### Deutsche Börse Aktiengesellschaft, Frankfurt/Main Balance Sheet as at 31 December 2016

|  |                  |              | -   |                                |                               |                  |              |
|--|------------------|--------------|---|--------------------------------|-------------------------------|------------------|--------------|
| Assets   | 31.12.2016       | 31.12.2015   | Shareholder's Equity and Liabilities            |                                |                               | 31.12.2016       | 31.12.2015   |
|  | €                | € (thousand) |   |                                |                               | €                | € (thousand) |
|  |                  |              |   | Per value of shares            | Subscribed capital            |                  |              |
|  |                  |              |   | acquired for retirement        | before retirement             |                  |              |
| NONCURRENT ASSETS  |                  |              | SHAREHOLDER'S EQUITY                            | €                              | €                             |                  |              |
| Intangible Assets  |                  |              | Subscribed Capital                              | 193,000,000.00                 | 6,194,985.00                  | 186,805,015.00   | 186,724      |
| Licenses and similar rights for data processing and software                             | 10,368,121.00    | 9,373        |   |                                |                               |                  |              |
| Goodwill   | 246,005.00       | 295          | Capital Reserve                                 |                                |                               | 1,365,156,085.66 | 1,363,356    |
| Prepayments  | 1,643,531.00     | 1,602        |   |                                |                               |                  |              |
|  | 12,257,657.00    | 11,270       | Retained Earnings                               |                                |                               |                  |              |
| Tangible Assets  |                  |              | Other profit reserves                           |                                |                               | 645,997,924.09   | 528,899      |
| Fixtures on third party land   | 17,746,963.00    | 17,430       | Unappropriated Surplus                          |                                |                               | 445.000.000.00   | 425,000      |
| Other assets, furniture and office equipment   | 48,597,047.33    | 34,163       | Total Shareholder's Equity                      |                                |                               | 2,642,959,024.75 | 2,503,979    |
| Prepayments on account and construction in progress                                      | 0.00             | 310          | Total oliaioliolaoi o Equity                    |                                |                               | 2,012,000,021170 | 2,000,575    |
| repairments on account and construction in progress                                      | 66,344,010.33    | 51,903       |   |                                |                               |                  |              |
|  | , ,              | ,            | Provisions                                      |                                |                               |                  |              |
| Financial Assets   |                  |              | Provisions for pensions and similar obligations |                                |                               | 17,982,798.86    | 26,626       |
| Shares in affiliated companies   | 6,001,795,625.55 | 6,092,780    | Provisions for deferred taxes                   |                                |                               | 116,230,732.52   | 160,343      |
| Investments  | 45,461,259.62    | 51,531       | Other provisions                                |                                |                               | 199,142,715.44   | 185,074      |
| Loans to companies in which the company has a participating interest                     | 399,752.89       | 146          | Total provisions                                |                                |                               | 333,356,246.82   | 372,043      |
| Long-Term securities   | 14,899,547.81    | 13,008       |   |                                |                               |                  |              |
| Other loans  | 14,115.49        | 28           | LIABILITIES                                     |                                |                               |                  |              |
|  | 6,062,570,301.36 | 6,157,493    | Bonds   |                                |                               | 2,300,000,000.00 | 2,660,480    |
| Total Noncurrent Assets  | 6,141,171,968.69 | 6,220,666    | thereof with residual term up to 1 yea          | r € 0,00 (previous year € 95,0 | 00 (thousand))                |                  |              |
|  |                  |              | thereof with residual term over 1 year          | € 2,300,000.00 (previous yea   | r € 2,565,480 (thousand))     |                  |              |
| CURRENT ASSETS   |                  |              | Trade accounts payable                          |                                |                               | 19,478,205.52    | 36,603       |
| Accounts Receivable and Other Assets   |                  |              | thereof with residual term up to 1 yea          | r € 19,478,205.52 (previous y  | ear € 36,603 (thousand))      |                  |              |
| Trade accounts receivable  | 157,073,461.05   | 131,006      | Amounts owed to affiliated companies            |                                |                               | 2,399,896,854.34 | 1,213,802    |
| Receivables from affiliated companies  | 433,621,272.88   | 249,062      | thereof with residual term up to 1 yea          | r € 2,399,896,854.341 (previ   | ous year € 1,213,802 (thousar | nd))             |              |
| Receivables from companies in which the company has a participating interest             | 542,934.05       | 655          | Amounts owed to companies in which the comp     |                                |                               | 38,699.70        | 127          |
| Other current assets   | 43,462,904.60    | 19,217       | thereof with residual term up to 1 yea          | r € 38,699.70 (previous year € | 127 (thousand))               |                  |              |
| thereof with residual term over 1 year € 2,369,411.46 (previous year € 4,686 (thousand)) |                  |              | Other liabilities                               |                                |                               | 39,663,105.42    | 33,319       |
|  | 634,700,572.58   | 399,940      | thereof with residual term up to 1 yea          |                                |                               |                  |              |
|  |                  |              | thereof with residual term over 1 year          |                                |                               |                  |              |
|  |                  |              | thereof from taxes € 3,546,236.93 (p            | •                              |                               |                  |              |
| Cash and Bank Balances   | 935,396,889.15   | 172,284      | thereof from social security € 137,610          | 0.30 (previous year € 168 (tho | usand))                       |                  |              |
| Total Current Assets   | 1,570,097,461.73 | 572,224      | Total Liabilities                               |                                |                               | 4,759,076,864.98 | 3,944,331    |
| DEFERRED EXPENSES AND ACCRUED INCOME   | 25,576,139.58    | 29,216       | DEFERRED INCOME AND ACCRUED EXPENSE             | S                              |                               | 1,453,433.45     | 1,753        |
| Total Assets   | 7,736,845,570.00 | 6,822,106    | Total Shareholder's Equity and Liabilities      |                                |                               | 7,736,845,570.00 | 6,822,106    |
|  | ,,,              | -,,          |   |                                |                               | , , ,            | -,,100       |

# Deutsche Börse Aktiengesellschaft, Frankfurt/Main Profit and Loss Account for the period 1 January to 31 December 2016

|  | 203               | 16               | 2015         |              |
|--|-------------------|------------------|--------------|--------------|
|  | €                 | €                | € (thousand) | € (thousand) |
| Sales Revenue  |                   | 1,300,229,397.51 |              | 1,181,934    |
| Other Operating Income   |                   | 149,114,189.21   |              | 168,839      |
| thereof from currency translation € 32,442,041.22 (previous year € 53,045 (thou    | usand))           |                  |              |              |
| Personnel Expenses   |                   |                  |              |              |
| Wages and Salaries   | -172,607,137.86   |                  | -166,977     |              |
| Social securities, pensions and other benefits                                     | -29,204,554.03    |                  | -27,206      |              |
| thereof pensions € 13,348,209.78 (previous year € 13,083 (thousand))               |                   | -201,811,691.89  |              | -194,183     |
| Depreciation   |                   |                  |              |              |
| of intangible and tangible assets  |                   | -24,312,255.56   |              | -24,367      |
| Other Operating Expenses   |                   | -720,012,185.23  |              | -708,438     |
| thereof from currency translation € 26,006,321.49 (previous year € 88,636 (thou    | usand))           |                  |              |              |
| Income from Participating Interests  |                   | 37,281,900.85    |              | 18,174       |
| thereof from affiliated companies € 35,094,177.96 (previous year € 16,929 (thou    | usand))           |                  |              |              |
| Income from Profit and Loss Agreements   |                   | 167,173,191.40   |              | 147,084      |
| Income from Financial Assets: Long-Term Securities and Loans                       |                   | 7,840,661.10     |              | 1,497        |
|  |                   |                  |              |              |
| Interest and Similar Income  |                   | 19,861,444.68    |              | 3,330        |
| thereof from affiliated companies € 1,426,548.12 (previous € 939 (thousand))       |                   |                  |              |              |
| thereof from addition of discounted interest € 3,460,640.00 (previous year € 0 (ti | housand))         |                  |              |              |
| Depreciation of Current Assets: Financial Assets and Securities                    |                   | -17,996,248.05   |              | -46,689      |
| thereof to affiliated companies € 1,182,654.40 (previous year € 30,358 (thousan    | nd))              |                  |              |              |
| Interest and Similar Charges   |                   | -114,191,665.32  |              | -103,242     |
| thereof to affiliated companies € 2,732,426.75 (previous year € 3,715 (thousand    | 9))               |                  |              |              |
| thereof from addition of discounted interest € 10,248,024.87 (previous year € 26   | 5,933 (thousand)) |                  |              |              |
| Tax on Profit  |                   | -49,948,827.39   |              | -128,033     |
| Income after Taxes   |                   | 553,227,911.31   |              | 315,906      |
| Other Taxes  |                   | 7,338.70         |              | 12           |
|  |                   |                  |              |              |
| Net Income for the Financial Year  |                   | 553,235,250.01   |              | 315,920      |
| Withdrawal from other profit reserves  |                   | 0                |              | 109,080      |
| Allocations to other profit reserve  |                   | -108,235,250.01  |              | (            |
| Unappropriated Surplus   |                   | 445,000,000.00   |              | 425,000      |
| опарргориатей экірійѕ  |                   | 445,000,000.00   |              | 425,00       |

# Notes to the financial statements for financial year 2016

# General information on the Company

Deutsche Börse AG (the "Company"), which has its registered office in Frankfurt/Main, Germany, is registered in Commercial Register B of Frankfurt/Main District Court under the number HRB 32232.

# **Accounting policies**

Deutsche Börse AG's financial statements for financial year 2016 were prepared in accordance with the provisions of the Handelsgesetzbuch (HGB, German Commercial Code) and of the Aktiengesetz (AktG, the German Stock Corporation Act).

The total cost accounting method was chosen for the income statement.

The Company is a large corporation as defined by section 267 (3) HGB.

Interest expense resulting from the investment of funds at negative interest rates is recognised in the "interest and similar charges" item. Interest income resulting from borrowing funds at negative interest rates is reported under "interest and similar income".

The form of presentation and the structure of the sequential balance sheets and income statements has not been maintained. The informative value of comparisons with the figures for previous years is limited due to the entry into force of the Bilanzrichtlinie-Umsetzungsgesetz ("BilRUG", the German Act -Implementing the Accounting Directive) on 1 January 2016. The figures for previous years have not been adjusted in line with the changed financial reporting regulations. Please refer to our comments on sales revenue in particular.

### Fixed assets

Acquired intangible assets are carried at cost and amortised using the straight-line method or valued at the lower fair value. No use was made of the option to capitalise internally generated intangible assets.

Purchased goodwill is capitalised upon acquisition and subjected to scheduled amortisation.

Property, plant and equipment is carried at cost. Depreciable property, plant and equipment is depreciated using the straight-line method over its useful life or valued at its lower fair value.

Low-value fixed assets with acquisition costs of up to €410 were written off directly in financial year 2016 in accordance with section 6 (2) of the Einkommensteuergesetz (EStG, German Income Tax

Act). In this respect, no use was made of the option granted by section 6 (2a) EStG to create a compound item.

Investments in affiliated companies stated under financial assets as well as equity investments are carried at the lower of cost or fair value. Loans to affiliated companies and other loans are recognised at nominal value, taking into account any permanent impairment, where applicable. Securities are carried at acquisition cost or at the lower exchange rate on the reporting date, in the event of permanent impairment. If the circumstances which led to the non-scheduled write-down of financial assets no longer apply, a reversal is recognised up to a maximum of the original acquisition cost.

Fixed asset line items denominated in foreign currency have been translated into euro amounts using the exchange rates valid on the date of acquisition; in cases of permanent impairment, the conversion is at the period-end exchange rate.

#### **Current assets**

Receivables and other assets are always carried at their nominal amount. All discernible risks are impaired on an item-by-item basis, while latent risks are considered on a portfolio basis.

Credit balances with banks are carried at their nominal value.

Receivables and other assets and credit balances at banks which are held in foreign currencies are translated using the ECB's reference exchange rate or Bloomberg's exchange rate on the balance sheet date, taking section 256a HGB into account.

### Equity

The subscribed capital is carried at nominal value.

### **Provisions**

Provisions for pensions and other employee benefits have been calculated along with the projected benefit obligation on the basis of actuarial tables using the modified "2005 G" mortality tables (generation tables) developed by Dr Klaus Heubeck and fully adjusted in 2011.

| Actuarial assumptions            |            |            |
|----------------------------------|------------|------------|
|                                  | 31.12.2016 | 31.12.2015 |
| Pensions and similar obligations | %          | %          |
| 10-year average discount rate    | 4.01       | -          |
| 7-year average discount rate     | 3.24       | 3.89       |
| Salary growth                    | 3.50       | 3.50       |
| Pension growth                   | 2.00       | 2.00       |
| Staff turnover rate              | 2.00       | 2.00       |
| Deferred compensation programme  |            |            |
| Discount rate                    | 4,01       | 3.89       |

In accordance with section 246 (2) HGB, the settlement amount of pension liabilities as at the reporting date was offset against the fair value of those assets that are protected from all creditors and exclusively serve the purpose of meeting liabilities arising from pension obligations or comparable long-term commitments to employees ("plan assets").

The values of the provisions for the Stock Bonus Plan and Long-term Sustainable Instrument (LSI) are calculated on the basis of the price of Deutsche Börse AG's shares on the reporting date. The provision for the Co-Performance Investment Plan (CPIP) was recognised pro rata temporis, taking the relationship between the vesting period that has already passed and the overall term of the tranches into account. The measurement was based on an option pricing model that takes the programme's key parameters into account.

The provisions for anniversary payments and early retirement were measured at the amount to be paid in accordance with actuarial principles, and for early retirees at present value. The projected unit credit method was applied as the basis of this assessment. During the year under review, the interest rate of 3.24 per cent (previous year: 3.89 per cent) published by the German Ministry of Finance was applied. The modified "2005 G" mortality tables developed by Dr Klaus Heubeck and fully adjusted in 2011 were the basis of these projections.

For all hedge accounting procedures as defined by section 254 HGB, Deutsche Börse AG exercises the option of only stating hedges on the balance sheet to the extent that the hedge was ineffective and a negative result arises (compensatory valuation/net hedge presentation method). In such an event, a provision for contingent losses is recognised.

The other provisions have been estimated in consideration of all known risks and unknown liabilities as at the balance sheet date and were estimated at the amount which is required to be paid according to a reasonable commercial assessment. Provisions with a maturity of more than one year are discounted using the market interest rates published by Deutsche Bundesbank according to the remainder of their maturity.

#### Liabilities

In accordance with section 253 (1) HGB, these liabilities are recognised at their respective settlement amounts.

Liabilities in foreign currencies are translated using the ECB's reference exchange rate or Bloomberg's exchange rate on the balance sheet date, taking section 256a HGB into account.

#### Deferred taxes

Deferred taxes are calculated in accordance with section 274 HGB on temporary differences between the carrying amounts according to commercial law and their taxable values. Deferred tax liabilities are only reported insofar as they exceed deferred tax assets.

In view of the existing single-entity relationship for tax purposes with Clearstream Holding AG, temporary differences between the carrying amounts according to commercial law and their taxable values of this company were accounted for at the level of the controlling company, Deutsche Börse AG. Calculations of deferred taxes are based on the expected combined income tax rate of all the companies comprising a single entity for tax purposes with Deutsche Börse AG, which currently stands at 27.5 per cent.

As at 31 December 2016, the excess of deferred tax assets amounted to  $\[ \in \]$ 19.9 million (previous year:  $\[ \in \]$ 31.1 million). The excess of deferred tax assets is mainly the result of differences in the carrying amounts in the provisions for pensions, their related cover assets and restructuring provisions.

In accordance with section 274 (1) clause 2 HGB, the Company refrained from reporting the excess of deferred tax assets. Deferred taxes are calculated on the basis of the tax rates in effect or expected in Germany on the date they are recovered.

There is currently a uniform rate of corporation tax of 15 per cent plus a solidarity surcharge of 5.5 per cent. Taking trade tax into account, this results in an aggregate tax rate of 27.5 per cent. There were no carryforwards of tax losses as at the reporting date.

### Valuation units

The Company exercises its option to create valuation units. The main reason it does so is to hedge against interest rate and currency risks by creating valuation units comprising assets, liabilities or transactions that are highly likely to be concluded as well as suitable hedging transactions. Effectiveness is monitored using suitable methods such as the critical term match or hypothetical derivative methods.

## Notes to the balance sheet

#### Fixed assets

The changes in fixed assets are described in the statement of changes in fixed assets.

In financial year 2016, write-downs of  $\in 18.0$  million (previous year:  $\in 41.9$  million) were recognised on financial assets. Impairment losses totalling  $\in 11.3$  million were recognised on account of the unsatisfactory economic performance of Global Markets Exchange Group International LLP, Bondcube Ltd., R5FX Ltd. and Impendium Systems Ltd. A loan granted as part of an asset deal ( $\in 6.5$  million) was also written off because it is thought to be irrecoverable. In addition, impairment losses were recognised on loans to companies in which Deutsche Börse AG holds an equity interest ( $\in 0.2$  million).

### Goodwill

A useful life of 10 years is assumed for the goodwill purchased in 2011 as part of an asset deal.

# Shares in affiliated companies

As at 31 December 2016, Deutsche Börse AG had investments in affiliated companies as follows:

| Company   | Domicile       | Equity in € thous. 1) | 2016 net profit/loss in € thous. | Equity<br>interest<br>direct<br>(indirect) |
|---|----------------|-----------------------|----------------------------------|--|
| Assam SellerCo, Inc.                                      | USA            | 21.907                | 142                              | 100,00%                                    |
| Assam SellerCo Service, Inc. 2)                           | USA            | n/a                   | n/a                              | (100,00)%                                  |
| MNI Financial and Economic Information (Beijing) Co. Ltd. | China          | 238                   | 22                               | (100.00)%                                  |
| Need to Know News, LLC                                    | USA            | 1.994                 | 0                                | (100.00)%                                  |
| Börse Frankfurt Zertifikate AG                            | Germany        | 13.168                | 3.972                            | 100.00%                                    |
| Börse Frankfurt Zertifikate Holding S.A. in liquidation   | Luxembourg     | 171                   | -93                              | 100,00%                                    |
| Clearstream Holding AG                                    | Germany        | 2.285.314             | 167.173                          | 100.00%                                    |
| Clearstream International S.A.                            | Luxembourg     | 1.103.930             | 188.005                          | (100.00)%                                  |
| Clearstream Banking S.A.                                  | Luxembourg     | 1.193.498             | 172.084                          | (100.00)%                                  |
| Clearstream Banking Japan, Ltd.                           | Japan          | 1.379                 | 163                              | (100.00)%                                  |
| REGIS-TR S.A.   | Luxembourg     | 6.129                 | 548                              | (50.00)%                                   |
| Clearstream Banking AG                                    | Germany        | 346.133               | 47.517                           | (100.00)%                                  |
| Clearstream Global Securities Services Ltd.               | Ireland        | 9.870                 | 1.823                            | (100.00)%                                  |
| Clearstream Operations Prague s.r.o.                      | Czech Republic | 7.221                 | 425                              | (100.00)%                                  |
| Clearstream Services S.A.                                 | Luxembourg     | 110.557               | 5.910                            | (100.00)%                                  |
| Deutsche Börse Asia Holding Pte. Ltd.                     | Singapore      | 15.237                | -4.553                           | 100.00%                                    |

| Eurex Exchange Asia Pte. Ltd.                                | Singapore Singapore Germany | 10.397<br>472 | 176     | (100.00)%  |
|--|-----------------------------|---------------|---------|------------|
| -  |                             | 472           | 0.000   |            |
| DD1.V  | Germany                     |               | -2.060  | (100.00)%  |
| DB1 Ventures GmbH  |                             | 12            | -13     | 100,00%    |
| Deutsche Börse Market Data + Services<br>Singapore Pte. Ltd. | Singapore                   | 315           | -619    | 100.00%    |
| Deutsche Boerse Systems, Inc.                                | USA                         | 38.020        | 6.672   | 100.00%    |
| Deutsche Börse Photography Foundation gGmbH                  | Germany                     | 177           | 16      | 100.00%    |
| Deutsche Börse Services s.r.o.                               | Czech Republic              | 9.598         | 2.284   | 100.00%    |
| Eurex Frankfurt AG   | Germany                     | 1.635.692     | 512.630 | 100.00%    |
| Eurex Clearing AG  | Germany                     | 364.813       | 2.209   | (100.00)%  |
| Eurex Clearing Security Trustee GmbH                         | Germany                     | 79            | 1       | (100.00) % |
| Eurex Bonds GmbH   | Germany                     | 10.785        | 344     | (79.44)%   |
| Eurex Repo GmbH  | Germany                     | 7.000         | 4.237   | (100.00)%  |
| Eurex Global Derivatives AG                                  | Switzerland                 | 496.809       | 62.898  | 100.00%    |
| Eurex Zürich AG  | Switzerland                 | 302.565       | 5.461   | (100.00)%  |
| European Energy Exchange AG                                  | Germany                     | 129.282       | 66.132  | (62.91)%   |
| Agricultural Commodity Exchange GmbH                         | Germany                     | 2.046         | -1.697  | (62.91)%   |
| APX Shipping B.V.  | Netherlands                 | 0             | 32      | (62,91)%   |
| Cleartrade Exchange Pte. Ltd.                                | Singapore                   | 2.656         | -1.618  | (62,91)%   |
| EEX Link GmbH  | Germany                     | 51            | 3       | (62,91)%   |
| European Commodity Clearing AG                               | Germany                     | 73.935        | 48.195  | (62.91)%   |

| Company  | Domicile       | Equity in € thous. 1) | 2016 net profit/loss in € thous. | Equity<br>interest<br>direct<br>(indirect) |
|--|----------------|-----------------------|----------------------------------|--|
| European Commodity Clearing<br>Luxembourg S.à.r.l. | Luxembourg     | 82                    | 68                               | (62.91)%                                   |
| EEX Power Derivatives GmbH                         | Germany        | 6.018                 | 27.666                           | (62.91)%                                   |
| Global Environmental Exchange GmbH                 | Germany        | 48                    | -2.690                           | (62.91)%                                   |
| Power Exchange Central Europe a.s.                 | Czech Republic | 1.266                 | 146                              | (41,94)%                                   |
| Powernext SA                                       | France         | 29.803                | 9.927                            | (55.19)%                                   |
| EPEX Spot SE                                       | France         | 65.135                | 22.845                           | (28.97)%                                   |
| APX Commodities Ltd.                               | United Kingdom | 2.146                 | 280                              | (28.97)%                                   |
| EPEX Netherlands B.V.                              | Netherlands    | 0                     | 0                                | (28.97)%                                   |
| EPEX SPOT Belgium S.A.                             | Belgium        | 3.782                 | 239                              | (28,97)%                                   |
| EPEX SPOT Schweiz AG                               | Switzerland    | 146                   | 20                               | (28.97)%                                   |
| JV Epex-Soops B.V.                                 | Netherlands    | 186                   | 11                               | (17.38)%                                   |
| Gaspoint Nordic A/S                                | Denmark        | 687                   | 688                              | (55,19)%                                   |
| PEGAS CEGH Gas Exchange Services<br>GmbH           | Austria        | 7.117                 | -367                             | (28,14)%                                   |
| Eurex Services GmbH (dormant)                      | Germany        | 101                   | 0                                | 100.00%                                    |
| Finnovation S.A.                                   | Luxembourg     | 197.876               | 45.072                           | 100.00%                                    |
| Impendium Systems Ltd.                             | United Kingdom | 578                   | -697                             | 100.00%                                    |
| STOXX Ltd.   | Switzerland    | 117.384               | 52.797                           | 100.00%                                    |
| STOXX Australia Pty Limited                        | Australia      | 39                    | 19                               | (100.00)%                                  |
| Tradegate Exchange GmbH                            | Germany        | 1.537                 | 526                              | 78.72%                                     |

| Company                                      | Domicile  | Equity in € thous. 1) | 2016 net<br>profit/loss in €<br>thous. | Equity<br>interest<br>direct<br>(indirect) |
|--|-----------|-----------------------|--|--|
| 360T Treasury Systems AG                     | Germany   | 43.434                | 13.633                                 | 100.00%                                    |
| 360T Asia Pacific Pte. Ltd.                  | Singapore | 2.786                 | -74                                    | (100.00)%                                  |
| 360 Trading Networks Inc.                    | USA       | 6.446                 | 116                                    | (100.00)%                                  |
| 360 Trading Networks LLC                     | UAE       | 336                   | 41                                     | (100.00)%                                  |
| Finbird GmbH                                 | Germany   | 1.424                 | 0                                      | (100.00)%                                  |
| Finbird Ltd.                                 | Israel    | -315                  | -49                                    | (100.00)%                                  |
| ThreeSixty Trading Networks (India) Pte.Ltd. | India     | 898                   | 27                                     | (100.00)%                                  |

