases or sales may, in a given month, be large, though over longer periods of time such transactions tend to offset and are in any event constrained by the 5 % of share capital limit. These securities trading transactions consist predominantly of transactions on major non-U.S. securities exchanges. We also enter into derivative contracts with respect to our shares.

The following table sets forth, for each month in 2017 and for the year as a whole, the total gross number of our shares repurchased by us and our affiliated purchasers (pursuant to both activities described above), the total gross number of shares sold, the net number of shares purchased or sold, the average price paid per share (based on the gross shares repurchased), the number of shares that were purchased for group purposes mentioned above and the maximum number of shares that at that date remained eligible for purchase under such programs.

Issuer Purchases of Equity Securities in 2017

Month	Total number of shares purchased	Total number of shares sold	Net number of shares purchased or (sold)	Average price paid per share (in)	Number of shares purchased for group purposes (incl. derivatives)	Maximum number of shares that may yet be purchased under plans or programs
January	13,342,267	13,335,219	7,048	18.32	0	137,050,659
February	22,254,609	22,123,554	131,055	18.37	3,415,000	133,635,659
March	42,490,194	38,215,790	4,274,404	17.44	4,223,132	129,412,527
April	86,317,986	89,514,812	(3,196,826)	16.28	6,273,870	123,138,657
May	111,474,291	111,511,282	(36,991)	17.12	0	206,677,313
June	51,833,275	51,844,885	(11,610)	15.34	0	206,677,313
July	16,106,932	14,179,123	1,927,809	15.89	1,971,185	204,706,128
August	54,543,508	52,234,635	2,308,873	14.59	11,842,813	192,863,315
September	42,451,074	47,468,391	(5,017,317)	13.65	274,000	192,589,315
October	13,519,534	13,545,311	(25,777)	14.36	0	192,589,315

November	12,933,972	13,175,034	(241,062)	15.39	0	192,589,315
December	23,422,716	23,374,674	48,042	16.39	0	192,589,315
Total 2017	490,690,358	490,522,710	167,648	16.12	28,000,000	192,589,315

At December 31, 2017, the number of shares held by us in treasury totalled 371,090. This figure stems from 203,442 shares at the beginning of the year, plus 167,648 net shares purchased in 2017. At December 31, 2017, our issued share capital consisted of 2,066,773,131 ordinary shares, of which 2,066,402,041 were outstanding.

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.

Item 16F: Change in Registrant s Certifying Accountant

Not applicable.

Item 16G: Corporate Governance

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

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

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

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

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

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

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

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

The Recommendations of the Code. The Code was issued in 2002 by a commission composed of German corporate governance experts appointed by the German Federal Ministry of Justice in 2001. The Code was last amended in February 2017 and, as a general rule, will be reviewed annually and amended if necessary to reflect international corporate governance developments. The Code describes and summarizes the basic mandatory statutory corporate governance principles found in the provisions of German law. In addition, it contains supplemental recommendations and suggestions for standards on responsible corporate governance intended to reflect generally accepted best practice.

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

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

In their last Declaration of Conformity of October 26, 2017, the Management Board and the Supervisory Board of Deutsche Bank stated that, since the last Declaration of Conformity issued on October 27, 2016, they have acted and will act in the future in conformity with the recommendations of the Code, with certain specified exceptions. The Declaration of Conformity is available on Deutsche Bank s internet website at www.db.com/ir/en/documents.htm.

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

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

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

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

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

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

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

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

Item 16H: Mine Safety Disclosure

Not applicable.

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

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

Legacy Financing Arrangements. Despite having ceased entering into new business in or with Iran in 2007, we continue to be engaged as lender, sponsoring bank and/or facility agent or arranger in several long-term financing agreements relating to the construction or acquisition of plant or equipment for the petroleum and petrochemical industries, under which Iranian entities were the direct or indirect borrowers. Before 2007, as part of banking consortia, we entered into a number of financing arrangements, one of which remained outstanding as of December 31, 2017, with the National Petrochemical Company (NPC). Another of these commitments was fully repaid in 2017, but an undrawn commitment of as of December 31, 2017 of approximately 1.3 million remains. Due to the export credit agency coverage, this remainder cannot be cancelled without German government approval, for which we have applied but which we have not yet received. We do not intend to make further disbursements upon this undrawn commitment.