Includes capital reserves and retained earnings, accumulated gains or losses and net profit or loss for the year and, if necessary, further components according to the respective local GAAP

The currency exchange rate was used as of December 31, 2016 for the conversion of the equity and net profit/loss from foreign currencies.

# **Equity investments**

As at 31 December 2016, Deutsche Börse AG held the following equity investments:

| Company  | Domicile       | Equity in € thous. 1) | 2016 net<br>profit/loss in €<br>thous. | Equity<br>interest<br>direct<br>(indirect) |
|--|----------------|-----------------------|--|--|
| Bondcube Limited in Administration               | United Kingdom | -426                  | -251                                   | 30,00%                                     |
| BrainTrade Gesellschaft für<br>Börsensysteme mbH | Germany        | 1.614                 | 214                                    | (28.58)%                                   |
| China Europe International Exchange AG           | Germany        | 21.897                | -4.373                                 | 40.00%                                     |

<sup>&</sup>lt;sup>2)</sup> The Assam SellerCo Service, Inc. is contained in the subgroupe of Assam SellerCo, Inc.

| Company  | Domicile       | Equity in € thous. 1) | 2016 net<br>profit/loss in €<br>thous. | Equity<br>interest<br>direct<br>(indirect) |
|--|----------------|-----------------------|--|--|
| Deutsche Börse Commodities GmbH                    | Germany        | 4.752                 | 2.126                                  | 16,20%                                     |
| Digital Vega FX Ltd                                | United Kingdom | 912                   | 124                                    | 24,03%                                     |
| figo GmbH  | Germany        | 6.682                 | -1.975                                 | 18,67%                                     |
| Global Markets Exchange Group<br>International LLP | United Kingdom | 456                   | -172                                   | 45,13%                                     |
| Index Marketing Solutions Limited                  | United Kingdom | -1                    | 0                                      | 31,45%                                     |
| LuxCSD S.A.  | Luxembourg     | 5.747                 | 425                                    | (50,00)%                                   |
| PHINEO gAG   | Germany        | 3.647                 | 783                                    | 12,00%                                     |
| R5FX Ltd   | United Kingdom | 164                   | -1.375                                 | 24,37%                                     |
| SEEPEX a.d.  | Serbia         | 1.512                 | -243                                   | (7,24)%                                    |
| Switex GmbH  | Germany        | 25                    | 0                                      | 40,00%                                     |
| Tradegate AG Wertpapierhandelsbank                 | Germany        | 42.637                | 12.644                                 | 14,86%                                     |
| ZDB Cloud Exchange GmbH in<br>Liquidation          | Germany        | 158                   | -902                                   | 49,90%                                     |
| Zimory GmbH in Liquidation                         | Germany        | 413                   | -525                                   | 30,03%                                     |

The currency exchange rate was used as of December 31, 2016 for the conversion of the equity and net profit/loss from foreign currencies.

### Receivables from affiliated companies

The item breaks down as follows:

|  | 31.12.2016 | 31.12.2015 |
|--|------------|------------|
|  | €m         | €m         |
| Receivables from affiliated companies  |            |            |
| Trade receivables  | 93.8       | 71.4       |
| Other assets   | 339.8      | 177.7      |
| Of which resulting from the profit and loss transfer agreement with Clearstream Holding AG | 167.2      | 147.1      |
| Of which resulting from a loan to  | 161.6      | 0.0        |
| Deutsche Börse Systems Inc.  |            |            |
| Total receivables from affiliated companies  | 433.6      | 249.1      |

### Receivables from companies in which the Company has a participating interest

This balance sheet item primarily comprises trade receivables from companies in which the Company has a participating interest.

### Prepaid expenses

Prepaid expenses contain discounts for bond issues as defined by section 250 (3) HGB of &8.7 million (previous year: &10.5 million).

#### Deferred tax assets

Deutsche Börse AG does not exercise the option to recognise deferred tax assets.

# Equity

The fully paid-in share capital amounts to €193.0 million, and is divided into 193,000,000 no-par value registered shares.

There were 6,194,985 treasury shares held at the end of the year (previous year: 6,276,014), representing 3.2 per cent of share capital. As part of employee programmes, 81,029 shares were sold at a price of  $\[ \in \]$ 5.9 million during financial year 2016. On the basis of the share price of  $\[ \in \]$ 77.62 as at 31 December 2016, the shares are valued at  $\[ \in \]$ 480.9 million. This figure results primarily from share buybacks since 2005.

Subject to the agreement of the Supervisory Board, the Executive Board is authorised to increase the subscribed share capital by the following amounts:

|                                    | Amount in € | Date of<br>shareholder<br>approval | Conclusion of approval process | Existing shareholders' pre-emptive rights may be disapplied for fractioning and/or may be disapplied if the share issue is:  |
|------------------------------------|-------------|------------------------------------|--------------------------------|--|
| Authorised<br>share capital<br>I*  | 13,300,000  | 11 May 2016                        | 10 May 2021                    | - N/A  |
| Authorised<br>share capital<br>II* | 19,300,000  | 13 May 2015                        | 12 May 2020                    | <ul> <li>for cash at an issue price not significantly lower than the exchange-traded share price up to a maximum amount of 10 per cent of the nominal capital to issue new shares</li> <li>against non-cash contributions for the purpose of acquiring companies, parts of companies, interests in companies, or other assets</li> </ul> |
| Authorised<br>share capital        | 38,600,000  | 13 May 2015                        | 12 May 2020                    | N/A  |
| Authorised<br>share capital<br>IV  | 6,000,000   | 16 May 2012                        | 15 May 2017                    | - for the issuance of up to 900,000 new shares per year to Executive Board members and employees of the Company as well as to the management and employees of affiliated companies within the meaning of sections 15 et seq. AktG  |

<sup>\*</sup>Shares may only be issued without subscription rights if during the term of the authorisation the total number of new shares issued without subscription rights (including those issued in accordance with other authorisations) does not constitute more than 20 per cent of the share capital.

### Contingent capital

By resolution of the Annual General Meeting on 15 May 2014, the Executive Board was authorised – until 14 May 2019 and subject to the approval of the Supervisory Board – to issue individual or multiple convertible bonds and/or bonds with warrants or a combination of these instruments having a total nominal value of up to €2,500,000,000 and with limited or unlimited terms and to grant the holders/creditors conversion rights and/or options on new no-par value registered shares in Deutsche Börse AG with a proportionate interest in the share capital totalling up to €19,300,000, subject to the terms and conditions of the convertible bonds/the warrants attached to the bonds with warrants.

Subject to the Supervisory Board's approval, the Executive Board is authorised to disapply shareholders' pre-emptive rights to bonds with conversion rights or options on shares in Deutsche Börse AG in the following cases: (i) For the purpose of eliminating fractions; (ii) If a bond's issue price is not significantly lower than the theoretical market value calculated using recognised financial and mathematical methods and the sum of the shares attributable to these bonds does not exceed 10 per cent of the share capital; (iii) To grant the holders of conversion rights and/or options on shares in Deutsche Börse AG as many pre-emptive rights as they would be entitled to after exercising these rights, for the purpose of eliminating dilution.

The bonds may also be issued by German or foreign-domiciled companies affiliated with Deutsche Börse AG in accordance with sections 15 et seq. AktG. As a result, the share capital was increased conditionally by up to  $\[ \in \] 19,300,000$  (contingent capital 2014). So far, no use has been made of the authorisation to issue convertible bonds and/or bonds with warrants.

No other rights to acquire shares existed at 31 December 2016 or 31 December 2015.

The Company's capital reserves and retained earnings performed as follows:

|  | Capital reserves | Retained earnings |                         |       |
|--|------------------|-------------------|-------------------------|-------|
|  |                  | Statutory reserve | Other retained earnings | Total |
|  | €m               | €m                | €m                      | €m    |
| Brought forward as at 1 January 2016     | 1,363.4          | 0.0               | 528.9                   | 528.9 |
| Addition from previous year's net profit | 0.0              | 0.0               | 4.9                     | 4.9   |
| Addition from 2016 net income            | 0.0              | 0.0               | 108.2                   | 108.2 |
| Addition due to sale of own shares       | 1.8              | 0.0               | 4.0                     | 4.0   |
| Balance as at 31 December 2016           | 1,365.2          | 0.0               | 646.0                   | 646.0 |

An amount of €27.2 million is general barred from distribution in accordance with section 268 (8) HGB. This comprises the following components:

|   | 31.12.2016 | 31.12.2015 |
|---|------------|------------|
|   | €m         | €m         |
| Plan assets pursuant to section 246 (2) clause 2 HGB  | 9.9        | 4.5        |
| (amount from the capitalisation of assets at fair value pursuant to section 246 (2) clause 2 HGB less deferred tax liabilities owed on this amount)   |            |            |
| Pension provision difference pursuant to section 253 (6) HGB (difference between the 10-year and 7-year average discount on pension provisions less deferred tax liabilities owed on this amount) | 17.3       | 0.0        |

However, since the freely available reserves exceed the dividend-restricted amounts, this distribution block does not exist in accordance with section 253 (6) clause 2 HGB and section 268 (8) HGB.

A profit carryforward from the previous year amounting to €4.9 million was held in financial year 2016.

### Proposal for the appropriation of earnings

The Executive Board proposes appropriating the net profit of EUR 445,000,000 reported in Deutsche Börse AG's annual financial statements as follows:

Distributing EUR 2.35 for each no-par value share granting entitlement to a dividend, i.e. EUR 438,991,785.25 in total, and adding an amount of EUR 6,008,214.75 to "Other retained earnings".

The proposed appropriation of earnings takes into account the treasury shares held directly or indirectly by the Company, which do not grant entitlement to a dividend pursuant to section 71b AktG. The number of shares granting entitlement to a dividend may increase or decrease prior to the Annual General Meeting as a result of the acquisition of treasury shares (with or without the subsequent withdrawal of the acquired shares) or the sale of treasury shares. In this case, a correspondingly amended proposal for a resolution regarding the appropriation of earnings will be submitted to the Annual General Meeting, with an unchanged distribution of EUR 2.35.

## Provisions for pensions and other employee benefits

The cumulative costs of the plan assets amount to €173.8 million (previous year: €161.0 million).

The plan assets, which correspond to a 71.4 per cent share (previous year: 69.9 per cent) in a domestic alternative investment fund as defined by section 1 (10) of the Kapitalanlagegesetzbuch (KAGB, German Capital Investment Code), had a fair value at the balance sheet date of €187.4 million (previous year: €167.2 million), which is equivalent to the current value as defined by section 278 in conjunction with section 168 KAGB. This special fund is an international mixed fund (mixed special fund) with regulatory investment restrictions. In accordance with the investment guidelines, an absolute return approach with a capital protection mechanism is applied and investments can be made in different asset classes. During the period under review, €7.6 million (previous year: €3.9 million) was withdrawn. €6.1 million of this amount consisted of ongoing pension payments and was immediately added back to the plan assets. A total amount of €20.3 million (previous year: €19.1 million) was added to the special fund in the year under review. This asset is protected from any creditor claims and is thus not repayable on demand.

| Pension liabilities on the basis of section 246 (2) clause 2 HGB |        |  |  |  |
|--|--------|--|--|--|
|  | €m     |  |  |  |
| Pension obligations payable                                      | 205.4  |  |  |  |
| Fair value of plan assets  | -187.4 |  |  |  |
| Provisions for pensions and other employee benefits              | 18.0   |  |  |  |
|  |        |  |  |  |
| Netting profit and loss  |        |  |  |  |
|  | €m     |  |  |  |
| Expenses arising from pension obligations                        | 0.1    |  |  |  |
| Net income stated under personnel expenses                       | 0.1    |  |  |  |
| Interest expense arising from pension obligations                | -4.0   |  |  |  |
| Reversal of plan assets  | 7.5    |  |  |  |
| Income from plan assets  | 0.1    |  |  |  |
| Net income stated under financial result                         | 3.6    |  |  |  |

Due to a change in the HGB relating to the implementation of the Mortgage Credit Directive, the pension provisions have been discounted using a 10-year average discount since 2016 (until 2015: 7-year average discount). The resulting difference is as follows:

| Value of obligation based on different discount rates | €m             |
|---|----------------|
| Pension provision discounted using 10-year average    | 212,496,277.00 |
| Pension provision discounted using 7-year average     | 236,397,995.00 |
| Difference  | 23,901,718.00  |

The difference less deferred taxes may not be distributed pursuant to section 253 (6) HGB.

# Other provisions

Other provisions, amounting to €199.1 million, comprise the following:

|   | €m    |
|---|-------|
| Variable remuneration   | 42.1  |
| Provisions made as part of the efficiency programmes  | 40.5  |
| Interest relating to tax audit  | 33.1  |
| Outstanding invoices  | 23.9  |
| Phantom stock option plans and stock bonus plan   | 17.0  |
| Other personnel provisions  | 16.9  |
| Anticipated losses relating to derivatives and others   | 9.3   |
| Obligation to reimburse current and future pension payments to the chamber of commerce (IHK) on | 8.1   |
| the basis of the transition agreement   |       |
| Process risks   | 2.3   |
| Anticipated losses from leases and asset retirement obligations                                 | 2.2   |
| Remuneration for the Supervisory Board  | 1.8   |
| Miscellaneous provisions  | 1.9   |
| Total other provisions  | 199.1 |

# Liabilities

Liabilities are divided into the categories below. Lien rights or similar rights are not included in liabilities.

| Amount in €m  | Total amount         | Thereof: > 5 years   |
|---|----------------------|----------------------|
| Bonds (previous year)   | 2,300.0<br>(2,660.5) | 1,700.0<br>(1,700.0) |
| Trade payables (previous year)  | 19.5<br>(36.6)       | 0.0                  |
| Liabilities towards affiliated companies (previous year)                                      | 2,399.9<br>(1,213.8) | 0.0 (0.0)            |
| - Thereof trade payables (previous year)  | 82.2<br>(59.3)       | 0.0 (0.0)            |
| - Thereof other liabilities (previous year)   | 2,317.7<br>(1,154.5) | 0.0 (0.0)            |
| Payables to other companies in which the Company has a participating interest (previous year) | 0.0<br>(0.1)         | 0.0 (0.0)            |
| - Thereof trade payables (previous year)  | 0.0<br>(0.1)         | 0.0 (0.0)            |
| - Thereof other liabilities (previous year)   | 0.0 (0.0)            | 0.0 (0.0)            |
| Other liabilities (previous year)   | 39.7<br>(33.3)       | 0.0 (0.1)            |
| - Thereof taxes (previous year)   | 3.6<br>(3.6)         | 0.0 (0.0)            |
| - Thereof social security contributions (previous year)                                       | 0.1 (0.2)            | 0.0 (0.0)            |
| Total liabilities □(previous year)  | 4,759.1<br>(3,944.3) | 1,700.0<br>(1,700.1) |

Lien rights or similar rights are not included in liabilities.

# Income statement disclosures

### Sales revenue

Based on the definition of sales revenue that applied in financial year 2016, sales revenue would have amounted to  $\[mathbb{\in}\]$ 1,280.5 million in the preceding financial year. The discrepancy of  $\[mathbb{\in}\]$ 98.6 million stems in particular from the classification of non-typical services as sales revenue in accordance with BilRUG. In the past, this compensation was reported as other operating income.

Sales revenue breaks down by field of activity as follows:

| Sales revenue by segment | 2016    |
|--------------------------|---------|
| Eurex                    | 799.4   |
| MD+S                     | 275.8   |
| Xetra                    | 175.8   |
| Clearstream              | 49.2    |
| Total                    | 1,300.2 |

# Other operating income

Other operating income breaks down as follows:

|  | 2016  | 2016 2015    |               |
|--|-------|--------------|---------------|
|  |       | After BilRUG | Before BilRUG |
|  | €m    | €m           | €m            |
| Disposal of equity interests                       | 99.0  | 5.7          | 5.7           |
| Income from currency translation                   | 32.4  | 53.0         | 53.0          |
| Reversal of provisions from previous years         | 12.8  | 5.4          | 5.4           |
| Income from receivables impaired in previous years | 1.3   | 2.6          | 2.6           |
| Other  | 3.6   | 3.8          | 5.2           |
| Agency agreements for affiliated companies         | 0.0   | 0.0          | 96.9          |
| Total other operating income                       | 149.1 | 70.5         | 168.8         |

# Other operating expenses

Other operating expenses break down as follows:

|   | 2016  | 2015  |
|---|-------|-------|
|   | €m    | €m    |
| Agency fees to affiliated companies   | 241.7 | 252.6 |
| Legal and consulting expenses   | 199.5 | 154.5 |
| IT services   | 51.4  | 43.0  |
| Lease expenses  | 39.4  | 41.0  |
| Sales of price information  | 32.5  | 30.2  |
| CCP transactions  | 28.4  | 6.3   |
| Non-deductible input tax  | 13.4  | 7.3   |
| Xetra Market Services   | 12.9  | 15.0  |
| Advertising and marketing   | 9.5   | 9.1   |
| Communication network   | 8.1   | 9.1   |
| Price information from regional stock exchanges and exchange brokers                              | 7.8   | 7.4   |
| Travel, hospitality and entertainment expenses  | 6.4   | 7.2   |
| Contributions, charges and fees   | 4.5   | 3.2   |
| Incidental personnel costs  | 3.1   | 3.3   |
| Currency translation expenses  from exchange rate differences  from the valuation of bonds in USD | 26.0  | 47.6  |
|   | 0.0   | 41.0  |
| Other   | 35.4  | 30.6  |
| Total other operating expenses  | 720.0 | 708.4 |

Expenses of €1.8 million relating to other periods are also included in the "Other" item. These are bad debts.

# Expenses relating to other periods

|   | Amount |
|---|--------|
|   | €m     |
| Processing of CCP (subsequent charging for the years 2013 – 2015) | 14.2   |
| Bad debts   | 1.8    |
| Agency fees to affiliated companies                               | 0.5    |
| Total expenses relating to other periods                          | 16.5   |

### Auditor's fee

The Company is included in the scope of consolidation of Deutsche Börse AG. In accordance with section 285 (17) HGB, disclosures as to the auditor's fee are contained in the notes to the consolidated financial statements of Deutsche Börse AG.

# Other disclosures

### Disclosures on derivative financial instruments and hedging transactions

Deutsche Börse AG held derivative financial instruments on the balance sheet date. These are carried at fair value, and some have been designated as part of hedging transactions.

Deutsche Börse AG has made payments in connection with a service agreement whose repayment depends on the occurrence of future events. Since these conditions are not closely related to the underlying contract, the embedded derivative was carried separately. It had a negative fair value of EUR 3.3 million on 31 December 2016.

### Disclosures on valuation units

The Company reports the following transactions in derivative financial instruments that are the subject of a valuation unit as defined by section 254 HGB as at the balance sheet date:

| Risk     |   | Underlying transaction  |                    | Hedging instrument  |                    | Type of cash-<br>generating unit | Prospective<br>effectivenes<br>s     |
|----------|---|---|--------------------|---|--------------------|----------------------------------|--------------------------------------|
|          | Туре  | Туре  | Amount             | Risk  | Amount             |                                  |                                      |
| Currency | Hedging of<br>currency risks<br>relating to the<br>potential<br>devaluation of<br>the USD against<br>the euro | Part of a loan to a<br>subsidiary of<br>Deutsche Börse<br>AG that is<br>denominated in<br>USD | \$170.0<br>million | Forward<br>exchange<br>transaction:<br>sale of USD<br>on 31 March<br>2017 | \$170.0<br>million | Cash flow hedge                  | Hypothetical<br>derivative<br>method |

The hedge was completely effective during the period under review. Due to changes in the value of the USD against the euro, an expense of EUR 6.0 million was recognised with an effect on income. This is offset by corresponding income from the valuation of the loan in the foreign currency.

### Other financial obligations and transactions not included in the balance sheet

| Amount in €m  | Total amount  | Thereof: up to 1 year | Thereof: 1-5<br>years | Thereof: > 5 years |
|---|---------------|-----------------------|-----------------------|--------------------|
| Rental, leasing and maintenance contracts (previous year)       | 191.0 (239.9) | 36.7 (48.0)           | 95.3 (110.9)          | 59.0 (81.0)        |
| Management and agency contracts (previous year)                 | 273.8 (249.4) | 273.8 (249.4)         | 0.0 (0.0)             | 0.0 (0.0)          |
| - Thereof to affiliated or associated companies (previous year) | 272.3 (249.4) | 272.3 (249.4)         | 0.0 (0.0)             | 0.0 (0.0)          |
| Other contracts, including service agreements (previous year)   | 16.6 (9.2)    | 4.9 (4.6)             | 8.2 (4.0)             | 3.5 (0.6)          |

Deutsche Börse AG issued a letter of comfort in favour of Eurex Clearing AG on 15 June 2016. In it, Deutsche Börse AG undertakes to provide Eurex Clearing AG with the financial resources it requires to meet its obligations. The maximum aggregate amount to be provided in accordance with the letter of comfort is €600 million. If Deutsche Börse AG makes payments to Eurex Clearing AG in the form of borrowed capital on the basis of the letter of comfort dated 15 June 2016, these payments shall be made available to Eurex Clearing AG in the form of an interest-free loan. The letter of comfort does not grant any rights to third parties. The letter of comfort issued by Deutsche Börse AG on 15 June 2016 replaced its letter of comfort dated 20 November 2012. Due to the risk management system implemented by Eurex Clearing AG, in particular the lines of defence, and the fact that Deutsche Börse AG has not been called upon in the event of defaults by clearing participants or other situations in the past, Deutsche Börse AG currently believes that utilisation of the comfort letter is unlikely.

In addition, in accordance with section 5 (10) of the statute of the Deposit Protection Fund, an unlimited statement of commitment has been issued to Clearstream Banking AG, according to which Deutsche Börse AG indemnifies Bundesverband deutscher Banken e.V. from all potential loss claims.

Moreover, Deutsche Börse AG has provided Ioan commitments in favour of affiliated companies and companies in which the Company has a participating interest of € 80 million and GBP 0.3 million.

Provisions arising from deferred compensation were recognised in the balance sheet under employee expenses for individual subsidiaries. However, as Deutsche Börse AG has an obligation as a provider towards participating employees, a contingent liability of  $\leqslant$  31.0 million (previous year:  $\leqslant$  29.6 million) arises which is equivalent to the amount of the provisions made by the individual subsidiaries.

### Supervisory Board

The members of the Supervisory Board are:

Dr Joachim Faber

Chairman

Independent management consultant, Grünwald

Other appointments

HSBC Holding plc, London

(member of the Board of Directors)

Coty Inc., New York

(member of the Board of Directors)
Joh. A. Benckiser SARL, Luxembourg

(Chairman of the Committee of Shareholders)

Allianz France, Paris (member of the Board of Directors)

Richard Berliand

Management consultant, Executive Director, Richard Berliand

Deputy Chairman

Limited, Ashtead, Surrey

Chairman of the Management Committee, Renshaw Bay LLP, London

Supervisory Board

appointments

Eurex Frankfurt AG, Frankfurt/Main

Other appointments

Earth-i Ltd., Guildford (member of the Board of Directors)

Eurex Zürich AG, Zurich (member of the Board of Directors)

ITRS Group Limited, London (Chairman of the Board of Directors)

London Wine Agencies, London (Director)

Mako Europe Limited, London (member of the Board of Directors)

Man Group plc, London (member of the Board of Directors, since 19

January 2016)

Rothesay Assurance Limited, London (member of the Board of

Directors)

Rothesay Life Holdco UK Limited, London (member of the Board of

Directors)

Rothesay Life Limited, London (member of the Board of Directors)

Prof Dr Dr Ann-Kristin

**Achleitner** 

Scientific Co-Director of the Center for Entrepreneurial and Financial Services (CEFS) at the Technical University of Munich,

(since 11 May 2016)

Munich

Supervisory Board

appointments

Linde AG, Munich
Metro AG, Düsseldorf

Munich Reinsurance Company, Munich

Other appointments

ENGIE S.A., Paris (member of the Board of Directors)

Karl-Heinz Flöther

Independent management consultant, Kronberg

Supervisory Board appointments

Commerzbank AG, Frankfurt/Main

Marion Fornoff

Employee in the HR Europe & US section Deutsche Börse AG, Frankfurt/Main

Hans-Peter Gabe

Employee in the HR Compensation, Workforce & Talent Management

section, Deutsche Börse AG, Frankfurt/Main

Craig Heimark

Managing Partner, Hawthorne Group LLC, Palo Alto

Other appointments

Cohesive Flexible Technologies Corporation, Chicago

(Chairman of the Board of Directors)

Dr Monica Mächler

Member of various supervisory bodies, Pfäffikon

Other appointments

Cembra Money Bank AG, Zurich (member of the Board of Directors)

Zurich Insurance Group AG, Zurich (member of the Board of

Directors)

Zurich Insurance Group AG, Zurich (member of the Board of

Directors)

Dr Erhard Schipporeit Independent management consultant, Hanover

Supervisory Board

BDO AG, Hamburg

appointments

Fuchs Petrolub SE, Mannheim Hannover Rück SE, Hanover

HDI V.a.G., Hanover

RWE AG, Essen (since 20 April 2016)

SAP SE, Walldorf Talanx AG, Hanover

Other appointments

Fidelity Funds SICAV, Luxembourg (member of the Board of Directors,

until 25 February 2016)

Jutta Stuhlfauth Law

Lawyer, M.B.A. (Wales) and Head of Policies

and Procedures Unit, Deutsche Börse AG, Frankfurt/Main

Johannes Witt

Staff member in the Financial Accounting & Controlling Department,

Deutsche Börse AG, Frankfurt/Main

Amy Yip

Member of the management, RAYS Capital Partners Limited,

Hong Kong, Executive Director, Vitagreen, Hong Kong

Other appointments

AIG Insurance Hong Kong Limited, Hong Kong (member of the Board

of Directors)

Temenos Group AG, Geneva (member of the Board of Directors)

### Former Supervisory Board members

Gerhard Roggemann (until 11 May 2016)

Senior Advisor, Edmond de Rothschild Private Merchant Banking LLP, London

Supervisory Board appointments

Deutsche Beteiligungs AG, Frankfurt/Main (Deputy Chairman)

GP Günter Papenburg AG, Schwarmstedt (Chairman)

Fresenius SE & Co. KGaA, Bad Homburg (until 13.05.2016)

Wave Management AG, Hanover

In the year under review, the members of the Supervisory Board received remuneration of €1.8 million.

The Supervisory Board has established the following committees:

### **Audit Committee**

Dr Erhard Schipporeit (Chairman) Karl-Heinz Flöther Dr Monica Mächler Johannes Witt

### **Nomination Committee**

Dr Joachim Faber (Chairman)
Prof Dr Dr Ann-Kristin Achleitner (since 11 May 2016)
Gerhard Roggemann (until 11 May 2016)
Amy Yip

### **Personnel Committee**

Dr Joachim Faber (Chairman)
Prof Dr Dr Ann-Kristin Achleitner (since 11 May 2016)
Marion Fornoff
Gerhard Roggemann (until 11 May 2016)
Amy Yip

## Risk Committee

Richard Berliand (Chairman)
Dr Monica Mächler
Dr Erhard Schipporeit
Jutta Stuhlfauth

## **Strategy Committee**

Dr Joachim Faber (Chairman)
Prof Dr Dr Ann-Kristin Achleitner (since 11 May 2016)
Richard Berliand
Hans-Peter Gabe
Gerhard Roggemann (until 11 May 2016)
Jutta Stuhlfauth
Amy Yip

# **Technology Committee**

Richard Berliand (Chairman) Karl-Heinz Flöther Craig Heimark Johannes Witt

### **Executive Board**

The members of the Executive Board are:

### Carsten Kengeter

Chief Executive Officer

Master of Science (M.Sc.) Finance and Accounting BA Business Administration Graduate degree in Business Management (Diplom-Betriebswirt (FH))

Supervisory Board appointments

China Europe International Exchange AG (Deputy Chairman)

Other appointments

b-to-v Partner AG, St. Gallen (Member of the Board of Directors)

FNZ Group Ltd., London (Non-Executive Director)

Circuitus Capital LLP, London (Non-Executive Chairman of the

Supervisory Board)

**Andreas Preuss** 

Graduate Degree in Business Administration (Diplom-Kaufmann) Member of the Executive Board and Deputy Chief Executive Officer

Responsible for IT & Operations, Data & New Asset Classes

Supervisory Board

appointments

China Europe International Exchange AG (member, until 30 June 2016)

360 Treasury Systems AG (Chairman)

Clearstream Holding AG (member, since 1 April 2016)

European Energy Exchange AG (member, since 16 June 2016)

Other appointments

Clearstream Services S.A. (member of the Board of Directors from 1

March 2016 to 22 September 2016, Deputy Chairman of the

Supervisory Board since 22 September 2016)

International Securities Exchange, LLC (Vice Chairman and member

of the Board of Directors until 30 June 2016)

International Securities Exchange Holdings, Inc. (Vice Chairman and

member of the Board of Directors until 30 June 2016)

ISE Gemini, LLC (member of the Board of Directors, until 30 June

2016)

ISE Mercury, LLC (member of the Board of Directors, from 1 February

2016 to 30 June 2016)

Eurex Zürich AG (member of the Management Board and CEO, until

16 March 2016)

Eurex Services GmbH (member of the Management Board, until 16

February 2016)

### **Gregor Pottmeyer**

Graduate Degree in Business Administration (Diplom-Kaufmann) Member of the Executive Board and Chief Financial Officer

Supervisory Board appointments

Clearstream Holding AG (Deputy Chairman of the Supervisory Board) Eurex Clearing AG (Deputy Chairman of the Supervisory Board)

Other appointments

Clearstream Banking S.A. (Deputy Chairman of the Board of Directors until 22 September 2016, Deputy Chairman of the Supervisory Board

since 22 September 2016)

Clearstream International S.A. (Deputy Chairman of the Board of Directors until 22 September 2016, Deputy Chairman of the

Supervisory Board since 22 September 2016)

Hauke Stars

Grad. Degree in IT (Dipl.-Ing. Informatik)
Master of Science (M.Sc.)

Member of the Executive Board, Deutsche Börse AG Responsible for Cash Market, Pre-IPO & Growth Financing

Supervisory Board appointments

Eurex Frankfurt AG

Fresenius SE & Co. KgaA (member of the Supervisory Board, since

13 May 2016)

GfK SE (member of the Supervisory Board, until 20 May 2016) Klöckner & Co. SE (member of the Supervisory Board, until 13 May

2016)

Other appointments

Clearstream Services S.A. (member of the Board of Directors, until 1

March 2016)

Eurex Zürich AG (member of the Board of Directors)

Kuehne + Nagel International AG (member of the Board of Directors,

since 3 May 2016)

## Jeffrey Tessler

MBA

Member of the Executive Board, Deutsche Börse AG Responsible for Clients, Products & Core Markets

Supervisory Board appointments

China Europe International Exchange AG (member of the Supervisory Board, since 1 April 2016)

Clearstream Banking AG (Chairman)

Clearstream Holding AG (Chairman of the Supervisory Board)

Eurex Clearing AG (member of the Supervisory Board, since 1 April

2016)

Eurex Frankfurt AG (member of the Supervisory Board, since 1 April

2016)

## Other appointments

Clearstream Banking S.A. (Chairman of the Board of Directors until 22 September 2016, Chairman of the Supervisory Board since 22 September 2016)

Clearstream International S.A. (Chairman of the Board of Directors until 22 September 2016, Chairman of the Supervisory Board since 22 September 2016)

Clearstream Services S.A. (Chairman of the Board of Directors until 22 September 2016, Chairman of the Supervisory Board since 22 September 2016)

Eurex Zürich AG (member of the Board of Directors since 1 April 2016, Vice Chairman since 20 June 2016)

International Securities Exchange, LLC (member of the Board of Directors from 4 January to 30 June 2016)

ISE Mercury, LLC (member of the Board of Directors from 4 January to 30 June 2016)

ISE Gemini, LLC (member of the Board of Directors from 4 January to 30 June 2016)

LuxCSD S.A. (member of the Board of Directors until 15 February 2016)

REGIS TR. S.A. (Chairman of the Board of Directors)

#### **Executive Board**

In 2016, the total remuneration paid to members of the Executive Board amounted to € 20.4 million.

The total compensation includes share-based remuneration of  $\leqslant$  3.6 million. The shares were valued at market price on the balance sheet date. The number of stock options in the amount of 46,393 is based on a Deutsche Börse AG share price of  $\leqslant$  78.35 per share as the average price during the calendar month December 2015.

For additional disclosures regarding Executive Board compensation, please see the Deutsche Börse AG management report.

The remuneration paid to former Executive Board members and their surviving dependants amounted to €4.5 million in 2016. Provisions totalling €66.0 million have been set aside for pension obligations to former Executive Board members and their surviving dependants.

## **Employees**

As at 31 December 2016, the number of employees at Deutsche Börse AG was 1,132 (previous year: 1,153). During financial year 2016, the average number of employees was 1,118 (previous year: 1,131).

|                          | Male | Female | Total |
|--------------------------|------|--------|-------|
| Management employees     | 121  | 13     | 134   |
| Management employees     | 121  | 10     | 101   |
| Non-management employees | 589  | 395    | 984   |
| Number of employees      | 710  | 408    | 1,118 |
|                          |      |        |       |

### Intercompany agreements

As part of the profit transfer agreement concluded between Clearstream Holding AG and Deutsche Börse AG on 4 March 2008, Clearstream Holding AG is obliged to transfer its entire net income for the year to Deutsche Börse AG, less any losses carried forward from the previous year and the

amount to be added to the reserves, as required by section 300 of the AktG. Simultaneously, Deutsche Börse AG is required to equalise any losses incurred at Clearstream Holding AG during the year through loss absorption, provided that such losses have not already been balanced by transfers from other retained earnings added during the term of the contract.

On 2 March 2010, Deutsche Börse AG entered into a control agreement ("Beherrschungsvertrag") with Clearstream Banking AG. As part of this agreement, Clearstream Banking AG subordinates the management of its company to Deutsche Börse AG, and Deutsche Börse AG has the right to give instructions to the Executive Board of Clearstream Banking AG with respect to the management of the company.

## Combined management report

The management report of Deutsche Börse AG and the management report on the consolidated financial statements of Deutsche Börse AG have been summarised in accordance with section 315 (3) HGB in conjunction with section 289 (3) HGB and German Accounting Standard (GAS) 20 (22).

### Group structure

Deutsche Börse AG, which has its registered office in Frankfurt/Main, Germany, prepares consolidated financial statements in accordance with International Financial Reporting Standards. The consolidated financial statements are published in the electronic version of the German Federal Gazette and are also available at the Company's premises.

# Ownership structure

Deutsche Börse AG received the following notifications in accordance with section 21 of the Wertpapierhandelsgesetz (WpHG, German Securities Trading Act):

| Meldepflichtiger                          | Sitz und Staat, in dem sich der<br>Sitz oder Wohnort des<br>Meldepflichtigen befindet | Datum des<br>Erreichens, Über-<br>oder<br>Unterschreitens | Über-<br>/Unter-<br>schreitung<br>(+/-) | Melde-<br>schwelle<br>in % | Zurechnung gemäß §§ 21,22, 25 und 25a WpHG                | Beteiligung<br>in % | Beteiligung in<br>Stimmrechten |
|---|---|---|---|----------------------------|---|---------------------|--------------------------------|
| Deutsche Börse AG                         | Frankfurt am Main, Deutschland  | 17.02.2012  | -                                       | 5,00%                      | keine Angabe  | 4,94%               | 9.533.068                      |
|   |   |   |   |                            | §§ 21,22 WpHG   | 5,11%               | 9.868.925                      |
| Artisan Partners Funds, Inc               | Madison, USA  | 18.07.2016  | +                                       | 5,00%                      | § 25 Abs. 1 Nr. 1/2 WpHG                                  | 0,21%               | 399.896                        |
|   |   |   |   |                            | §§ 21,22 WpHG i.V.m § 25 Abs. 1 Nr.1/2 WpHG               | 4,91%               | 9.469.029                      |
| BlackRock Advisors Holdings, Inc.         | New York, USA   | 01.12.2009  | +                                       | 3,00%                      | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,35%               | 6.526.163                      |
|   |   |   |   |                            |   | 3,01%               | 5.799.497                      |
| BlackRock Delaware Holding, Inc           | Wilmington, USA   | 19.05.2015  | +                                       | 3,00%                      | § 22 Abs.1 Satz 1 Nr. 1 WpHG                              | 0,93%               | 1.787.637                      |
|   |   |   | l                                       |                            | § 22 Abs.1 Satz 1 Nr. 6 i.V.m § 22 Abs.1 Satz 2 WpHG      | 2,08%               | 4.011.860                      |
|   | 1   |   |   |                            | •                   | 5,51%               | 10.632.040                     |
| BlackRock Financial Management, Inc.      | Wilmington, USA   | 27.10.2015  | +                                       | 5.00%                      | § 25 WpHG   | 0,20%               | 380.000                        |
|   |   |   | ľ                                       | 5,557.5                    | §§ 21,22 WpHG   | 5,31%               | 10.252.040                     |
| Black Rock Group Limited                  | London, Großbritannien  | 07.12.2012  | +                                       | 2 00%                      | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,00%               | 5.790.525                      |
| black Rock Gloup Littled                  | London, Grossmannen   | 07.12.2012  | 1                                       | 3,0076                     | § 22 Abs. 1 Satz 1 W. 01. V.III. § 22 Abs. 1 Satz 2 Wpild |                     | 10.632.040                     |
| BlackRock Holdco 2, Inc.                  | Wilmington, USA   | 27.10.2015  | +                                       | 5,00%                      | Carwallo  | 5,51%               |                                |
|   |   |   |   |                            | ,   | 0,20%               | 380.000                        |
|   |   |   |   | -                          | §§ 21,22 WpHG   | 5,31%               | 10.252.040                     |
| BlackRock Holdco 4, Inc.                  | Wilmington, USA   | 19.05.2015  | +                                       | 3,00%                      |   | 3,01%               | 5.799.497                      |
|   |   |   |   |                            | § 22 Abs. 1 Satz 1 Nr. 1 WpHG                             | 0,93%               | 1.787.637                      |
|   |   |   |   |                            | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 2,08%               | 4.011.860                      |
| BlackRock Holdco 6, Inc.                  | Wilmington, USA   | 19.05.2015  | +                                       | 3,00%                      |   | 3,01%               | 5.799.497                      |
|   |   |   |   |                            | § 22 Abs. 1 Satz 1 Nr. 1 WpHG                             | 0,93%               | 1.787.637                      |
|   |   |   |   |                            | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 2,08%               | 4.011.860                      |
|   |   |   |   |                            | ·   | 6,12%               | 11.803.225                     |
| BlackRock, Inc.                           | Wilmington, USA   | 27.06.2016  | +                                       | 3,00%                      | § 25 Abs. 1 Nr. 1 WpHG                                    | 0,38%               | 729.792                        |
|   |   |   |   |                            | §§ 21,22 WpHG   | 5,74%               | 11.073.433                     |
| BlackRock International Holdings, Inc.    | New York, USA   | 02.08.2012  | 1.                                      | 2 000/                     | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,58%               | 6.981.055                      |
|   |   |   | +                                       |                            | ·   |                     |                                |
| BR Jersey International Holdings, L.P.    | St. Helier, Jersey, Kanalinseln   | 08.02.2012  | +                                       | 1                          | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,58%               | 6.981.055                      |
| FIL Limited                               | Pembroke, Bermuda   | 11.10.2016  | +                                       | 3,00%                      | § 22 Abs. 1 Satz 1 Nr. 6 WpHG                             | 3,00%               | 5.792.276                      |
| Invesco Limited                           | Hamilton, Bermuda   | 03.11.2016  | +                                       |                            |   | 5,01%               | 9.674.103                      |
|   |   |   |   | 5,00%                      | §§ 21, 22 WpHG  | 2,91%               | 5.615.833                      |
|   |   |   |   |                            | §§ 21, 22 WpHG  | 2,10%               | 4.058.270                      |
| Invesco Advisers, Inc                     | Wilmington, USA   | 21.10.2015  | +                                       | 3,00%                      | § 22 Abs, 1 Satz 1 Nr.6 WpHG                              | 3,01%               | 5.804.518                      |
| Invesco Group Services, Inc               | Wilmington, USA   | 21.10.2015  | +                                       | 3,00%                      | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| Invesco Holding Campany Limited           | Henley, Großbritannien  | 21.10.2015  | +                                       | 3,00%                      | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| Invesco North American Holdings Inc       | Wilmington, USA   | 21.10.2015  | +                                       |                            | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| Ivesco Management Group, Inc              | Wilmington, USA   | 21.10.2015  | +                                       | 1                          | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| IVZ, Inc.                                 | Wilmington, USA   | 21.10.2015  | +                                       |                            | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| IVZ UK Limited                            | Henley, Großbritannien  | 21.10.2015  | _                                       |                            | § 22 Abs. 1 Satz 1 Nr. 6 i.V.m. § 22 Abs. 1 Satz 2 WpHG   | 3,01%               | 5.804.518                      |
| Jupiter Fund Management plc UK            | London, Großbritannien  | 05.01.2017  | ľ                                       | 3,00%                      |   | 2,99%               | 5.774.950                      |
| Jupiter Fund Management pic ok            | London, Grossintaninen  | 03.01.2017  | F                                       | 3,00%                      | gy 21, 23 Abs.1 N1.1 uliu N1.2 WpHG                       |                     |                                |
|   |   |   |   |                            | 55.04.00.14.140   | 4,11%               | 7.926.928                      |
| Morgan Stanley                            | Wilmington, USA   | 21.05.2013  | -                                       | 5,00%                      | §§ 21, 22 WpHG  | 0,23%               | 448.039                        |
|   |   |   |   |                            | § 25 WpHG   | 0,25%               | 489.195                        |
|   |   |   |   |                            | § 25a WpHG  | 3,62%               | 6.989.694                      |
|   |   |   |   |                            |   | 4,01%               | 7.734.733                      |
| Morgan Stanley International Holdings Inc | Wilmington, USA   | 21.05.2013  | L                                       | 5,00%                      | §§ 21, 22 WpHG  | 0,21%               | 403.568                        |
| Morgan stanley international notdings inc | Wilmington, USA   | 21.05.2013  | _                                       | 5,00%                      | § 25 WpHG   | 0,18%               | 341.471                        |
|   |   |   |   |                            | § 25a WpHG  | 3,62%               | 6.989.694                      |
|   |   |   |   |                            |   | 3,70%               | 7.138.902                      |
| Morgan Stanley International Limited      | London, Großbritannien  | 21.05.2013  | -                                       | 5,00%                      | §§ 21, 22 WpHG  | 0,21%               | 403.568                        |
|   |   |   |   | ",==,"                     | § 25a WpHG  | 3,49%               | 6.735.334                      |
|   |   |   |   |                            | J ===p.1.0  | 3,70%               | 7.138.902                      |
| Morgan Stanley Group Europe               | London, Großbritannien  | 21.05.2013  | -                                       | 5,00%                      | §§ 21, 22 WpHG  |                     | 403.568                        |
|   |   |   |   |                            |   | 0,21%               |                                |
|   |   |   |   |                            | § 25a WpHG  | 3,49%               | 6.735.334                      |
| Morgan Stanley UK Group                   | London, Großbritannien  | 21.05.2013  | -                                       | E 000/                     | 55.04.00.04.00  | 3,70%               |                                |
|   |   |   |   | 5,00%                      | §§ 21, 22 WpHG  | 0,21%               |                                |
|   |   |   |   |                            | § 25a WpHG  | 3,49%               | 6.735.334                      |
|   |   |   |   |                            |   | 3,70%               | 7.138.902                      |
| Morgan Stanley & Co International Plc     | London, Großbritannien  | 21.05.2013  | -                                       | 5,00%                      | §§ 21, 22 WpHG  | 0,21%               | 403.568                        |
|   |   |   |   |                            | § 25a WpHG  | 3,49%               | 6.735.334                      |
| Societe General S.A                       | Paris, Frankreich   | 02.10.2015  | _                                       | 5,00%                      |   | 4,46%               | 8.614.620                      |
|   |   |   |   |                            | § 25a WpHG  | 4,44%               | 8.570.359                      |
|   |   |   |   |                            | § 25 WpHG   | 0,02%               | 44.261                         |
| Societe General Effekten GmbH             | Frankfurt am Main, Deutschland  | 10.08.2015  | _                                       | 5.00%                      | § 25a WpHG  | 4,93%               | 9.505.422                      |
| Table General Energett Gilbin             |   |   |   | 3,0076                     | J ===p  | 4,60%               | 8.882.666                      |
| UBS AG                                    | Zürich, Schweiz   | 20.05.2014  | -                                       |                            | 66 21 22 WnHG   | 2,52%               | 4.865.398                      |
|   |   |   |   |                            | §§ 21, 22 WpHG  |                     |                                |
|   |   |   |   |                            | § 25 WpHG   | 1,39%               | 2.687.268                      |
|   | l .   |   | 1                                       | 1                          | § 25a WpHG  | 0,69%               | 1.330.000                      |