The latest final maturity under these loan facilities is in 2019. These loan facilities were guaranteed by national export credit agencies representing two European governments. In principle, the obligations of the borrowers under these loan facilities are secured by assignments of receivables from oil and oil products exported by NPC and/or its trading subsidiaries to buyers, mostly in Asia. These delivery obligations, however, were waived for the period covered by this report, because of the sanctions environment at that time. For these arrangements, we act as escrow agent, holding escrow accounts for the Iranian borrowers mentioned above, into which receivables are, in principle, paid by the buyers of the oil and oil products. During the period covered by this report, no such receivables were paid to the said escrow accounts. Such accounts are pledged in favor of the relevant banking consortium. We have no involvement in the contractual arrangements related to, or in the physical settlement of, the oil and oil product exports mentioned above. Until Implementation Day, Iranian entities in whose names the escrow accounts have been held were not permitted to draw on such accounts, either because they were sanctioned parties or, where this was not the case, because of our business decision to not allow access to such accounts in light of the overall sanctions environment in the past. Following Implementation Day, such accounts were no longer blocked.

As a remainder from a previously existing financing related to National Iranian Oil Company (NIOC), which was fully paid back in 2012, we still held an account for NIOC (which was previously used as an escrow account in the context of the respective financing) with a balance in EUR. That escrow account was closed on January 30, 2017 and the balance of approximately 125.0 million paid to NIOC.

During 2017, approximately 26.0 million was paid into accounts of the borrower. We, in our role as agent, distributed to the participants in the banking consortia approximately 98.0 million including portions attributable to us totalling approximately 9.8 million.

We generated revenues in 2017 of approximately 0.28 million in respect of these financing arrangements, of which approximately 0.23 million consisted of escrow account revenues, 0.04 million consisted of loan interest revenues and 0.01 million consisted of fee revenues. The net profits were less than these amounts.

In one additional financing arrangement, we are not ourselves a lender but act rather as agent for a lender, a state-owned development bank. In this capacity, we received fees from the Iranian borrower of approximately 3,400.

Our portion of the outstanding principal amount of the remaining loan facilities amounted to approximately 0.7 million as of December 31, 2017. We intend to continue pursuing repayment and fulfilling our administrative role under these agreements, but we currently do not intend to engage in any new extensions of credit to these or other Iranian entities.

Legacy Contractual Obligations Related to Guarantees and Letters of Credit. Prior to 2007, we provided guarantees to a number of Iranian entities. In almost all of these cases, we issued counter-indemnities in support of guarantees issued by Iranian banks because the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. In 2007, we made a decision to discontinue issuing new guarantees to Iranian or Iran-related beneficiaries. The pre-existing guarantees stipulate that they must be either extended or honored if we receive such a demand and we are legally not able to terminate these guarantees. In 2017, in order not to pay under the guarantees, we extended two guarantees for a total amount of approximately 3.8 million for which we paid guarantee commission amounting to approximately 44,000. Furthermore, we paid guarantee commission amounting to approximately 25,000 relating to three guarantees. Even though we exited, where possible, many of these guarantees, guarantees with an aggregate face amount of approximately 7.0 million are still outstanding as of year-end 2017. The gross revenues from this business in 2017 were approximately 31,000 and the net profit we derived from these activities was less than this amount.

We also have outstanding legacy guarantees in relation to a Syrian bank sanctioned by the U.S. under its non-proliferation program. The aggregate face amount of these legacy guarantees was approximately 9.1 million as of December 31, 2017, the gross revenues received from non-Syrian parties for these guarantees were approximately 66,000 in 2017 and the net profit we derived from these activities was less than this amount.

We still intend to exit these guarantee arrangements.

Payments Executed. After the Implementation Day of the JCPoA on January 16, 2016, Deutsche Bank reviewed its existing approach regarding the processing of payments related to Iran in particular with a view to the reconnection of certain Iranian banks in the EU to the European Payment System Target2 and the expectation expressed by the Bundesbank to allow the execution of payments. As a result, Deutsche Bank introduced the following process for payments related to the Iran starting in April 2016:

In principle, the overall restrictive policy of the Bank on Iran remains unchanged. As a limited exception, transactions can be executed if the following provisions are met simultaneously:

- The Bank executes incoming and outgoing payments on behalf of its own clients only (financial institutions are not included).
- Payments must be denominated in Euros.
- Clients need to submit to the bank a specific client declaration.
- Incoming payments need generally to come through Iranian banks not sanctioned by the EU.
- Outgoing payments need to go through Iranian banks connected to Target2 and not sanctioned by the EU.
- All relevant transactions will be subject to enhanced due diligence.

Incoming Payments. In 2017, we received less than 1,800 payments adding up to approximately 381 million in favor of non-Iranian clients of which some payments ultimately originated from Iranian persons and entities and others were merely channelled through Iranian intermediary banks not subject to EU sanctions or U.S. secondary sanctions since Implementation Day of the JCPoA. Revenues for these incoming payments were less than 13,000. These figures include relevant payments in favor of clients of our subsidiary Postbank as well as transactions by order of Iranian Embassy-related offices and in favor of our non-Iranian clients.

We expect that we will continue to execute such transactions in the future.