# German corporate governance code

On 8 December 2016, the Executive Board and the Supervisory Board jointly issued the updated declaration of conformity in accordance with section 161 AktG and made it available to shareholders on a permanent basis on the website of Deutsche Börse Aktiengesellschaft.

# Report on post-balance sheet date events

On 1 February 2017, Deutsche Börse AG announced that the Public Prosecutor's Office of Frankfurt am Main investigated at Deutsche Börse AG in respect of a share purchase by its Chief Executive Officer which was carried out on 14 December 2015 in implementation of the Executive Board's remuneration programme as approved by the Supervisory Board of Deutsche Börse AG. Such programme provides for an investment of the Executive Board members in shares of Deutsche Börse AG. Deutsche Börse AG and the Chief Executive Officer fully cooperate with the public prosecutor.

On 6 February 2017, the relevant bodies of Deutsche Börse AG and London Stock Exchange Group plc decided to formally submit the divestment of LCH.Clearnet SA by LCH.Clearnet Group Limited as a remedy to the European Commission in order to address anti-trust concerns raised by the European Commission in relation to the merger of both companies.

Following the market test in relation to the remedy proposal of 6 February 2017, the European Commission has raised new concerns regarding the viability of LCH SA as a divestment business in relation to access to bond and repo trading feeds currently provided for by MTS S.p.A., an Italian regulated electronic trading platform. The European Commission has therefore required that Deutsche Börse AG ("DBAG") and London Stock Exchange Group plc ("LSEG") commit to the divestment of LSEG's majority stake in MTS S.p.A. to secure merger clearance. LSEG has resolved tonight to not commit to the required divestment of LSEG's majority stake in MTS S.p.A.

The parties will await the further assessment by the European Commission and currently expect a decision by the European Commission on the merger of DBAG and LSEG until April 3, 2017 the latest.

Frankfurt/Main, 07 March 2017

Deutsche Börse Aktiengesellschaft

The Executive Board

Carsten Kengeter

Andreas Preuß

Gregor Pottmeyer

Hauke Stars

Jeffrey Tessler

Naule Stas Jeffy Tesse

# Deutsche Börse Aktiengesellschaft, Frankfurt/Main

# Statement of Changes in Noncurrent Assets as at 31 December 2016

|  | Acquistion and Production Costs |               |          |               |                |               | Depreciation and Amortization |                |               |         | Book Value    |            |                |                  |                  |
|--|---------------------------------|---------------|----------|---------------|----------------|---------------|-------------------------------|----------------|---------------|---------|---------------|------------|----------------|------------------|------------------|
|  |                                 | Change due to |          |               |                |               |                               |                |               |         |               |            |                |                  |                  |
|  | Balance as at                   | mergers       | Discount | Additions     | Disposals      | Rebookings    | Balance as at                 | Balance as at  | Depreciation  | Release | Disposals     | Rebookings | Balance as at  |                  |                  |
|  | 1 Jan. 2016                     | 2016          | 2016     | 2016          | 2016           | 2016          | 31 Dec. 2016                  | 1 Jan. 2016    | 2016          | 2016    | 2016          | 2016       | 31 Dec. 2016   | 31 Dec. 2016     | 31 Dec. 2015     |
|  | €                               | €             |          | €             | €              | €             | €                             | €              | €             | €       | €             | €          | €              | €                | €                |
| Intangible Assets  |                                 |               |          |               |                |               |                               |                |               |         |               |            |                |                  |                  |
| Licenses and similar rights for data processing and software         | 166,257,271.91                  | 0.00          | 0.00     | 7,153,201.17  | 17,428.33      | 0.00          | 173,393,044.75                | 156,884,724.91 | 6,157,627.17  | 0.00    | 17,428.33     | 0.00       | 163,024,923.75 | 10,368,121.00    | 9,372,547.00     |
| Goodwill   | 514,150.36                      | 0.00          | 0.00     | 0.00          | 0.00           | 0.00          | 514,150.36                    | 218,915.36     | 49,230.00     | 0.00    | 0.00          | 0.00       | 268,145.36     | 246,235.00       | 295,235.00       |
| Prepayments  | 1,602,066.84                    | 0.00          | 0.00     | 1,518,531.00  | 1,477,066.84   | 0             | 1,643,531.00                  | 0.00           | 0.00          | 0.00    | 0.00          | 0.00       | 0.00           | 1,643,531.00     | 1,602,066.84     |
|  | 168,373,489.11                  | 0.00          | 0.00     | 8,671,732.17  | 1,494,495.17   | 0.00          | 175,550,726.11                | 157,103,640.27 | 6,206,857.17  | 0.00    | 17,428.33     | 0.00       | 163,293,069.11 | 12,257,657.00    | 11,269,848.84    |
| Tangible Assets  |                                 |               |          |               |                |               |                               |                |               |         |               |            |                |                  |                  |
| Fixtures on third party land   | 34,378,542.59                   | 0.00          | 0.00     | 2,555,535.21  | 4,377,596.58   | 0.00          | 32,556,481.22                 | 16,948,661.59  | 2,238,453.21  | 0.00    | 4,377,596.58  | 0.00       | 14,809,518.22  | 17,746,963.00    | 17,429,881.00    |
| Other assets, furnitures and office equipment                        | 226,597,110.52                  | 0.00          | 0.00     | 30,324,607.78 | 1,628,475.21   | 0.00          | 255,293,243.09                | 192,434,389.75 | 15,866,945.18 | 0.00    | 1,605,139.17  | 0.00       | 206,696,195.76 | 48,597,047.33    | 34,162,720.77    |
| Prepayments on account and construction in progress                  | 310,533.78                      | 0.00          | 0.00     | 0             | 310,533.78     | 0.00          | 0.00                          | 0.00           | 0.00          | 0.00    | 0.00          | 0.00       | 0.00           | 0.00             | 310,533.78       |
|  | 261,286,186.89                  | 0.00          | 0.00     | 32,880,142.99 | 6,316,605.57   | 0.00          | 287,849,724.31                | 209,383,051.34 | 18,105,398.39 | 0.00    | 5,982,735.75  | 0.00       | 221,505,713.98 | 66,344,010.33    | 51,903,135.55    |
| Financial Assets   |                                 |               |          |               |                |               |                               |                |               |         |               |            |                |                  |                  |
| Shares in affiliated companies                                       | 6,133,121,689.12                | 0.00          | 0.00     | 1,307,889.46  | 116,739,474.63 | 0.00          | 6,017,690,103.95              | 40,341,298.63  | 1,182,654.40  | 0.00    | 25,629,474.63 | 0.00       | 15,894,478.40  | 6,001,795,625.55 | 6,092,780,390.49 |
| Investments  | 88,146,593.56                   | 0.00          | 0.00     | 5,022,574.01  | 1,870,747.26   | -1,008,761.21 | 90,289,659.10                 | 36,615,795.57  | 10,083,351.17 | 0.00    | 1,870,747.26  | 0.00       | 44,828,399.48  | 45,461,259.62    | 51,530,797.99    |
| Loans to companies in which the company has a participating interest | 3,479,859.30                    | -77,363.22    | 0.00     | 562,358.76    | 0.00           | 0.00          | 3,964,854.84                  | 3,333,540.41   | 231,561.54    | 0.00    | 0.00          | 0.00       | 3,565,101.95   | 399,752.89       | 146,318.89       |
| Long-term securities   | 13,007,592.78                   | -307,194.66   | 0.00     | 2,022,121.48  | 831,733.00     | 1,008,761.21  | 14,899,547.81                 | 0.00           | 0.00          | 0.00    | 0.00          | 0.00       | 0.00           | 14,899,547.81    | 13,007,592.78    |
| Other loans  | 27,424.65                       | 0.00          | 0.00     | 10,000.00     | 23,309.16      | 0.00          | 14,115.49                     | 0.00           | 0.00          | 0.00    | 0.00          | 0.00       | 0.00           | 14,115.49        | 27,424.65        |
|  | 6,237,783,159.41                | -384,557.88   | 0.00     | 8,924,943.71  | 119,465,264.05 | 0.00          | 6,126,858,281.19              | 80,290,634.61  | 11,497,567.11 | 0.00    | 27,500,221.89 | 0.00       | 64,287,979.83  | 6,062,570,301.36 | 6,157,492,524.80 |
|  | 6,667,442,835.41                | -384,557.88   | 0.00     | 50,476,818.87 | 127,276,364.79 | 0.00          | 6,590,258,731.61              | 446,777,326.22 | 35.809.822.67 | 0.00    | 33,500,385.97 | 0.00       | 449,086,762.92 | 6,141,171,968.69 | 6,220,665,509.19 |

Deutsche Börse AG

Combined management report as at 31 December 2016

# Combined management report

This combined management report covers both Deutsche Börse Group and Deutsche Börse AG. It has been prepared in accordance with sections 289, 315 and 315a of the Handelsgesetzbuch (HGB, German Commercial Code) and German Accounting Standard (GAS) 20. This management report also takes into account the requirements of the Practice Statement "Management Commentary" issued by the International Accounting Standards Board (IASB).

# Fundamental information about the Group

#### Overview of Deutsche Börse Group

# **Business operations and Group structure**

Deutsche Börse AG, which is headquartered in Frankfurt/Main, Germany, is the parent company of Deutsche Börse Group. As at 31 December 2016, the Group employed 5,176 people at 37 locations in 29 countries. As one of the largest market infrastructure providers worldwide, Deutsche Börse Group offers its customers a wide range of products and services. These cover the entire financial market transactions value chain – from equities and derivatives trading through transaction clearing and settlement, securities custody, services for liquidity and collateral management, and the provision of market information, down to the development and operation of IT systems that support all these processes.

Deutsche Börse AG operates the cash market at Frankfurter Wertpapierbörse (FWB®, the Frankfurt Stock Exchange) with its fully electronic Xetra® trading platform. It also offers trading in structured products (certificates and warrants) in Germany via Börse Frankfurt Zertifikate AG. In addition, Deutsche Börse AG operates the Eurex Exchange derivatives market via Eurex Frankfurt AG and Eurex Zürich AG. Commodities spot and derivatives markets are operated by the Group's indirect subsidiary European Energy Exchange AG (EEX). Deutsche Börse AG operates a foreign-exchange trading platform via its subsidiary 360 Treasury Systems AG (360T). The Group also offers clearing services for the cash and derivatives markets (Eurex Clearing AG). Furthermore, Deutsche Börse sells price and reference data as well as other trading information; its STOXX Ltd. subsidiary develops and sells indices. All post-trade services that Deutsche Börse Group provides for securities are handled by Clearstream Holding AG and its subsidiaries (Clearstream Holding group). These include transaction settlement, the administration and custody of securities, as well as services for global securities financing, investment funds and hedge funds. Deutsche Börse AG and Clearstream Services S.A. develop and operate Deutsche Börse Group's technological infrastructure.

The → "Equity investments and partnerships strengthen product and service offering" chart gives an overview of Deutsche Börse Group's main shareholdings; its basis of consolidation is presented in full in → note 2 to the consolidated financial statements. Material changes in the reporting period include the sale of US futures and options exchange International Securities Exchange Holdings, Inc. (ISE), effective 30 June 2016; details can be found in the → "Changes to the basis of consolidation and to segment reporting" section.

Equity investments and partnerships strengthen product and service offering



- 1) Simplified presentation of main shareholdings (rounded values), as at 1 January 2017
- 2) Direct equity interest Deutsche Börse AG: 50%, direct equity interest Eurex Global Derivatives AG: 50%
- 3) Direct equity interest European Energy Exchange AG: 11%, direct equity interest Powernext SA: 40%
- $4)\ Direct\ equity\ interest\ Deutsche\ B\"{o}rse\ AG:\ 50\%,\ equity\ interest\ of\ 15\%,\ which\ is\ held\ indirectly\ via\ Zimory\ GmbH$
- 5) Direct equity interest Deutsche Börse AG: 75%, equity interest of 5%, which is held indirectly via Tradegate AG Wertpapierhandelsbank
- $\textbf{6) Direct equity interest Deutsche B\"{o}rse AG: 14\%, direct equity interest B\"{o}rse Frankfurt Zertifikate AG: 14\%, direct equity interest B\"{o}rse Frankfurt AG: 14\%, direct equity interest BTF AG: 14\%, direct equity BTF AG: 14\%, direct equit$

### Management

The governing bodies of Deutsche Börse AG, which is a German stock corporation, are the Annual General Meeting, the Supervisory Board and the Executive Board, each of which has its own areas of responsibility.

The Annual General Meeting resolves on the appropriation of the unappropriated surplus, appoints the shareholder representatives on the Supervisory Board and approves the actions of the Executive Board and the Supervisory Board. In addition, it resolves on corporate actions and other matters governed by the Aktiengesetz (AktG, German Stock Corporation Act).

The Supervisory Board appoints, supervises and advises the Executive Board and is directly involved in key decisions affecting the company. Additionally, it approves the consolidated financial statements prepared by the Executive Board. Members of the Supervisory Board are appointed for a period of three years, although the Annual General Meeting may determine a shorter term of office when electing members. The Supervisory Board of Deutsche Börse AG has twelve members: eight shareholder representatives and four employee representatives.

The Executive Board manages the company at its own responsibility; the Chief Executive Officer coordinates the activities of the Executive Board members. In financial year 2016, the Executive Board of Deutsche Börse AG had five members. The remuneration system and the remuneration paid to the individual members of the Executive Board are described in detail in the remuneration report.

### Reporting segments

Deutsche Börse Group classifies its business into four segments: Eurex, Xetra, Clearstream and Market Data + Services. This structure serves as a basis for the Group's internal management and for financial reporting (see the 🗈 table entitled "Deutsche Börse Group's reporting segments" for details).

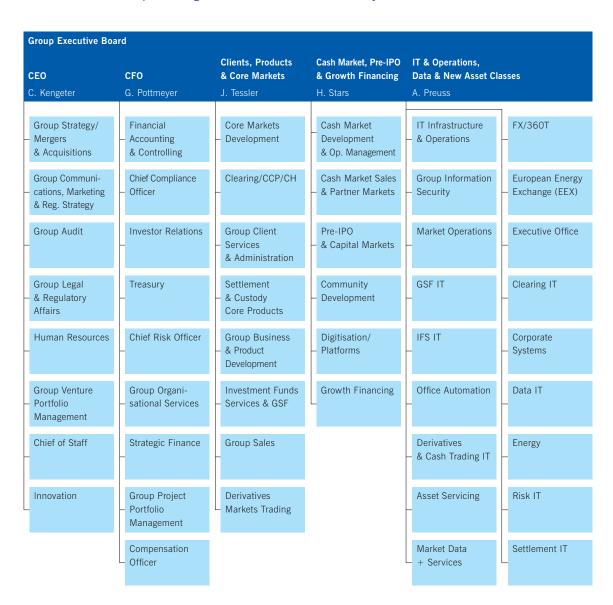
#### Deutsche Börse Group's reporting segments

| Reporting segment      | Business areas  |  |  |  |  |  |
|------------------------|---|--|--|--|--|--|
| Eurex                  | <ul> <li>Electronic trading of European derivatives (Eurex Exchange), commodities (EEX group) and foreign<br/>exchange (360T*)</li> </ul> |  |  |  |  |  |
|                        | <ul> <li>■ Eurex Repo® over-the-counter (OTC) trading platform</li> </ul>   |  |  |  |  |  |
|                        | <ul> <li>■ C7<sup>®</sup> electronic clearing architecture</li> </ul>   |  |  |  |  |  |
|                        | <ul> <li>Central counterparty for on- and off-exchange derivatives and repo transactions</li> </ul>                                       |  |  |  |  |  |
| Xetra                  | ■ Cash market with the Xetra <sup>®</sup> , Börse Frankfurt and Tradegate trading venues  |  |  |  |  |  |
|                        | ■ Eurex Bonds® OTC trading platform   |  |  |  |  |  |
|                        | <ul> <li>Central counterparty for equities and bonds</li> </ul>   |  |  |  |  |  |
|                        | <ul> <li>Admission of securities (listing)</li> </ul>   |  |  |  |  |  |
| Clearstream            | Custody and settlement services for domestic and international securities   |  |  |  |  |  |
|                        | <ul> <li>Global securities financing services and collateral management</li> </ul>  |  |  |  |  |  |
|                        | <ul> <li>Investment funds and hedge funds services</li> </ul>   |  |  |  |  |  |
| Market Data + Services | Distribution of licences for trading and market signals   |  |  |  |  |  |
|                        | <ul><li>Development and sales of indices (STOXX)</li></ul>  |  |  |  |  |  |
|                        | <ul> <li>Technology and reporting solutions for external customers</li> </ul>   |  |  |  |  |  |
|                        | <ul> <li>Trading participant connectivity</li> </ul>  |  |  |  |  |  |

#### Organisational structure

At the start of 2016, Deutsche Börse AG realigned the assignment of responsibilities within its Executive Board in order to place client focus at the heart of its organisational structure. The Clients, Products & Core Markets division combines Deutsche Börse Group's derivatives trading businesses, its clearing house as well as Clearstream's settlement and custody business. Clients, Products & Core Markets is responsible for coordinating Group-wide product development as well as global sales activities. The IT & Operations, Data & New Asset Classes division combines Deutsche Börse Group's IT activities and market operations. Technological transformation and digitisation are key issues which are advanced by this division – in close coordination with the Chief Executive Officer (CEO). Some of Deutsche Börse Group's fastest growing business areas, such as the market data business, the electronic foreign-exchange trading platform 360T®, as well as EEX group also belong to this division. Deutsche Börse Group's cash market businesses – comprising Xetra, the Frankfurt Stock Exchange, and the certificates and warrants business – form part of the Cash Market, Pre-IPO & Growth Financing division. The division is also responsible for the build-up of a pre-IPO market, as well as for developing and establishing tools for growth financing. The portfolio of the Chief Financial Officer (CFO) includes risk management and compliance. The responsibilities of the CEO include Group Strategy and Human Resources, as well as innovation; moreover,

### Deutsche Börse Group's management structure as at 1 January 2017



he provides strategic impetus in the areas of technological transformation and digitisation. The current organisational set-up is shown in the  $\boxdot$  "Deutsche Börse Group's management structure as at 1 January 2017" chart.

#### **Objectives and strategies**

#### Deutsche Börse Group's objectives and strategies

Deutsche Börse Group is one of the largest market infrastructure providers worldwide. The Group's business model enhances the capital markets' stability, efficiency and integrity. Issuers benefit from the low capital costs it offers, while investors enjoy high liquidity and low transaction costs. At the same time, Deutsche Börse stands for transparent, secure capital markets in which organised trading is based on free price formation.

Deutsche Börse's business success is founded on its business model: its broadly diversified product and service range covers the entire value chain for financial market transactions. The business model aims to offer customers reliable services in an efficient and cost effective manner, based on the following key principles:

- integrating different financial market services such as trading, clearing, settlement, securities custody, liquidity and collateral management, as well as index and market data services
- providing these services for different asset classes such as equities, bonds, funds, commodities,
   FX products, fixed-income products and derivatives on these underlyings
- developing and operating proprietary electronic systems for all processes along the value chain
- organising an impartial marketplace to ensure orderly, supervised trading with fair price formation, plus providing risk management services

The efficiency of this business model can be seen from the fact that Deutsche Börse Group has generated strong cash flows from operating activities for many years and that it is one of the most cost-effective providers of trading, clearing and settlement services among comparable products.

In order to maintain its leading position among exchange organisations and to grow further, Deutsche Börse Group launched its Group-wide "Accelerate" programme in 2015, with the following objectives: to actively participate in global competition among capital markets infrastructure providers – in an agile, ambitious and effective manner with a strong client focus – and to turn Deutsche Börse into the global market infrastructure provider of choice, being top-ranked in all its activities. In order to achieve this strategic objective, Deutsche Börse has launched a broad range of initiatives, and triggered a cultural change throughout the company.

In the context of its "Accelerate" growth strategy, Deutsche Börse Group has implemented far-reaching organisational changes and defined its financial targets. As part of that, the company is constantly assessing its future competitive positioning, profitability, innovative strength, and strategic benefits of all its shareholdings and own activities. Deutsche Börse pursues the goal of becoming the number one or number two player in every business area the company operates in – a goal that requires active management of the business portfolio. In areas where Deutsche Börse is not able to meet this goal, it evaluates other options. As part of its ongoing review of capital allocation, the Group disposed of various investments during the year under review, including Infobolsa, Market News International and the International Securities Exchange. Moreover, it sold a partial shareholding in BATS Global Markets, Inc.

Thanks to a Group-wide approach in marketing, innovation and operations, the Group will be better positioned to serve changing client needs and to gradually exploit untapped sales potential. A cross-divisional Group Management Committee was established, and responsibilities on the Executive Board realigned, in order to promote the Group's new direction and to intensify collaboration. Besides, the new remuneration system for the Executive Board and executive staff, which was introduced during the year under review, has created stronger incentives for growth in the individual divisions. Likewise, the Group has conducted an in-depth review of its organic growth initiatives, and re-prioritised where appropriate. In this context, the Group pursues an accelerated expansion into new markets and asset classes. Within the scope of various initiatives, it aims for a markedly higher degree of innovation (please refer to the report on opportunities). As far as external growth opportunities are concerned, on the one hand the focus is on strengthening existing high-growth areas, and on exploring new asset classes and services.

Deutsche Börse Group has a scalable business model, which permits higher business volumes at relatively minor additional costs. With a strong business performance and organic or external growth, this means that income growth will exceed cost increases. To reinforce the scalability of its business model, the Group has introduced clearly defined profit growth targets. Accordingly, it anticipates net revenue increases of between 5 and 10 per cent annually, based on its current business portfolio and assuming a continued recovery of the world economy as well as medium-term interest rate rises. The Group is targeting 10 per cent to 15 per cent increases in earnings before interest and taxes (EBIT) and consolidated net profit for the period attributable to Deutsche Börse AG shareholders.

Deutsche Börse Group's ability to achieve its organic growth targets depends on the following factors, among others:

- The effect of macroeconomic conditions on the financial markets: e.g. greater stock market volatility typically leads to higher levels of trading in the cash and derivatives markets and rising interest rates drive higher net interest income.
- Regulatory requirements affecting all market participants: if regulatory initiatives (e.g. EMIR, Capital Requirements Directives) strengthen the role of exchanges, this will also benefit Deutsche Börse Group.
- Structural changes in the financial markets: e.g. trading activity increases if investment funds make greater use of derivatives to implement their trading strategies.
- The Group's innovative strength: if it succeeds in continually introducing new products and services for which there is demand on the market, the Group will further grow its business.

Deutsche Börse Group is committed to transparent, reliable and liquid financial markets, although it cannot affect how the volume drivers for these markets develop. However, the Group is able to influence the other factors to some extent or to control them in full; for instance, it can lobby for a favourable legal framework for the financial markets or it can develop products and services to support its customers' business. This also enables it to reduce its dependence on those factors that are beyond its control.

## Management approach for a Group-wide commitment to sustainability

Deutsche Börse Group's objectives and strategies include discharging its corporate responsibility holistically. In line with this, its management approach is guided by three action-based principles that aim to sustainably strengthen and preserve the value added to the economy and to society by Deutsche Börse Group:

■ Building trust. Deutsche Börse Group aims to organise the capital markets in a way that ensures their integrity, transparency and security. The availability of high-quality information is a key aspect in this process, and something that the company is working constantly to enhance. In this context, providing sustainability information is as significant as engaging in a constructive dialogue on the future viability of the international capital markets with both customers and the general public.

- Leading by example. As a listed service provider, Deutsche Börse Group aims to ensure that its own business activities are conducted responsibly and with a view to the future. In addition, the Group pursues a sustainable human resources policy and is committed to the environment and hence to conserving resources. It enhances its commitment to sustainability and its reporting on an ongoing basis in order to establish itself as a long-term role model on the market.
- Increasing public awareness. The Group is part of civil society and as such has a responsibility towards it. It is committed to fulfilling this role both in Germany and in its international locations, too. It systematically bases its actions on local requirements and, as a good corporate citizen, takes part in long-term cooperative initiatives aimed at strengthening structures in the non-profit sector.

#### Planned merger with London Stock Exchange Group

The 2016 reporting year was largely characterised by plans for the merger of Deutsche Börse with LSEG. The business combination would create a leading global market infrastructure provider with deep roots in Europe – a major opportunity for accelerating the growth strategies of both companies. The commitment to a client-focused business model would enable the Combined Group to fulfil client needs in the best possible manner. The merger would generate cost synergies of some €450 million (from the third year following completion of the transaction) as well as revenue synergies of at least €250 million (from the fifth year following completion).

Overall, approximately 89 per cent of Deutsche Börse AG's shareholders accepted the offer up until 12 August 2016, exchanging their Deutsche Börse shares into shares of the new company. LSEG shareholders had already approved the merger, with a large majority, at the extraordinary general meeting that took place on 4 July 2016.

At the time of writing this report, the approval process for this project is ongoing. Numerous authorities must approve the planned merger, including the European Commission, and the Ministry of Economics, Transportation and Regional Development of the State of Hesse.

On 28 September 2016, the European Commission embarked upon Phase II of the merger clearance proceedings, which are scheduled to be concluded no later than 3 April 2017. Within the scope of this ongoing EU merger control procedure, Deutsche Börse received a so-called "Statement of Objections" regarding the merger, which summarises concerns raised by the European Commission with regard to the merger. In order to remedy these concerns, LSEG agreed to sell its subsidiary LCH.Clearnet SA subsidiary to Euronext N.V., for a cash consideration of €510 million (subject to customary market price adjustments). The possible divestment of LCH.Clearnet SA would be subject to, amongst other things, examination and approval by the European Commission, in connection with the recommended merger of DBAG and LSEG. Moreover, the transaction would be conditional upon the successful completion of the merger. Following the market test in relation to this remedy proposal, the European Commission has raised new concerns regarding the viability of LCH SA as a divestment business. These concerns relate to access to bond and repo trading feeds currently provided for by MTS S.p.A., an Italian regulated electronic trading platform. The European Commission has therefore required that Deutsche Börse AG and LSEG commit to the divestment of LSEG's majority stake in MTS S.p.A. to secure merger clearance. LSEG has resolved to not commit to the required divestment of LSEG's majority stake in MTS S.p.A.

Besides the European Commission's approval, the merger is subject to a review from the Hesse Exchange Supervisory Authority, which is part of the Ministry of Economics, Energy, Transportation and Regional Development of the State of Hesse. The conclusion of this review procedure and the corresponding decision would be expected to take place during the second guarter of 2017.

# Internal management

#### Management systems

Deutsche Börse Group's internal management system is based on key performance indicators taken from the consolidated income statement (net revenue, operating costs, EBIT, the Group's net profit for the period attributable to Deutsche Börse AG shareholders) and the balance sheet (cash flows from operating activities, liquidity, equity less intangible assets). Additionally, the system includes key performance indicators that are derived from the consolidated income statement and the balance sheet (interest coverage ratio, interest-bearing gross debt / EBITDA and return on shareholders' equity).

Net revenue is composed of sales revenue plus net interest income from banking business and from other operating income, less volume-related costs. Sales revenue from external customers is generally dependent on the growth factors described above (the performance of the financial markets, regulatory and structural changes, and the Group's innovative strength). Net interest income from banking business is dependent on how Clearstream's international settlement business performs, on the one hand, and on developments of short-term interest rates, particularly in the euro zone and the USA, on the other. In addition to income from the Clearstream segment, net interest income has also included interest income and expenses in the Eurex segment. This income is generated by the Group's clearing houses from investing their clients' cash collateral. Other operating income results from exchange rate differences, among other things. Volume-related costs normally correlate with sales revenue in the relevant business areas, such as fees and commissions from banking business or the cost of purchasing price data. In addition, various licence fees (e.g. for index licences) contribute to volume-related costs.

Operating costs include staff costs, depreciation, amortisation and impairment losses, and other operating expenses. Staff costs consist of wages and salaries, social security contributions and the cost of retirement benefits. They are subject to inflation adjustments and depend partially on the company's performance, as they also include a variable remuneration. Depreciation, amortisation and impairment charges include depreciation and amortisation of, and impairment losses on, intangible assets and property, plant and equipment. Other operating expenses mainly comprise the costs of developing and operating the Group's technological infrastructure, office infrastructure costs and marketing costs.

Around 80 per cent of Deutsche Börse Group's costs are fixed costs (excluding special factors). As a result, the Group can handle higher volumes of business without a significant increase in costs. Conversely, a decline in business volumes has a direct impact on the Group's profitability. Approximately 20 per cent of the Group's costs are volume-related costs.

Deutsche Börse Group manages its EBIT using net revenue and operating costs. At Group level, the net profit for the period attributable to Deutsche Börse AG shareholders also serves as a performance indicator for internal management.

The balance sheet key performance indicators include cash flows from operating activities, a predefined liquidity target and equity less intangible assets. Liquidity planning aims at maintaining enough liquidity to meet operating costs for one quarter (currently between  $\[ \in \] 150$  million and  $\[ \in \] 250$  million). There is no set target for the Group's management of its equity less intangible assets KPI; rather, the objective is to maintain a positive figure.

The interest coverage ratio is the ratio of EBITDA to the interest expense from financing activities. As part of its capital management programme, the Group aims to achieve an interest coverage ratio of at least 16 for Deutsche Börse Group. In addition, the goal is to achieve a maximum ratio of interest-bearing gross debt to EBITDA of 1.5 at Group level. The latter performance indicator is particularly important at present in protecting the Group's current AA rating. The goal of the Clearstream subgroup is to maintain an interest coverage ratio of 25 and to comply with other capital adequacy measures to protect its current AA rating. Because Clearstream had no financial liabilities from non-banking business in either the reporting period or the previous year, no interest coverage ratio had to be calculated for the subgroup.

Group projects are prioritised and steered using strategic and financial criteria, taking project-specific risks into account. The main criterion used to assess the strategic attractiveness of projects is their (expected) contribution to the strategic objectives for Deutsche Börse Group and its business areas. The main financial criteria are key performance indicators such as net present value (NPV), the payback period and the return after tax, which are calculated on the basis of the project or business plans. Risks are monitored at all levels of project work, i.e. both when prioritising and steering projects and during ongoing project management.

Further information on the Group's financial position is presented in the 

⊕ "Financial position" section of this combined management report.

#### Internal control system as part of the financial reporting process

Deutsche Börse has established a Group-wide internal control system (ICS). The ICS comprises a set of rules for the management of corporate activities as well as guidelines which help to ensure that such rules are being observed. Monitoring tasks are implemented through process-integrated measures (such as organisational safeguards and controls) as well as through process-independent measures. All business divisions are responsible that Group-wide ICS requirements are met in their respective areas of responsibility.

The purpose of the accounting-related ICS is to ensure orderly accounting practices. The central Financial Accounting and Controlling (FA&C) division is primarily responsible for preparing the accounts at Deutsche Börse AG and its consolidated subsidiaries. FA&C is supported in this task by decentralised units, which have to comply with the standards set by FA&C. The head of FA&C is responsible for the process, including effective safeguards and controls. The goal is to ensure that risks in the accounting process are identified early on so that remedial action can be taken in good time.

In order to maintain consistent and continuous accounting processes, FA&C provides regularly updated accounting manuals as well as guidelines and work instructions for the material accounting processes – as part of the preparation of the annual financial statements and consolidated financial statements of Deutsche Börse AG. All FA&C employees have access to this documentation, accounting manuals and account allocation guidelines, allowing them to obtain information on the management judgements and accounting options exercised by Deutsche Börse Group.

Moreover, Deutsche Börse Group continuously monitors and analyses changes in the accounting environment and adjusts its processes in line with them. This applies in particular to national and international accounting standards.

Another key feature of the ICS is the principle of the separation of functions: tasks and responsibilities are clearly defined and allocated within the organisation. Incompatible tasks – such as modifying master data on the one hand and issuing payment instructions on the other – are strictly segregated at a functional level. An independent control unit grants individual employees access rights to the accounting system and monitors these permissions continuously using an incompatibility matrix. Transactions are initially recorded in the general ledger or the appropriate subledgers on the basis of the chart of accounts and the account allocation guidelines. The principle of dual control applies to all closing entries made and to preparation of the consolidated financial statements.

Major Deutsche Börse Group subsidiaries maintain and consolidate their general ledgers in the same system. Accounting data from the other companies is uploaded for inclusion in the consolidated financial statements. Liabilities, expenses and income for individual transactions are recorded in separate accounts under the name of the counterparty concerned. Any consolidation differences are reviewed centrally and sent to the accounting departments of the companies concerned for clarification.

The processes, systems and controls described above aim to provide reasonable assurance that the accounting system complies with the applicable principles and laws. In addition, Compliance and Internal Audit act as a further line of defence, performing risk-based, process-independent controls on whether the ICS is appropriate and effective. The Executive Board and the Audit Committee established by the Supervisory Board receive regular reports on the effectiveness of the ICS with respect to the financial reporting process.

#### Research and development activities

As a service provider, Deutsche Börse Group does not engage in research and development activities comparable to those of manufacturing companies. As a result, this combined management report does not contain a detailed research and development report. However, Deutsche Börse does develop and operate its own trading and clearing systems as well as system solutions designed to achieve its structural growth objectives. The company works constantly to maintain and enhance the technology leadership and stability of its electronic systems in the interests of its customers and the systemic stability of the financial markets. This is why Deutsche Börse has significantly overhauled its trading and clearing systems, which go by the trade names T7® and C7®. Other technically challenging projects include implementing the European Central Bank's plans to create a uniform, pan-European securities settlement platform (TARGET2-Securities).

In 2016, research and development expenses amounted to €171.0 million (2015: €202.2 million); of this figure, approximately 52 per cent (2015: 47 per cent) was attributable to development costs that were capitalised as internally developed software. In addition, €48.7 million of capitalised development costs were amortised in 2016. This means that research and development costs amounted to 7 per cent of net revenue (2015: 8 per cent). In the Eurex and Clearstream segments, which mainly invest in systems upgrades, research and development costs amounted to 6 per cent and 10 per cent of net revenue, respectively. Details can be found in  $\boxdot$  note 7 to the consolidated financial statements.

Further details of product and services development activities can be found in the ∃ report on opportunities and the ∃ report on expected developments.

### Takeover-related disclosures

#### Disclosures in accordance with sections 289 (4) and 315 (4) of the HGB

In accordance with sections 289 (4) and 315 (4) of the Handelsgesetzbuch (HGB, German Commercial Code), Deutsche Börse AG hereby makes the following disclosures as at 31 December 2016:

The share capital of Deutsche Börse AG amounted to €193.0 million on the above-mentioned reporting date and was composed of 193 million no-par value registered shares. There are no other classes of shares besides these ordinary shares.

The share capital has been contingently increased by up to €19.3 million by issuing up to 19.3 million no-par value registered shares (contingent capital 2014). The contingent capital increase will be implemented only to the extent that holders of convertible bonds or warrants attaching to bonds with warrants issued by the company or a Group company in the period until 14 May 2019 on the basis of the authorisation granted to the Executive Board in accordance with the resolution of the Annual General Meeting on 15 May 2014 on item 5 (a) of the agenda exercise their conversion or option rights, that they meet their conversion or option obligations, or that shares are tendered, and no other means are used to settle such rights or obligations. More details can be found in Article 4 (7) of the Articles of Association of Deutsche Börse AG.

The Executive Board is only aware of limitations to voting rights that result from the German Stock Corporation Act, according to which voting rights arising from shares affected by section 136 of the AktG may not be exercised. Furthermore, shares held by Deutsche Börse AG as treasury shares are exempted from the exercise of any rights according to section 71b of the AktG.

Under the Wertpapierhandelsgesetz (WpHG, German Securities Trading Act), any investor whose share-holding reaches, exceeds or falls below specified voting right thresholds as a result of purchase, sale or any other transaction is required to notify the company and the Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin, German Federal Financial Supervisory Authority). The lowest threshold for this disclosure requirement is 3 per cent. Deutsche Börse AG is not aware of any direct or indirect equity interests in its capital exceeding 10 per cent of the voting rights.

There are no shares with special rights granting the holder supervisory powers.

Employees holding shares in Deutsche Börse AG exercise their rights in the same way as other shareholders in accordance with the statutory provisions and the Articles of Association.

Members of the Executive Board are appointed and dismissed in accordance with sections 84 and 85 of the AktG and with Article 6 of the Articles of Association of Deutsche Börse AG. Amendments to the Articles of Association of Deutsche Börse AG are adopted by resolution of the Annual General Meeting in accordance with section 119 (1) No. 5 of the AktG. Under Article 12 (4) of the Articles of

Association of Deutsche Börse AG, the Supervisory Board has the power to make changes to the Articles of Association that relate to the wording only. In accordance with Article 18 (1) of the Articles of Association of Deutsche Börse AG, resolutions of the Annual General Meeting are passed by a simple majority of the votes cast, unless otherwise mandated by the AktG. Insofar as the AktG additionally prescribes a majority of the share capital represented at the time of a resolution, a simple majority of the share capital represented is sufficient where this is legally permissible.

Subject to the approval of the Supervisory Board, the Executive Board is authorised to increase the share capital by up to a total of €13.3 million on one or more occasions in the period up to 10 May 2021 by issuing new no-par value registered shares in exchange for cash and/or non-cash contributions (authorised capital I). Shareholders must be granted pre-emptive rights. However, subject to the approval of the Supervisory Board, the Executive Board may exclude shareholders' pre-emptive rights with respect to fractional amounts. Pursuant to the authorisation, however, the exclusion of shareholders' pre-emptive rights is subject to the proviso that shares issued during the term of the authorisation, excluding shareholders' pre-emptive rights, shall not exceed twenty per cent of the registered share capital. Full authorisation, and particularly the conditions under which shareholders' pre-emptive rights can be excluded, derive from Article 4 (3) of the Articles of Association of Deutsche Börse AG.