Outgoing Payments. In 2017, we executed less than 210 payments adding up to approximately 591 million; again, some payments were executed in favor of Iranian persons and entities and others were merely channelled through Iranian intermediary banks that are not subject to EU sanctions or U.S. secondary sanctions. Revenues for these outgoing payments were less than 1,700. These figures include relevant payments originated by clients of our subsidiary Postbank as well as transactions in favor of Iranian Embassy-related offices.

We expect that we will continue to execute such transactions in the future.

Operations of Iranian Bank Branches and Subsidiaries in Germany and/or France. Several Iranian banks, including Bank Melli Iran, Bank Saderat, Bank Tejarat and Europäisch-Iranische Handelsbank, have branches or offices in Germany and/or France, even though their funds and other economic resources had been frozen earlier under European law. As part of the payment clearing system in Germany and other European countries, when these branches or offices needed to make payments in Germany or Europe to cover their day-to-day operations such as rent, taxes, insurance premia and salaries for their remaining staff, or for any other kind of banking-related operations necessary to wind down their legacy trade business, the German Bundesbank and French banks had accepted fund transfers from these Iranian banks and disbursed them to the applicable payees holding accounts with us. Until the reconnection of the relevant Iranian banks to Target2, German payments were processed via the agreed procedure with the Bundesbank. Afterwards, the relevant Iranian banks could process these payments related to operations via Target2 directly.

In 2017, we received approximately 5.2 million in such disbursements in approximately 1,000 transactions, and the gross revenues derived from these payments were less than 5,000. Relevant transactions of our subsidiary Postbank are included in these figures.

We expect that we will continue to execute such transactions in the future.

Maintaining of Accounts for Iranian Consulates and Embassies. In 2017, Iranian embassies and consulates in Germany held accounts with us as well as with Postbank. The purpose of these accounts is the funding of day-to-day operational costs of the embassies and consulates, such as salaries, rent and electricity. In 2017, the total volume of outgoing payments from these accounts was approximately 9.2 million. From these activities, we derived gross revenues of approximately 32,000 and net profits which were less than this amount. The relevant German Government has requested that we provide these services to enable the Government of Iran to conduct its diplomatic relations.

Activities of Entities in Which We Have Interests. Section 13(r) requires us to provide the specified disclosure with respect to ourselves and our affiliates, as defined in Exchange Act Rule 12b-2. Although we have minority equity interests in certain entities that could arguably result in these entities being deemed affiliates, we do not have the authority or the legal ability to acquire in every instance the information from these entities that would be necessary to determine whether they are engaged in any disclosable activities under Section 13(r). In some cases, legally independent entities are not permitted to disclose the details of their activities to us because of German privacy and data protection laws or the applicable banking laws and regulations. In such cases, voluntary disclosure of such details could violate such legal and/or regulatory requirements and subject the relevant entities to criminal prosecution or regulatory investigations.

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PART III

Item 17: Financial Statements

Not applicable.

Item 18: Financial Statements

The Financial Statements of this Annual Report on Form 20-F consist of the Consolidated Financial Statements including Notes 1 to 44 thereto, which are set forth as Part 2 of the Annual Report 2017, and, as described in Note 1 Significant Accounting Policies and Critical Accounting Estimates thereto in the third paragraph under Basis of Accounting , certain parts of the Management Report set forth as Part 1 of the Annual Report 2017. Such Consolidated Financial Statements have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, as described in their Report of Independent Registered Public Accounting Firm included in the Annual Report 2017.

Item 19: Exhibits

We have filed the following documents as exhibits to this document.

Exhibit number	Description of Exhibit
1.1	English translation of the Articles of Association of Deutsche Bank AG, furnished as Exhibit 3.2 to our Report on Form 6-K dated December 1, 2017 and incorporated by reference herein.
2.1	The total amount of long-term debt securities of us or our subsidiaries authorized under any instrument does not exceed 10 percent of the total assets of our Group on a consolidated basis. We hereby agree to furnish to the Commission, upon its request, a copy of any instrument defining the rights of holders of long-term debt of us or of our subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.
4.1	Equity Plan Rules 2014, furnished as Exhibit 4.5 to our 2013 Annual Report on Form 20-F and incorporated by reference herein.
4.2	Equity Plan Rules 2015, furnished as Exhibit 4.5 to our 2014 Annual Report on Form 20-F and incorporated by reference herein.
4.3	Equity Plan Rules 2016, furnished as Exhibit 4.6 to our 2015 Annual Report on Form 20-F and incorporated by reference herein.
4.4	Equity Plan Rules 2017, furnished as Exhibit 4.6 to our 2016 Annual Report on Form 20-F and incorporated by reference herein.
4.5	Key Retention Plan Equity Plan Rules 2017, furnished as Exhibit 4.7 to our 2016 Annual Report on Form 20-F and incorporated by reference herein.