The Executive Board is also authorised to increase the share capital by up to a total of €19.3 million on one or more occasions in the period up to 12 May 2020, subject to the approval of the Supervisory Board, by issuing new no-par value registered shares against cash and/or non-cash contributions (authorised capital II). Shareholders must be granted pre-emptive rights, which the Executive Board can disapply in certain cases, subject to the approval of the Supervisory Board in each case. The Executive Board is authorised to exclude shareholders' pre-emptive rights: (i) in the case of cash capital increases, provided that the issue price of the new shares is not significantly lower than the prevailing exchange price, and the total number of shares issued under exclusion of shareholders' pre-emptive rights does not exceed 10 per cent of the share capital; (ii) in the case of capital increases in exchange for non-cash contributions for the purpose of acquiring companies, parts of companies, interests in companies, or other assets; and (iii) with respect to fractional amounts. However, according to the authorisation, the Executive Board may only exclude shareholders' pre-emptive rights if the total number of shares issued during the term of authorisation does not exceed 20 per cent of the share capital. The full authorisation, and particularly the conditions under which shareholders' pre-emptive rights can be disapplied, derive from Article 4 (4) of the Articles of Association of Deutsche Börse AG.

In addition, the Executive Board is authorised to increase the share capital by up to a total of €38.6 million on one or more occasions in the period up to 12 May 2020, subject to the approval of the Supervisory Board, by issuing new no-par value registered shares in exchange for cash contributions (authorised capital III). Shareholders must be granted pre-emptive rights, which the Executive Board can exclude, subject to the approval of the Supervisory Board, only for fractional amounts. However, according to the authorisation, the Executive Board may only exclude shareholders' pre-emptive rights if the total number of shares issued during the term of authorisation does not exceed 20 per cent of the share capital. The exact content of this authorisation derives from Article 4 (5) of the Articles of Association of Deutsche Börse AG.

Furthermore, the Executive Board is authorised to increase the share capital by up to a total of €6.0 million on one or more occasions in the period up to 15 May 2017, subject to the approval of the Supervisory Board, by issuing new no-par value registered shares against cash and/or non-cash contributions (authorised capital IV). Shareholders must be granted pre-emptive rights unless the Executive Board makes use of the authorisation granted to it to disapply such rights, subject to the approval of the Supervisory Board. The Executive Board is authorised to disapply shareholders' pre-emptive rights for fractional amounts with the approval of the Supervisory Board. The Executive Board is also authorised, subject to the approval of the Supervisory Board, to exclude shareholders' pre-emptive rights in order to issue up to 900,000 new shares per financial year from authorised capital IV to members of the Executive Board and employees of the company as well as to members of the executive boards or management and employees of its affiliated companies in accordance with sections 15ff. of the AktG. Full authorisation derives from Article 4 (6) of the Articles of Association of Deutsche Börse AG.

The Executive Board is authorised to acquire treasury shares amounting to up to 10 per cent of the share capital. However, the acquired shares, together with any treasury shares acquired for other reasons that are held by the company or attributed to it in accordance with sections 71a ff. of the AktG, may at no time exceed 10 per cent of the company's share capital. The authorisation to acquire treasury shares is valid until 12 May 2017 and may be exercised by the company in full or in part on one or more occasions. However, it may also be exercised by dependent companies, by companies in which Deutsche Börse AG holds a majority interest or by third parties on its or their behalf. The Executive Board may elect to acquire the shares (1) on the stock exchange, (2) via a public tender offer addressed to all shareholders or via a public request for offers of sale addressed to the company's shareholders, (3) by issuing tender rights to shareholders or (4) using derivatives (put or call options or a combination of the two). The full and exact wording of the authorisation to acquire treasury shares, and particularly the permissible uses to which the shares may be put, can be found in items 8 and 9 of the agenda for the Annual General Meeting held on 13 May 2015.

The following material agreements of the company are subject to a change of control following a takeover bid:

- On 18 March 2013, Deutsche Börse AG and its subsidiary Clearstream Banking S.A. entered into a multicurrency revolving facility agreement with a banking syndicate for a working capital credit totalling up to €750 million. If there is a change of control, the credit relationship between Deutsche Börse AG and the lenders can be reviewed in negotiations within a period of no more than 60 days. In this process, each lender has the right, at its own discretion, to terminate its credit commitment and demand partial or full repayment of the amounts owing to it. A change of control has occurred if Deutsche Börse AG no longer directly or indirectly holds the majority of Clearstream Banking S.A. or if a person or a group of persons acting in concert acquires more than 50 per cent of the voting shares of Deutsche Börse AG.
- Under the terms of Deutsche Börse AG's €600.0 million fixed-rate bond issue 2015/2041 (hybrid bond), Deutsche Börse AG has a termination right in the event of a change of control which, if exercised, entitles Deutsche Börse AG to redeem the bonds at par, plus accrued interest. If Deutsche Börse AG does not exercise this termination right, the affected bonds' coupon will increase by 5 percentage points. A change of control will take place if a person or a group of persons acting in concert, or third parties acting on their behalf, has or have acquired more than 50 per cent of the shares of Deutsche Börse AG or the number of Deutsche Börse AG shares required to exercise more than 50 per cent of the voting rights at Annual General Meetings of Deutsche Börse AG. In addition, the relevant bond terms require that the change of control must adversely affect the long-term rating given to Deutsche Börse AG by Moody's Investors Services, Inc., Standard & Poor's Rating Services or Fitch Ratings Limited. Further details can be found in the applicable bond terms.

- The terms of the €500.0 million fixed-rate bonds 2015/2025, the €600.0 million fixed-rate bonds 2013/2018, and the €600.0 million fixed-rate bonds 2012/2022, which were all issued by Deutsche Börse AG, all provide Deutsche Börse AG with a termination right in the event of a change of control. If these cancellation rights are exercised, the bonds are repayable at par plus any accrued interest. A change of control has taken place if a person or a group of persons acting in concert, or third parties acting on their behalf, has or have acquired more than 50 per cent of the shares of Deutsche Börse AG or the number of Deutsche Börse AG shares required to exercise more than 50 per cent of the voting rights at Annual General Meetings of Deutsche Börse AG. In addition, the respective sets of bond terms require that the change of control must adversely affect the rating given to one of the preferential unsecured debt instruments of Deutsche Börse AG by Moody's Investors Services, Inc., Standard & Poor's Rating Services or Fitch Ratings Limited. Further details can be found in the applicable bond terms.
- Furthermore, the Co-operation Agreement entered into on 16 March 2016 between Deutsche Börse AG, London Stock Exchange Group plc, and HLDCO123 plc concerning the planned merger of Deutsche Börse AG and London Stock Exchange Group plc provides for certain termination rights in the event of a takeover offer by third parties. Pursuant to this, Deutsche Börse AG and London Stock Exchange Group plc are each entitled to terminate the Co-operation Agreement if a takeover offer for Deutsche Börse AG has been announced, and (i) the Executive Board and Supervisory Board of Deutsche Börse AG have issued a recommendation for acceptance of such takeover offer; or (ii) the takeover offer has been completed. A termination of the Co-operation Agreement would not automatically prevent completion of the merger of Deutsche Börse AG and London Stock Exchange Group plc, but would merely end the Co-operation Agreement. Please refer to the Co-operation Agreement for further details.
- Under certain conditions, members of Deutsche Börse AG's Executive Board have a special right to terminate their contracts of service in the event of a change of control. According to the agreements made with all Executive Board members, a change of control has occurred if (i) a shareholder or third party discloses that it owns more than 50 per cent of the voting rights in Deutsche Börse AG in accordance with sections 21 and 22 of the WpHG, (ii) an intercompany agreement in accordance with section 291 of the AktG is entered into with Deutsche Börse AG as a dependent company, or Deutsche Börse AG is absorbed in accordance with section 319 of the AktG or (iii) Deutsche Börse AG is merged in accordance with section 2 of the Umwandlungsgesetz (UmwG, German Reorganisation and Transformation Act).

Moreover, change-of-control agreements have been entered into with the members of the Executive Board. A description of these agreements, which are in line with customary national and international practice, can also be found in the  $\boxdot$  remuneration report.

# Deutsche Börse AG shares

The average annual return since Deutsche Börse AG's initial public offering in 2001 has been 13 per cent. Thus Deutsche Börse AG shares prove to be an attractive long-term investment. They closed financial year 2016 with a slight decline by 5 per cent − in line with the performance of the STOXX® Europe 600 Financials Return (minus 7 per cent), but underperforming the DAX® blue-chip index (plus 4 per cent) as well as the Dow Jones Global Exchanges Index, which tracks other exchange organisations and rose by 7 per cent during 2016 (see the ☑ "Share price development of Deutsche Börse AG and benchmark indices in 2016" chart).

# Deutsche Börse AG shares: key figures<sup>1)</sup>

|  |          | 2016               | 2015         |
|--|----------|--------------------|--------------|
| Earnings per share (basic) <sup>2)</sup>                     | €        | 4.34               | 3.85         |
| Dividend per share   | €        | 2.35 <sup>3)</sup> | 2.25         |
| Dividend distribution ratio <sup>2)</sup>                    | %        | 54                 | 55           |
| Dividend yield <sup>4)</sup>                                 | %        | 3.1                | 3.0          |
| Opening price (as at 1 Jan) <sup>5)</sup>                    | €        | 81.39              | 59.22        |
| High <sup>6)</sup>   | €        | 83.00              | 87.41        |
| Low <sup>6)</sup>  | €        | 67.19              | 58.65        |
| Closing price (as at 31 Dec)                                 | €        | 77.54              | 81.39        |
| Average daily trading volume on Xetra®                       | m shares | 0.5                | 0.7          |
| Number of shares (as at 31 Dec)                              | m        | 193.0              | 193.0        |
| thereof outstanding (as at 31 Dec)                           | m        | 186.8              | 186.7        |
| Free float (as at 31 Dec)                                    | %        | 100                | 100          |
| Price-earnings ratio <sup>4)</sup>                           |          | 17.3               | 18.3         |
| Market capitalisation (as at 31 Dec)                         | €bn      | 14.5               | 14.7         |
| Average annual return since IPO in 2001                      | %        | 13.2               | 14.4         |
| Attendance of share capital at the Annual General Meeting    | %        | 65.8               | 42.2         |
| Share of investors from Germany / UK / USA / other countries | %        | 17/29/30/24        | 15/28/31/26  |
| Institutional investors                                      | %        | 94                 | 95           |
| Shareholders   |          | appr. 60,000       | appr. 57,000 |
| Analyst recommendations buy / hold / sell (as at 31 Dec)     | %        | 43/50/7            | 52/39/9      |
| Average target price set by analysts at year-end             | €        | 84.00              | 85.00        |

<sup>1)</sup> Since 18 July 2016, all information related to share prices has been based on Deutsche Börse shares tendered for exchange (ISIN DE000A2AA253).

<sup>2)</sup> Adjusted for exceptional items

<sup>3)</sup> For financial year 2016, proposal to the Annual General Meeting 2017

<sup>4)</sup> Based on the volume-weighted average of the daily closing prices

<sup>5)</sup> Closing price on preceding trading day

<sup>6)</sup> Intraday price

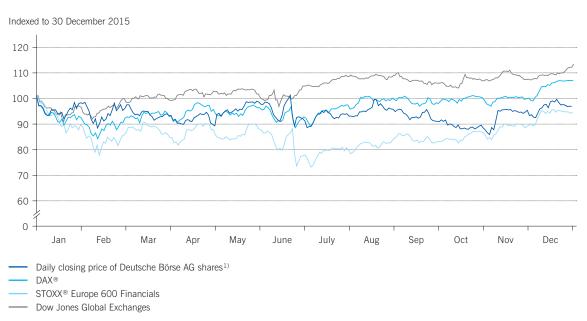
# Report on economic position

# Macroeconomic and sector-specific environment

Macroeconomic developments had and continue to have a significant impact on the overall economic environment and on trading activity on the markets. For Deutsche Börse Group, the macroeconomic environment during the year under review was rather complex; whilst some factors have a stimulating effect on business, others have the potential of unsettling market participants, burdening their business activity:

- the slight overall slowdown during 2016 in economies which are relevant to Deutsche Börse Group (Central Europe, USA)
- the major central banks' low interest rate policy and the resulting large volumes of liquidity, in Europe especially as a result of the European Central Bank's quantitative easing (QE), and in the US as a result of the Federal Reserve's interest rate policy (albeit with two minor interest rate hikes in December 2015 and December 2016)
- the fragile economic situation in the euro area (burdened by the high national debt levels of individual European countries), the result of the UK referendum in June 2016, the US elections in November 2016 and as a result, the devaluation of the euro and pound sterling against the US dollar, which reached its highest level in 14 years in December 2016
- unstable political conditions in some parts of Eastern Europe and recurring flashpoints in the Arab world and their impact on the Western world
- regulatory projects and the resulting stricter requirements for capital market participants (see the ∃ next section entitled "Regulatory environment")

### Share price development of Deutsche Börse AG and benchmark indices in 2016



1) As from 18 July 2016, the data shown refer to tendered shares (ISIN DE000A2AA253).

Against this background, the economies of industrialised nations showed somewhat weaker growth in 2016 compared to the previous year, as estimated by the International Monetary Fund (IMF). According to these estimates, real gross domestic product (GDP) rose by 1.6 per cent in 2016, compared to a growth rate of 2.1 per cent in 2015. Global economic growth was 3.1 per cent in 2016 (2015: real growth rate of 3.2 per cent).

Despite a minor slowdown in global economic growth, German GDP for 2016 slightly outperformed the previous year's levels, according to initial estimates. The IMF's January 2017 estimates put growth in German economic output at 1.7 per cent in 2016 (2015: increase in real terms of 1.5 per cent).

Economic performance throughout the euro area deteriorated again somewhat in 2016: even though no country was in recession during 2016, economic growth weakened in some states within the European Economic Area such as Spain, the Netherlands and Portugal. Hence, the European Central Bank continues to assess the economic situation in the EU as relatively fragile. It lowered the deposit rate for banks further in March 2016, from −0.30 per cent to −0.40 per cent. Moreover, it extended its bond-buying programme until the end of 2017, albeit cutting monthly volumes from €80 billion to €60 billion per month from April 2017 on.

The IMF expects US economic output to have posted a real 1.6 per cent increase for 2016, compared to a 2.6 per cent increase the year before. Given further relief on the labour market and higher expected economic growth for 2017 (not least as a result of the US elections), the US Federal Reserve raised its key interest rate again in December 2016, to a range between 0.50 per cent and 0.75 per cent.

All told, stagnating economic growth, political uncertainty in Europe, and the continued low interest rate policy pursued by the European Central Bank had a dampening effect on European capital markets during 2016. As a result, traded volumes on Deutsche Börse Group's cash markets showed a marked decline, whilst the Group's derivatives markets posted a slight increase.

# Development of trading activity on selected European cash markets

|   | <b>2016</b> €bn | Change<br>vs 2015<br>% |
|---|-----------------|------------------------|
| London Stock Exchange <sup>1)</sup>       | 1,566.3         | -8                     |
| Euronext <sup>2)</sup>                    | 1,802.0         | -15                    |
| Deutsche Börse Group                      | 1,377.0         | -16                    |
| Borsa Italiana <sup>1)</sup>              | 755.3           | -20                    |
| Bolsas y Mercados Españoles <sup>2)</sup> | 652.9           | -32                    |

- 1) Part of London Stock Exchange Group
- 2) Trading volume in electronic trading (single-counted)

Source: Exchanges listed

# Development of contracts traded on selected derivatives markets

|                                  |                     | Change       |
|----------------------------------|---------------------|--------------|
|                                  | 2016<br>m contracts | vs 2015<br>% |
| Shanghai Futures Exchange        | 1,680.7             | 60           |
| Moscow Exchange                  | 1,950.1             | 19           |
| CME Group                        | 3,942.2             | 12           |
| Deutsche Börse Group – Eurex®    | 1,727.5             | 3            |
| Intercontinental Exchange        | 2,037.5             | 2            |
| National Stock Exchange of India | 2,134.7             | -30          |

Source: Exchanges listed

## Regulatory environment

The international financial crisis has demonstrated the necessity for increased transparency and stability in the global financial markets and has sparked a discussion about the role and details of the necessary financial market infrastructure.

As a provider of a highly regulated financial market infrastructure, Deutsche Börse Group shares the objective of the national legislator, the European Union as well as the G20 to strengthen transparent and regulated markets. Being a constructive partner, we contribute to the political discussion on suitable national and European initiatives for financial market regulation.

The considerable increase in regulatory requirements has a twofold impact on Deutsche Börse Group: as a market infrastructure provider, the Group must meet regulatory duties and at the same time strive to offer products tailored exactly to meet the needs of its customers. It therefore holds an important position as a link between regulators and customers. As such, Deutsche Börse Group supports its customers in measures ensuring their compliance with regulatory requirements and thereby minimising their risks. The various regulatory dossiers have different impacts and/or offer opportunities for the entities contributing to Deutsche Börse Group's value chain. Accordingly, the Group views regulation not just as an obligation to comply but also as an opportunity to grow (see also the  $\boxdot$  report on opportunities).

#### Financial markets infrastructure regulation

Regulation of markets in financial instruments (MiFID II, MiFIR)

The revised directive (MiFID II) and the accompanying regulation (MiFIR) entered into force in July 2014. However, the date of application has been postponed to 3 January 2018 in order to give market participants and supervisory authorities sufficient time to prepare to the new requirements, particularly with regard to establishing technical reporting and monitoring systems. In Germany, the Second Financial Market Amendment Act (Zweites Finanzmarktnovellierungsgesetz, 2nd FiMaNoG) will transpose the new rules into national law and make these provisions applicable by July 2017 at the latest; a first legislative proposal also contains provisions on further EU Benchmark Regulation as well as the Securities Financing Transactions Regulation (SFTR) (see also below).

The European Parliament, the European Commission as well as the Council of Member States have agreed on the large majority of implementing measures (Level 2). The European Securities and Markets Authority (ESMA) in close cooperation with national supervisors is currently developing a set of common standards guiding the interpretation and application of the new rules (Level 3).

The new directive and regulation will fundamentally transform the European financial market by expanding transparency provisions, strengthening the stability and integrity of its infrastructure, revising the market's microstructure and improving the quality and availability of market data. The new rules will have a profound impact on Deutsche Börse Group, too, in particular on its trading and clearing activities, as well as on its market data business. We will continue our intense exchange with regulators, supervisors as well as market participants to apply the new rules consistently and will proceed in the development of new services and solutions which will support market participants in implementing regulatory objectives efficiently. Thereby, our focus lies on the areas of transparency provisions and disclosure requirements, market making and algorithmic trading as well as amending the organisational requirements with regard to the security mechanisms of trading venues and market participants.

#### EMIR: implementation and review

The European Market Infrastructure Regulation (EMIR), which entered into force in 2012, is a significant regulation for central counterparties. With the step-by-step introduction of a clearing obligation, which started in June 2016, implementation is about to enter the final phase. The European Commission commenced the official revision process for the regulation in the summer of 2015. The EU Commission's draft revision with amendments to EMIR has been published on 6 January 2017. The revision is centred around the following issues: liquidity of central counterparties, supervisory structures as well as risk management aspects and infrastructure reporting requirements.

#### Recovery and resolution regulation for central counterparties

The recovery and resolution plans complement EMIR with the aim of providing central counterparties with greater stability against market disruptions. In this context, one key aspect is to establish a sound incentive structure at a European and global level which helps to exclude the use of tax payers' money.

On a European level, the EU Commission published a proposed legislation on recovery and resolution plans for central counterparties in November 2016. On a global scale, the Committee on Payments and Market Infrastructures (CPMI), together with the International Organization of Securities Commissions (IOSCO), published first considerations for consultation back in 2012. CPMI/IOSCO provided global standards for recovery plans in October 2014. At the same time, the Financial Stability Board (FSB) published a framework for resolution plans in close cooperation with CPMI/IOSCO. The organisations published consultations in mid-2016 aiming to specify initial reports. It is expected that CPMI/IOSCO and FSB will publish respective results in the first half of 2017.

# **Central Securities Depository Regulation (CSDR)**

With the CSDR, a uniform European regulatory framework for central securities depositories was established for the first time in September 2014. The EU Commission and ESMA are currently specifying the requirements, by way of technical standards; these are expected to apply from March 2017 onwards. The CSDR will harmonise the securities settlement systems and supervisory rules for central securities depositories throughout Europe. This will strengthen Clearstream's business model, because the provision of integrated banking services will still be permitted. Clearstream, Deutsche Börse Group's provider of central securities depository (CSD) services, is actively involved in the legislative process and will submit its authorisation files for licences by November 2017.

#### Regulation on benchmarks and indices

The regulation on indices used as benchmarks in financial instruments and financial contracts (Benchmark Regulation) entered into force on 30 June 2016. The final application of the regulation will take place on 1 January 2018. The regulation largely follows the global IOSCO principles for financial benchmarks. The IOSCO principles were developed, back in 2013, as a response to the manipulation of certain indices or reference rates (such as LIBOR and Euribor).

Deutsche Börse Group, which successfully implemented the IOSCO principles in 2014 for its DAX® indices as well as for the indices of its subsidiary STOXX Ltd., welcomes the agreement reached between the EU Parliament and the Council. The regulation's specific impact on the Group's business activities depends on the implementation measures still to be laid out in the form of delegated acts and technical standards by the EU Commission and ESMA.

#### **BIS FX Code of Conduct**

In May 2016, the Bank for International Settlements (BIS) released a new global Code of Conduct designed to restore confidence in the foreign-exchange (FX) market following a number of scandals. The code is an industry-wide attempt, developed in close cooperation with regulators, to lay down common standards for the FX market. Phase 1 laid its focus on banks, while phase 2, due to be published in May 2017, will cover market issues such as electronic and high-speed trading and expand the original text to cover governance and risk management.

#### **Capital Markets Union**

Following the economic, monetary and banking unions, the Capital Markets Union (CMU) is the next step towards an integrated European financial market. The main objectives are to promote growth and job creation on a sustainable basis, and to develop a diversified financial system which complements bank-based financing with highly developed capital markets. Small and medium-sized enterprises in Europe still face a credit crunch, and thus a funding bottleneck. In the current financial climate, it has become increasingly difficult for them to obtain the financing they need to start and to grow. Another objective is further harmonisation and financial integration to release inactive capital throughout Europe, in order to offer savers a wider variety of investment forms and increase corporate financing opportunities at the same time. Current plans also include the simultaneous creation of an EU domestic capital market, to promote cross-border investments and enable companies to tap different sources of finance, independent of their domicile.

# Overview of regulatory initiatives and their impact on Deutsche Börse Group's business areas

|  | Cash<br>Market | Eurex | EEX | 360T | Eurex<br>Clearing | Clear-<br>stream  | IT &<br>MD+S | Status as at 31 December 2016  |
|--|----------------|-------|-----|------|-------------------|-------------------|--------------|--|
| Financial market infrastructure        |                |       |     |      |                   |                   |              |  |
| MiFID II, MiFIR                        | X              | Х     | Х   | Х    | Х                 |                   | Х            | Published in 2014; application to start in 2018  |
| EMIR                                   |                |       | Х   | Х    | Х                 | Х                 |              | Became effective in 2012; clearing obligation for derivatives implemented successively from Q2/2016 onwards; draft for a revision expected in 2017 |
| Recovery and resolution plans for FMIs |                |       | Х   |      | Х                 | (X) <sup>1)</sup> |              | New proposal for recovery and resolution for CCPs issued in November 2016  |
| CSDR                                   | Х              | Х     |     |      | Х                 | Х                 |              | Became effective in 2014;<br>application expected from November<br>2017 onwards  |
| Regulation on benchmarks and indices   |                | Х     | Х   |      | Х                 |                   | Х            | Entered into force on 30 June 2016; application to start in 2018   |
| BIS FX Code of Conduct                 |                |       |     | Х    |                   |                   |              | Phase 1 published in May 2016;<br>Phase 2 expected in May 2017   |
| Capital Markets Union                  | Х              | Х     | Х   |      | Х                 | Х                 | Х            | Development of an action plan in 2015; implementation by 2019  |
| Banks                                  |                |       |     |      |                   |                   |              |  |
| CRD IV, CRR                            |                |       | Х   |      | Х                 | Х                 |              | Effective since 2014; transitional regulations applicable until 2019   |
| CRD V, CRR II                          |                |       | Х   |      | Х                 | X                 |              | Finalisation expected in 2017/2018, with subsequent implementation throughout the EU   |
| SFTR                                   |                |       |     |      |                   | X                 |              | Entry into force in January 2016; implementing measures (Level 2) still outstanding  |

The EU Commission presented an action plan in September 2015, with the aim of implementing it by 2019. It has become increasingly clear that the goal of a CMU may not be realised by one particular initiative; instead, this goal requires a series of small steps, which – taken together – will most likely have a significant impact. This is reflected in a package of more than 33 measures identified by the European Commission, from which 15 initiatives have already been completed.

With Brexit advancing, the EU Commission officials continue to strongly back the CMU Action Plan, arguing that the project is more than ever necessary for the remaining 27 Member States to improve financing conditions, but also to function as a risk transfer mechanism between them. On 14 September 2016, the Commission announced its intention to accelerate the reform, launching a more ambitious second phase in early 2017 to tackle some challenging long-term issues such as insolvency laws and withholding tax procedures. In January 2017, the European Commission launched a CMU mid-term review. This public consultation shall help shape the next phase in building a single market for capital in Europe. Market participants were invited to provide feedback by 17 March 2017.

The CMU affects Deutsche Börse Group's entire value chain. Thus, the Group actively supports the project and assumes an active role in the political debate. In fact, Deutsche Börse is already taking steps to support the goals of the CMU (e.g. with its Deutsche Börse Venture Network® or its FinTech Hub); indeed, enabling growth in the real economy is an integral part of the company's mission.

#### Brexit

On 23 June 2016, the British population voted that the United Kingdom should leave the European Union. Deutsche Börse Group deeply regrets this decision. Against this background, we strongly believe that the economic connection between Continental Europe and the United Kingdom should be reinforced by an integrated financial market structure.

Once the UK has formally declared its intention to exit the EU – which it intends to do, but has not done yet – there will be a two-year period during which the UK will negotiate an exit treaty with the EU; this period may be extended. Until then, the UK will remain a full EU member. Hence, there will be no change to the existing legal framework for the time being.

After the British referendum, a stable financial market connection with the United Kingdom seems to be more important than ever before. From our perspective, Frankfurt should promote a stable connection between the largest economy in Continental Europe and London, the largest financial hub in the world.

For further regulatory information, please visit Deutsche Börse Group's regulation webpages at www.deutsche-boerse.com/dbg-en/regulation.

#### **Banking regulations**

Basel II

In consequence of the recent financial crisis and based on G20 decisions, the Basel Committee on Banking Supervision (BCBS) has substantially amended and updated the preceding banking framework, known as Basel II. Substantial cornerstones were published in 2011 and additional changes have been issued since then. Changes which have already been implemented include:

- stricter definition of the term "capital"
- increased capital levels
- revised market risk framework
- introduction of a leverage ratio

The revised framework, known as Basel III, is supposed to be finalised by adding revisions of the credit risk framework (standardised and model-based approaches) and the operational risk framework. The final elements are currently under discussion but the outstanding items have not yet been agreed upon by the BCBS members. How and when those elements will be implemented is currently unknown.

#### CRD IV/CRR

By issuing the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR), which both became effective on 1 January 2014, the EU implemented the first cornerstones of the Basel III framework. Implementation with some transitional and phase-in arrangements is scheduled to be completed by 2019.

#### CRD V/CRR II

In November 2016, the European Commission proposed amendments to CRD IV and CRR which take into account the ongoing changes regarding the Basel III framework and other elements of banking regulation. The proposed legislative package also reflects changes related to legislation on the Minimum Requirement for own funds and Eligible Liabilities (MREL) and the Total Loss-Absorbing Capacity (TLAC) which leads to adjustments mainly affecting the Bank Recovery and Resolution Directive (BRRD).

Key elements of the legislative proposal beside the MREL/TLAC adjustments are:

- the introduction of a binding leverage ratio of 3 per cent
- the introduction of a binding net stable funding ratio (NSFR)
- a revised framework for market risk

The legislative proposal is supposed to be finalised by early 2018 and will enter into force not before 2019. As the legislative process is at an early stage and the proposal is still subject to change, its impact on financial market infrastructures cannot be assessed yet. Deutsche Börse Group takes an active part in the discussion process regarding the modification of banking regulations, and thus addresses the regulation's specific impact on financial market infrastructures with (limited) authorisation to engage in banking business. Furthermore, Deutsche Börse Group will continuously analyse the capitalisation of its regulated entities, making any necessary adjustments in order to ensure that risks are adequately covered.

# Transparency of securities financing transactions

The EU bodies resolved a regulation on the transparency of securities financing transactions, which complements the proposed regulation on the introduction of a segregated banking system that ring-fences proprietary trading from the deposit and lending business. The regulation was published on 23 December 2015 in the Official Journal of the European Union. It introduces a requirement to report securities lending and repo transactions to central trade repositories. In addition, it introduces rules for repledging collateral and regulates the reporting requirements of investment fund providers with securities lending activities. The impact of comprehensive reporting requirements for securities lending transactions is different for Clearstream, Eurex Clearing AG and REGIS-TR S.A. For their own securities financing transactions, higher expenditures are to be expected. The fact that transactions must be reported to a trade repository however also bears business potential for REGIS-TR.

#### **Deposit Guarantee Schemes**

The implementation into national law of the Deposit Guarantee Schemes Directive only has a minor impact on Deutsche Börse Group entities. In November 2015, the European Commission presented a proposal on the further modification of deposit guarantee schemes, with a view to completing the banking union. The current status of political discussions does not yet allow for any projections on the possible impact of the legislative process on Deutsche Börse Group.

#### **Business developments**

Given the overall framework conditions outlined at the beginning of the economic report, the situation on the capital markets for financial services providers in the reporting period was somewhat less favourable compared to 2015. Slowing economic growth, the beginning of the turnaround in US interest rate policy, as well as uncertainty regarding the potential development of the European Union following the UK's Brexit referendum, all had a dampening effect on numerous business areas of the Group. Europe saw significant cash inflows from US investors during 2015. This trend reversed during the year under review, which placed an additional burden upon the Group's business. For instance, volumes in equities and equity derivatives declined; settlement and custody volumes in domestic securities also decreased. On the other hand, index derivatives volumes rose thanks to stock market volatility, which was elevated at times. Moreover, the Group's growth areas – such as commodities traded at the EEX group, investment funds services offered by Clearstream, and foreign exchange trading at 360T – continued to develop positively. Thanks to the turnaround in US interest rates in late 2015, Clearstream's net interest income also finally showed a marked increase. Looking at developments during the course of the year, business was strongest in the fourth quarter, whereas the third quarter turned out to be the weakest one, not least due to reticence amongst market participants' after the UK's referendum.

### Changes to the basis of consolidation and to segment reporting

As at 30 June 2016, Deutsche Börse Group sold International Securities Exchange Holdings, Inc. (ISE), operator of three US equity options exchanges, as well as ISE's parent company, U.S. Exchange Holdings, Inc., to Nasdaq, Inc., against a total cash consideration of US\$1.1 billion. The stakes held in BATS Global Markets, Inc, in Digital Asset Holdings LLC, and in ICE US Holding Company, Inc were not part of this agreement; Deutsche Börse Group continues to hold these investments. On 26 October 2016, Deutsche Börse sold parts of its stakes held in BATS Global Markets, Inc. The €23.1 million capital gain after taxes achieved upon disposal is reported in the Eurex segment. Following the sale of ISE as at 30 June 2016, this subsidiary has represented a discontinued operation as defined in IFRS 5. In accordance with IFRS requirements, the Group is now reporting its financial indicators in its combined management report without this discontinued operation. The comparative prior-year figures for the 2015 financial year were adjusted accordingly.

Effective 25 February 2016, Deutsche Börse AG sold its interest in Infobolsa S.A. Until that date, Bolsas y Mercados Españoles (BME) and Deutsche Börse had each held 50 per cent of the interests in Infobolsa S.A. and its subsidiaries (Market Data + Services segment). Effective 8 July 2016, Deutsche Börse AG sold the assets and liabilities related to its subsidiary Market News International Inc. (MNI) to Hale Global as part of an asset deal. In 2015, MNI contributed less than 1 per cent to the Group's net revenue (Market Data + Services segment).

Within Deutsche Börse Group, a series of organisational changes took place, affecting segment reporting:

#### Xetra segment

explicit recognition of revenue from listings (which was previously recognised under the "other" item)

#### Clearstream segment

breakdown of custody and settlement revenue into international business (ICSD), domestic business
 (CSD) and Investment Funds Services (prior to this, breakdown was only into custody and settlement)

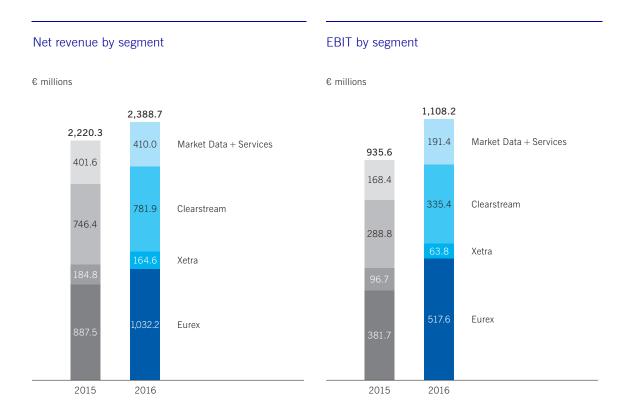
#### Market Data + Services segment

- merger of the Tools and Market Solutions business segments into Infrastructure Services
- information business segment was renamed Data Services
- reassignment of revenue from regulatory services, from Tools to Data Services
- reassignment of EEX connection revenue to Eurex

#### Results of operations

Although Deutsche Börse Group's revenue resources were influenced differently by the macroeconomic environment, the Group was able to prove the capabilities of its diversified business model during the year under review.

Compared to the previous financial year, cash markets profited less from the expansive monetary policy and excess market liquidity, although the ECB pushed deposit rates further negative during the first quarter of 2016, and extended its bond-buying programme. On the contrary, in light of the uncertainty surrounding the future of the European Economic Area, investors (notably from the US) increasingly withdraw their capital from European markets, and invested in their domestic markets, or emerging markets. The Brexit referendum held in June, and the presidential elections in the US in November contributed to the capital outflow from Europe, even though Deutsche Börse registered high trading volumes immediately before and after these events, as expected. Moreover, an increasing share of investments was bound towards alternative investment forms. Index levels of the benchmark indices DAX and STOXX® did



not quite reach the annual average of the previous year, which was due, among other things, to the revenue achieved with cash markets, Clearstream's domestic business, and the MD+S segment. Benchmark indices only accelerated towards the end of the year – after the US elections. However, equity index derivatives generated constant growth rates throughout the year, while interest rate derivatives accelerated only during the fourth quarter, following the turnaround in US interest rates. Deutsche Börse's commodities business, operated by the European Energy Exchange (EEX) and its subsidiaries, clearly increased in all areas, expanding its market position vis-à-vis competitors, and OTC trading. Regarding FX trading, operated by Deutsche Börse's subsidiary 360T, new customer business in particular provided the ground to achieve growth in a decelerating market. With regard to the post-trade business, Clearstream took advantage of rising interest rates in the US and the expansion of its international business, while the domestic business – given the weaker German cash market – lagged the previous year. The technology and market data business of Deutsche Börse Group (Market Data + Services segment) achieved growth, in particular with the index business. The Group benefited from additional tailwinds in selected business divisions, such as the lower valuation of the euro compared to the US dollar, or the stable economic cycles prevailing in relevant economies (e.g. Germany, US).

Deutsche Börse Group's net revenue increased by 8 per cent in the 2016 financial year, with the Eurex segment generating the strongest growth rate of 16 per cent. Net revenue of the Clearstream and Market Data + Services segments increased by 5 per cent and 2 per cent, respectively, while the cash market lacked 11 per cent behind the previous year, at very high trading activities and increased index levels. Net revenue attributable to changes in the basis of consolidation totalled €41.3 million. Net revenue is composed of sales revenue plus net interest income from banking business and of other operating income, less volume-related costs.

Some of Deutsche Börse Group's markets allocated to the Eurex segment and traded on its systems significantly increased their volume compared to the previous year. The number of futures and options contracts traded on Eurex Exchange increased by 3 per cent, trading in electricity products soared by 46 per cent, trading in gas products by 71 per cent, and emissions trading rose by 40 per cent. Net revenue in the Eurex segment increased by a total of 16 per cent. Besides the higher number of contracts, this was particularly attributable to the growth rate achieved by EEX, which more than doubled its net revenue through organic growth, and to 360T, which was fully consolidated on an annual basis for the first time.

However, trading volumes declined on all cash market trading platforms. Moreover, the – compared to the previous year – relatively low index levels had a negative impact on the realised revenues, given that cash market fees are based on transaction value. Hence, net revenue decreased by 11 per cent.

The Clearstream segment provides post-trade services and generated solid growth rates during the year under review: in the international business, and the Global Securities Financing (GSF) business, the segment grew by 3 per cent, and 8 per cent, respectively. Funds business generated stable revenues, while the domestic business deteriorated by 7 per cent, in line with the weaker cash market. Net interest income from the banking business grew by 84 per cent compared to the previous year based on the turnaround in US interest rates and the charging of negative deposit rates.

Net revenue of the Market Data + Services segment was slightly above the previous year's figure – the index business in particular developed strongly on a sustained basis and increased net revenue by 12 per cent.

Operating costs were up 3 per cent year-on-year, including non-recurring effects of €143.2 million (2015: €124.8 million). Non-recurring effects are partially related to the planned merger with London Stock Exchange Group (LSEG) (€65.8 million), the integration of acquired companies or the devolving

of sold companies ( $\in$ 42.7 million), criminal proceedings against Clearstream Banking S.A. in the US ( $\in$ 19.7 million) as well as efficiency programmes ( $\in$ 11.1 million). Adjusted for these non-recurring factors, operating costs increased by 1 per cent compared to the previous year. This year-on-year increase was exclusively due to consolidation activities; excluding consolidation effects, costs slightly declined by  $\in$ 15.1 million or 1 per cent (2015:  $\in$ 1,189.3 million).

Staff costs are a key driver for operating costs. Adjusted staff costs increased by €32.4 million to €573.0 million (2015: €540.6 million) due to a series of reasons:

- full consolidation of 360T on an annual basis
- salary increase of 2.5 per cent
- higher bonus payments to employees due to successful financial year
- increased average number of employees during the year under review

Depreciation, amortisation and impairment losses increased by 8 per cent (adjusted) in the year under review. This was mainly due to the amortisation of hidden reserves which were revealed in connection with the full consolidation of 360T in 2015, in the amount of €10.1 million (2015: €2.1 million).

Other operating expenses relate primarily to the costs of enhancing and operating Deutsche Börse Group's technological infrastructure, including, for example, costs for IT services providers and data processing. In addition, other operating expenses include the cost of the office infrastructure at all the Group's locations as well as travel expenses, most of which are incurred in connection with sales activities. Because of the Group's business model and the fact that the company does not normally distribute its products and services to end customers, advertising and marketing costs only account for a very small portion of the company's operating expenses. Adjusted for non-recurring effects, the other operating expenses declined by 5 per cent.

The result from equity investments amounted to €36.9 million (2015: €-1.5 million). The significant increase was due in particular to non-recurring income in connection with the disposal of the shares held in BATS Global Markets, Inc during the fourth quarter 2016. Adjusted for this non-recurring effect, the result from equity investments was €5.7 million (2015: €2.7 million).

Deutsche Börse Group's earnings before interest and taxes (EBIT) increased by 18 per cent during the year under review. Adjusted for non-recurring items in costs and the result from equity investments, the Group's EBIT increased by 15 per cent.

# Deutsche Börse Group key performance figures

|   | unadjusted |         |        | adjusted |         |        |  |
|---|------------|---------|--------|----------|---------|--------|--|
|   | 2016       | 2015    | Change | 2016     | 2015    | Change |  |
|   | €m         | €m      | %      | €m       | €m      | %      |  |
| Net revenue   | 2,388.7    | 2,220.3 | 8      | 2,388.7  | 2,220.3 | 8      |  |
| Operating costs   | 1,317.4    | 1,283.2 | 3      | 1,174.2  | 1,158.4 | 1      |  |
| EBIT  | 1,108.2    | 935.6   | 18     | 1,220.2  | 1,064.6 | 15     |  |
| Consolidated net profit for the period attributable to Deutsche Börse AG shareholders | 722.1      | 613.3   | 18     | 810.8    | 712.1   | 14     |  |
| Earnings per share (basic) in €   | 3.87       | 3.31    | 17     | 4.34     | 3.85    | 13     |  |

The Group's financial result was  $\in$ -74.6 million (2015:  $\in$ -57.5 million). The change compared with the previous year was due in particular to positive currency effects attributable to the first quarter 2015 in the amount of  $\in$ 18.1 million.

The effective Group tax rate 2016 was 27.7 per cent. Adjusted for non-recurring effects, it was 27.0 per cent as expected.

The net profit for the period attributable to Deutsche Börse AG shareholders (hereinafter referred to as consolidated net profit) increased by 18 per cent compared with the previous year (adjusted: 14 per cent).

Non-controlling interests in consolidated net profit attributable to Deutsche Börse AG shareholders for the period amounted to €25.5 million (2015: €35.7 million). Non-controlling shareholders of EEX group received a considerable portion of net profits. The decline was due, among other things, to the full consolidation of STOXX in 2015.

Basic earnings per share, based on the weighted average of 186.8 million shares, amounted to €3.87 (2015: €3.31 for an average of 185.0 million shares outstanding). Adjusted for the non-recurring income items described above, basic earnings per share rose to €4.34 (2015: €3.85).

#### Comparison of results of operations with the forecast for 2016

In 2015, Deutsche Börse Group introduced principles for managing operating costs in order to ensure the scalability of the Group's business model. Since then, the Group has continuously managed operating costs relative to the development of net revenue. For 2016, the Group forecast an adjusted operating costs growth range of between 0 and 5 per cent, depending on the net revenue increase. With the disclosure of a modest growth figure of 1 per cent, at a revenue increase of 8 per cent, the Group met expectations.

Deutsche Börse Group projected an increase in net revenue of between 5 and 10 per cent, and of operating costs in a corresponding range. Furthermore, the Group expected an increase in EBIT and in the

# Key figures by quarter (adjusted)

|   | Q1                | Q2                |                   |                   | Q3                |                   | Q4                |                   |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | <b>2016</b><br>€m | <b>2015</b><br>€m | <b>2016</b><br>€m | <b>2015</b><br>€m | <b>2016</b><br>€m | <b>2015</b><br>€m | <b>2016</b><br>€m | <b>2015</b><br>€m |
| Net revenue   | 610.5             | 564.7             | 600.7             | 547.1             | 558.5             | 555.0             | 619.0             | 553.5             |
| Operating costs   | 279.8             | 260.5             | 275.8             | 273.4             | 275.7             | 290.6             | 342.9             | 333.9             |
| EBIT  | 332.3             | 305.8             | 325.6             | 273.5             | 286.0             | 265.9             | 276.3             | 219.4             |
| Consolidated net profit for the period attributable to Deutsche Börse AG shareholders | 221.3             | 205.6             | 218.5             | 180.8             | 190.7             | 179.2             | 180.3             | 146.5             |
| Earnings per share (basic) in €   | 1.18              | 1.12              | 1.17              | 0.98              | 1.02              | 0.97              | 0.97              | 0.78              |

consolidated net profit of between 10 and 15 per cent. With an EBIT increase of 15 per cent, and an increase in net profit for the period attributable to Deutsche Börse AG shareholders (consolidated net profit) of 14 per cent on an adjusted basis, Deutsche Börse Group's performance lies at the upper end of the projection range. Moreover, the Group achieved a ratio of interest-bearing gross debt to adjusted EBITDA of 1.5 at Group level, exactly in line with the target value of 1.5. The adjusted tax rate was 27.0 per cent, as planned. In line with projections, the operating cash flow was clearly positive. Investments in the continued business in property, plant and equipment, as well as intangible assets in the amount of €152.6 million were in line with the forecast. After increasing its target figures, the Group aimed to distribute dividends equivalent to the mean of the projected range of 40 to 60 per cent of (adjusted) consolidated net profit. According to the proposal made to the Annual General Meeting, a figure of 54 per cent will be reached.