4.6	Equity Plan Rules 2018, furnished as Exhibit 4.6 to our Registration Statement on Form S-8 No. 333-223301 and incorporated by reference herein.
4.7	Restricted Share Plan Rules 2018, furnished as Exhibit 4.8 to our Registration Statement on Form S-8 No. 333-223301 and incorporated by reference herein.
7.1	Statement re Computation of Ratio of Earnings to Fixed Charges of Deutsche Bank AG for the periods ended December 31, 2017, 2016, 2015, 2014 and 2013 (also incorporated as Exhibit 12.21 to Registration Statement No. 333-206013 of Deutsche Bank AG and as Exhibit 12.7 to Registration Statement No. 333-218897 of Deutsche Bank AG).
8.1	List of Subsidiaries.
12.1	Principal Executive Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
12.2	Principal Financial Officer Certifications Required by 17 C.F.R. 240.13a-14(a).
13.1	Chief Executive Officer Certification Required by 18 U.S.C. Section 1350.
13.2	Chief Financial Officer Certification Required by 18 U.S.C. Section 1350.
14.1	Legal Opinion regarding confidentiality of related party customers.
15.1	Consent of KPMG AG Wirtschaftsprüfungsgesellschaft.
101.1	Interactive Data File

Signatures

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: March 16, 2018

Deutsche Bank Aktiengesellschaft

/s/ JOHN CRYAN

John Cryan

Chairman of the Management Board

/s/ JAMES VON MOLTKE

James von Moltke

Member of the Management Board

Chief Financial Officer

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Annual Report 2017

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 labour 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) realisation 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 on-boarding 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 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.

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 organisational 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.

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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 nonrecurrence 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. (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 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. Additional-ly 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 reve-nues. 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 en-vironment. 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, vari-ous bond sales and further un-winds across the portfolio. In C&A, the decrease by 1.1 billion was primarily due to inte-rest 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. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in m.	in %	2016 increase (decrease) from 2015 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	3,603	3,507	3,666	96	3	(159)	(4)

management							
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 nonrecurrence 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 nonrecurrence of a specific litigation recovery and gain on sale of Maher Prince Rupert in 2015.

Noninterest Expenses

in m. (unless stated otherwise)	2017	2016	2015	2017 increase (decrease) from 2016 in m.	in %	2016 increase (decrease) from 2015 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 comparables 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	Consoli-dation & Adjust-ments	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.

						2016
in m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consoli-dation & Adjust-ments	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	3 %	7 %	N/M	N/M	N/M	(3) %

shareholders equity[4]						
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.

						2015
in m. (unless stated otherwise)	Corporate & Investment Bank	Private & Commercial Bank	Deutsche Asset Management	Non-Core Operations Unit	Consoli-dation & Adjust-ments	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 favourable 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.

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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.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in m.	in %	in m.	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 favourable 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 reorganisation 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

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 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, unfavourable 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 unfavourable 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 favourable 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 favourable 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 unfavourable 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 rumours 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 favourable Equity and Fixed Income market performance of 16 billion, and favourable 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.				2017 increase (decrease) from 2016		2016 increase (decrease) from 2015	
(unless stated otherwise)	2017	2016	2015	in m.	in %	in m.	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.

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Tabular Disclosure of Contractual Obligations

Cash payment requirements outstanding as of December 31, 2017.

Contractual obligations					Payment due by period
		Less than			More than
in m.	Total	1 year	1 3 years	3 5 years	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 .

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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
31.12.2017 14.0%
31.12.2016 11.8%

Internal Capital Adequacy Ratio[1]
31.12.2017 192%
31.12.2016 162%

Leverage Ratio
31.12.2017 3.8%
31.12.2016 3.5%

Liquidity Coverage Ratio
31.12.2017 140%
31.12.2016 128%

Total Risk-Weighted Assets
31.12.2017 344.2 bn
31.12.2016 357.5 bn

Total Economic Capital
31.12.2017 27.1 bn
31.12.2016 35.4 bn

Leverage Exposure
31.12.2017 1,395 bn
31.12.2016 1,348 bn

Stressed Net Liquidity Position (sNLP)
31.12.2017 32.6 bn
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 , Interna 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 finalised 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 organisation. 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 analysing 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 analysing 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 organisational 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 stabilise the group. Within one month after the application of the bail-in tool to recapitalise an institution, the BRRD (as implemented in the SAG) requires such institution to establish a business reorganisation 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 recapitalisation 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 Directve 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, which ever 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.

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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 99th 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 utilisation 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 (DEVE) 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 DNII 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 DNII 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 behaviour 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 behaviour. 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 behaviour 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 ³ 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. Further, the bank has 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	0	0

sector entities where the institution has a significant investment in those entities		
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

in m.	Dec 31, 2017	CRR/CRD 4 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 standardised 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-risiking 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 standardised approach for securitisation 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 busi-nesses.

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 securitisations, 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 favour 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.

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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.

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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.	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	