#### **Eurex segment**

The performance of the Eurex derivatives segment largely depends on the trading activities of institutional investors and proprietary trading by professional market participants. The segment's revenue is therefore generated primarily from the combined transaction fees that Eurex charges for trading and clearing derivatives contracts.

Revenue generated from Deutsche Börse Group's derivatives markets is primarily driven by the derivatives traded on Eurex Exchange: equity index derivatives accounted for 42 per cent of net revenue, interest rate derivatives 18 per cent and equity derivatives 4 per cent. Energy products traded on the EEX and its subsidiaries and/or shareholdings, and derivatives based thereon (commodities), contributed 21 per cent; foreign-exchange trading on 360T® contributed approximately a further 6 per cent. The "other" item (9 per cent) includes, among other things, the repo business, the participation fees paid by trading and clearing participants, as well as interest income generated by the Group's clearing houses from investing their clients' cash collateral. Deutsche Börse Group sold US options ISE to Nasdaq, Inc. as at 30 June 2016. The sale represents a discontinued operation as defined in IFRS 5. In accordance with IFRS 5 requirements, the Group is now reporting its financial key figures in its combined management report without this discontinued operation. The prior-year figures for the 2015 financial year were adjusted accordingly.

The derivatives market benefited from a trading environment that was very active overall. Even though average volatility was lower than in the previous year, demand for Eurex products rose during the course of the year as a whole – also due to changes in the political environment, such as the UK's "Brexit" referendum on the country's EU membership in June or the US presidential election in November. Moreover, the turnaround in US interest rates – initiated in December 2015 and affirmed in December 2016 – stimulated business in interest rate derivatives during the second half of the year. Thanks to its broad product portfolio, Eurex is in a prime position to service investors' hedging strategies in all situations. Nonetheless, the macroeconomic environment continued to present challenges. The ECB continued its

# Comparison of results of operations with the forecast for 2016

|   | Forecast<br>% | Result<br>% |
|---|---------------|-------------|
| Net revenue   | +5-10         | +8          |
| Operating costs (adjusted)  | 0-5           | +1          |
| EBIT (adjusted)   | +10-15        | +15         |
| Net profit for the period attributable to Deutsche Börse AG shareholders (adjusted) | +10-15        | +14         |

bond-buying programme and lowered its key interest rates once again in March 2016, cutting the deposit facility rate to -0.4 per cent, and the rate for its main refinancing operations in the euro area to 0 per cent. This was exacerbated by the persistently fragile economic situation in some countries and the low inflation environment during much of the year, with deflationary trends in some cases. Higher capital requirements – compared to the levels prevailing just a few years ago – and stricter rules for proprietary trading were additional burdens for investors.

Against this background, the Eurex segment once again improved on the previous year's result during the year under review. In total, 1,727.5 million futures and options contracts were traded on Eurex Exchange during 2016, up 3 per cent year-on-year (2015: 1,672.6 million). Commodities trading flourished, posting double-digit growth rates for electricity and gas products, as well as in emissions trading. The foreign-exchange business advanced slightly, against a decline in the overall market.

Net segment revenue increased by 16 per cent, operating costs rose by 8 per cent. €54.2 million (2015: €49.8 million) were attributable to non-recurring effects, especially in the context of the planned merger with LSEG and the integration of 360T and Powernext. 360T, which was consolidated in Q4/2015 accounted for €64.2 million of net revenue; its share in costs was €48.5 million. EBIT rose by 36 per cent, adjusted for non-recurring effects by 26 per cent.

As in the previous year, Eurex equity index derivatives were the product group with the highest trading volume. Contracts on the EURO STOXX 50® index were by far the most commonly traded products (374.5 million futures and 301.5 million options). The volume of Eurex's equity derivatives contracts (single-stock options and futures) traded in the year under review declined by 7 per cent. The volume of interest rate derivatives traded rose by 3 per cent during the year under review.

A rising proportion of Eurex segment revenue is contributed by relatively new products, such as volatility derivatives or derivatives on Italian and French government bonds, which Eurex launched to gradually supplement its range of benchmark products. Traded volumes in these products posted double-digit growth rates during the year under review.

# Segment key figures (adjusted)

|                 | Eurex             |                   | Xetra          |                   | Clearstream       |                   | Market Data + Services |                   |  |
|-----------------|-------------------|-------------------|----------------|-------------------|-------------------|-------------------|------------------------|-------------------|--|
|                 | <b>2016</b><br>€m | <b>2015</b><br>€m | <b>2016</b> €m | <b>2015</b><br>€m | <b>2016</b><br>€m | <b>2015</b><br>€m | <b>2016</b><br>€m      | <b>2015</b><br>€m |  |
| Net revenue     | 1,032.2           | 887.5             | 164.6          | 184.8             | 781.9             | 746.4             | 410.0                  | 401.6             |  |
| Operating costs | 495.5             | 457.6             | 95.1           | 81.0              | 398.8             | 402.8             | 184.8                  | 217.0             |  |
| EBIT            | 540.6             | 430.3             | 71.1           | 106.0             | 383.3             | 343.7             | 225.2                  | 184.6             |  |

EEX is the leading European energy exchange: it develops, operates and connects secure, liquid and transparent markets for energy and commodity products. The products traded on markets operated by EEX Group are electricity, natural gas, environmental products (such as emission allowances), agricultural products, as well as other commodities (in particular, freight rates, bunker fuel, and metals). EEX completed additional inorganic growth initiatives during 2016, thus strengthening its position as the central market for energy, energy-related products and commodities in Europe. The most important strategic steps in 2016 included the acquisition of a majority stake in Power Exchange Central Europe a.s. (PXE), based in Prague, which is EEX Group's first presence in the East European trading markets; the cooperation between Powernext and Austrian Central European Gas Hub AG (CEGH) for the joint development of gas markets in Austria, as well as in Central and Eastern Europe; and the full acquisition of Danish gas exchange Gaspoint Nordic A/S. Moreover, EEX Group succeeded in markedly growing its market share, compared to off-exchange markets, in the relevant products. On this basis, EEX Group posted substantial double-digit growth rates in its three core business segments during the 2016 financial year: up 46 per cent in the spot and forward electricity markets, up 71 per cent in the gas market, and up 40 per cent in emission rights trading.

# Eurex segment: key figures

|   | 2016                      | 2015                      | Change |
|---|---------------------------|---------------------------|--------|
| Financial key figures                                   | €m                        | €m                        | %      |
| Net revenue   | 1,032.2                   | 887.5                     | 16     |
| Operational costs                                       | 549.7                     | 507.4                     | 8      |
| EBIT  | 517.6                     | 381.7                     | 36     |
| EBIT (adjusted)   | 540.6                     | 430.3                     | 26     |
| Financial derivatives: trading volume on Eurex Exchange | m contracts               | m contracts               | %      |
| Derivatives <sup>1)</sup>                               | 1,727.5                   | 1,672.6                   | 3      |
| Equity index derivatives <sup>2)</sup>                  | 894.0                     | 837.7                     | 7      |
| Interest rate derivatives                               | 526.6                     | 509.1                     | 3      |
| Equity derivatives <sup>2)</sup>                        | 291.1                     | 311.8                     | -7     |
| Commodities: trading volume on EEX <sup>3) 4)</sup>     | TWh / m t CO <sub>2</sub> | TWh / m t CO <sub>2</sub> | %      |
| Electricity   | 4,455.6                   | 3,061.5                   | 46     |
| Gas   | 1,756.2                   | 1,024.9                   | 71     |
| Emissions trading                                       | 949.9                     | 677.6                     | 40     |
| Foreign exchange business: traded volume on 360T®       | €bn                       |                           | %      |
| Average daily volume on 360T®                           | 57.6                      | 55.3                      | 4      |

<sup>1)</sup> The total deviates from the sum of individual figures since it includes additional traded products, such as ETF, volatility, currency and precious metals derivatives.

<sup>2)</sup> Dividend derivatives are assigned to equity index and equity derivatives.

<sup>3)</sup> Volumes traded on EEX – in terawatt hours (TWh) for power and gas contracts, and in million tonnes of  $CO_2$  for emissions trading

<sup>4)</sup> Including volumes traded in the power segment on EPEX, APX/Belpex (or SEEPEX, since 17 February 2016), and in the gas segment on Powernext and Gaspoint Nordic (the latter added in 2016)

Global foreign exchange trading was characterised by declining traded volumes during the year under review, due to various factors including political uncertainty, changes in the regulatory framework, and reduced prime brokerage capacity, which burdened trading activity. Nonetheless, 360T®, one of the world's leading foreign-exchange platforms (winning awards such as "Best Professional E-trading Venue" and "Best e-FX Platform for Corporates"), which was acquired in 2015, managed to buck this trend, increasing its foreign-exchange trading volumes by 4 per cent. This growth was mainly driven by trading activity of new clients. 360T continued to grow its client portfolio across all regions and market segments; its integration into Deutsche Börse Group is making dynamic progress. During the year under review, this included joint client calls and joint cooperation in developing new offerings – for example, the FX trading order book, FX futures products and preparing a clearing offer for FX OTC contracts.

#### Xetra segment

The Xetra segment generates most of its net revenue from trading and clearing cash market securities. The primary sales driver, accounting for 64 per cent, was net revenue from trading. The central counterparty (CCP) for equities and exchange-traded products (ETPs) operated by Eurex Clearing AG contributed 16 per cent to the segment's net revenue; the net revenue of the CCP is determined to a significant extent by trading activities on Xetra®. Listing revenue (which accounts for around 9 per cent) is primarily generated from existing listings and new admissions. The "other" item (accounting for a total of 10 per cent of net revenue) includes, among others, net revenue generated by Eurex Bonds.

Net revenue in the Xetra segment declined by 11 per cent during the year under review. Operating costs rose by 21 per cent, mainly due to non-recurring effects. These non-recurring effects had burdened the

#### Net revenue in the Eurex segment Net revenue in the Xetra segment € millions € millions 1.032.2 184.8 88.0 Other1) 17.0 887.5 64.2 FX (360T)2) 74.2 13.6 164.6 215.9 Commodities (EEX) 16.7 Other 175.3 15.4 Listing 37.9 Equity derivatives Central counterparty 36.3 for equities Interest rate derivatives 105.8 Trading<sup>1)</sup> Index derivatives

2016

2015

2016

2015

<sup>1)</sup> Incl. repo business and net interest income from banking business 2) Consolidation in Q4/2015

The position "Trading" includes the Xetra® electronic trading system, Börse Frankfurt as well as structured products trading.

financial year 2015 (€3.9 million) and amounted to €7.3 million in the year under review, amongst others driven by the planned business combination with LSEG. As a result of significantly higher costs, EBIT decreased by 34 per cent.

During the year under review, cash markets in Europe failed to match the high trading volumes seen in 2015's record year – a development which Deutsche Börse and its marketplaces Xetra, the Frankfurt Stock Exchange, and Tradegate, were not immune to either. In the previous year, cash markets had benefited strongly from the launch of the ECB's bond-buying programme (as part of its quantitative easing policy, QE), and from strong market liquidity. This effect was reduced during the second year of QE, and investors were increasingly looking at alternative investment opportunities again. This was exacerbated by the continued fragile state of economies in Europe, plus the UK's decision to leave this economic area – developments which dented investors' confidence in the European capital markets. As a result, US investors in particular pulled capital from Europe, shifting investments to other markets.

In the 2016 financial year, securities with a total volume of €1.38 trillion were traded on Deutsche Börse Group's cash markets (2015: €1.64 trillion). They included shares and bonds from German and international issuers, exchange-traded funds (ETFs) and exchange-traded commodities (ETCs) as well as units in actively managed mutual funds and structured products. Institutional, private and international investors primarily trade on Xetra, the electronic trading platform. As a result, Xetra generates by far the highest trading volumes within the segment. In addition to Xetra, Deutsche Börse operates trading at the Frankfurt Stock Exchange and holds a 75 per cent stake in Tradegate Exchange GmbH – Germany's leading stock exchange for retail investors. At the end of the reporting year, Deutsche Börse increased its stake in Tradegate AG Wertpapierhandelsbank, which holds the remaining shares in Tradegate Exchange, from just under 15 per cent to just under 20 per cent, subject to regulatory approval.

Deutsche Börse has been operating Europe's leading marketplace for ETFs since 2000. It offers investors the largest selection of ETFs of all European exchanges: as at 31 December 2016, 1,133 ETFs were listed (2015: 1,116 ETFs). Assets under management held by ETF issuers totalled &411.6 billion at the end of the year, a year-on-year increase of 17 per cent (31 December 2015: &351.6 billion). Trading volumes declined by 16 per cent to &158.0 billion (2015: &188.9 billion). The most heavily traded ETFs are based on the European STOXX equity indices and on the DAX index.

Xetra-Gold®, a bearer bond issued by Deutsche Börse Commodities, benefited from the ECB's low interest rate policy as well as from investor unrest following the UK's Brexit referendum. Xetra-Gold has gen-

### Xetra segment: key figures

|  | 2016    | 2015    | Change |
|--|---------|---------|--------|
| Financial key figures                        | €m      | €m      | %      |
| Net revenue                                  | 164.6   | 184.8   | -11    |
| Operating costs                              | 102.4   | 84.9    | 21     |
| EBIT   | 63.8    | 96.7    | -34    |
| EBIT (adjusted)                              | 71.1    | 106.0   | -33    |
|  |         |         | _      |
| Cash market: trading volume (single-counted) | €bn     | €bn     | %      |
| Xetra <sup>®</sup>                           | 1,262.1 | 1,505.8 | -16    |
| Frankfurt Stock Exchange                     | 43.9    | 54.6    | -19    |
| Tradegate                                    | 71.0    | 75.3    | -6     |

erated the most turnover among all ETCs traded on Xetra: aggregate order book turnover was around €2.7 billion in 2016. Likewise, assets under management in Xetra-Gold stood at a record level of approximately €4.2 billion as at 31 December 2016.

The number of IPOs declined on a global scale during 2016, reflecting political and economic uncertainty. Accordingly, IPO activity at Frankfurter Wertpapierbörse (FWB®, the Frankfurt Stock Exchange) showed a mixed picture, with 19 new companies listed (2015: 24 new listings), bringing aggregate new issue volume to around €5.2 billion (2015: €7 billion). Despite the challenging market environment for IPOs, innogy SE, a subsidiary of RWE AG, managed to place the biggest IPO since 2000 in early October: a total of 555.6 million shares were admitted to trading, bringing the issue volume to some €5 billion.

The purpose of an exchange is to provide financing to, and foster growth for the real economy – this is at the very heart of an exchange's business. This is why Deutsche Börse has decisively expanded the pre-IPO business in its "Pre-IPO and Growth Financing" franchise. Alongside established on-exchange business (including trading in equities, bonds and other securities, as well as IPOs), this business has (once again) formed part of a separate Executive Board portfolio since 2016. Over a medium-term horizon, coordinated initiatives in the pre-IPO area are designed to lead to IPOs at the Frankfurt Stock Exchange.

It is Deutsche Börse's goal to establish an ecosystem for growth, designed to facilitate a better flow of investments and to enhance financing options for enterprises of any size (whether it is start-ups, small and medium-sized enterprises (SMEs), or large corporate groups). One of the building blocks in this development is the FinTech Hub in Frankfurt/Main, which supports start-ups on the Frankfurt financial marketplace and thus fosters a lively entrepreneurial culture. Launched in 2015, Deutsche Börse Venture Network® is designed to support companies in their growth phase which require more substantial follow-up financing. It brings these enterprises together with international investors, facilitating the raising of capital and enabling companies to build an extensive network – paving the way for their IPO. At the end of September 2016, Würzburg-based va-Q-tec was the first Venture Network company to go public, with an IPO in the Prime Standard segment. The exclusive Venture Network online platform allows investors and entrepreneurs to establish initial contacts, exchanging information within a protected area. Deutsche Börse Venture Network is continuously growing: at the end of the reporting year, 120 growth companies and 211 investors were active on the platform. Since the launch of the Venture Network, enterprises have raised around €1 billion in growth financing. With the new Venture Match service, introduced in September 2016, experts from Deutsche Börse now offer a more targeted matching of investors and companies, thus simplifying and enhancing access to growth capital as well as investment opportunities.

In its listing business, Deutsche Börse has announced the launch of Scale, a new segment for established small to medium-sized – and predominantly German – companies. The segment started operations on 1 March 2017. Companies seeking a listing in the new SME segment must fulfil certain minimum criteria: besides quantitative requirements, the focus here is on transparency and visibility – e.g. through mandatory research reports.

# Clearstream segment

The segment provides the post-trade infrastructure for the Eurobond market, and offers custody services for domestic securities from more than 50 markets worldwide. In doing so, Clearstream ensures that once a trade has been executed, cash and securities change hands. Clearstream is responsible for securities issuance, settlement, management and custody. As an international central securities depository (ICSD), Clearstream provides these settlement and custody services for securities held in Luxembourg. The ICSD business contributed 52 per cent to net revenue during the year under review. As a central securities depository (CSD), Clearstream services the market for German securities; this business accounts for 15 per cent of net revenue. Investment fund services are the segment's third pillar, accounting for 16 per

cent of net revenue. Using Clearstream's Vestima® fund processing platform, clients can manage settlements and custody for their entire fund portfolio. Net revenue from the Global Securities Financing (GSF) franchise – which encompasses triparty repo, GC Pooling®, securities lending and collateral management – contributed 9 per cent of the segment's net revenue. Net interest income from Clearstream's banking operations accounted for 8 per cent of net revenue.

Within the ICSD and CSD business, custody services provide the greater contribution. Net revenue in this business is mainly driven by the volume and value of securities under custody, which determines the deposit fees. The settlement business – the second pillar – depends heavily on the number of settlement transactions processed by Clearstream, both via stock exchanges and over the counter (OTC).

During the year under review, Clearstream saw growth in its ICSD business, in its Global Securities Financing services and in its net interest income from banking business. The segment increased its net revenue by 5 per cent. Operating costs declined by 2 per cent. Non-recurring effects totalled €47.9 million in 2016. In addition to costs for the planned business combination with LSEG they were attributable in particular to criminal investigations against Clearstream Banking S.A. in the US (2015: non-recurring effects of €54.9 million). EBIT thus increased by 16 per cent, adjusted for non-recurring effects of 12 per cent.

The Clearstream segment grew its ICSD business by 3 per cent: the value of international assets held in custody (which predominantly comprise bonds traded on the OTC market) increased slightly year-on-year, as did the number of transactions.

# Clearstream segment: key figures

|   | 2016  | 2015  | Change |
|---|-------|-------|--------|
| Financial key figures   | €m    | €m    | %      |
| Net revenue   | 781.9 | 746.4 | 5      |
| Operating costs   | 446.7 | 457.7 | -2     |
| EBIT  | 335.4 | 288.8 | 16     |
| EBIT (adjusted)   | 383.3 | 343.7 | 12     |
| Business key figures  |       |       |        |
| International business (ICSD)                                     | €tn   | €tn   | %      |
| Value of securities under custody (average value during the year) | 6.8   | 6.7   | 1      |
| Domestic business (CSD)   | €tn   | €tn   | %      |
| Value of securities under custody (average value during the year) | 4.4   | 4.8   | -7     |
| Investment Funds Services   | €tn   |       | %      |
| Value of securities under custody (average value during the year) | 1.9   | 1.8   | 5      |
| Global Securities Financing                                       | €bn   |       | %      |
| Outstanding volume (average value during the year)                | 515.9 | 598.6 | -14    |
| Net interest income from banking business                         | €bn   |       | %      |
| Average daily cash balances <sup>1)</sup>                         | 13.1  | 12.4  | 5      |

<sup>1)</sup> Includes some &1.5 billion currently or formerly blocked by EU and US sanctions (2015: &1.5 billion)

The domestic CSD business reflects the business development on the German cash markets, whereby custody volumes are largely determined by the market values of equities, funds and structured products traded. Given lower trading activity, settlement volumes were down 8 per cent, whilst the value of assets held in custody declined by 7 per cent, due to lower average index levels compared to the previous year.

In the funds business, Clearstream saw slight increases in the volume of assets held in custody, reflecting the positive overall performance on the international fund markets throughout the year. However, the number of transactions settled was down 5 per cent. Clearstream owns Clearstream Global Securities Services (CGSS) based in Cork, Ireland, previously Citco's custody operations for financial institutions' hedge funds.

Average outstanding volumes in GSF decreased by 14 per cent. After the ECB flooded markets with liquidity within the scope of its quantitative easing policy, volumes were down significantly, especially in GC Pooling. At the same time, order flows shifted towards smaller, higher-priced lending volumes, raising GSF net revenue overall.

Average cash customer deposits were up 5 per cent year-on-year. Besides the effect of this increase in volume, net interest income benefited from the charging of negative interest rates to clients (in some cases with a mark-up). In addition, the US Federal Reserve had raised its US dollar interest rates for the first time after a long period in December 2015, following up with another increase in December 2016. This provided an added boost to net interest income (over and above the higher liquidity levels), given that around 49 per cent of cash deposits is denominated in US dollars.

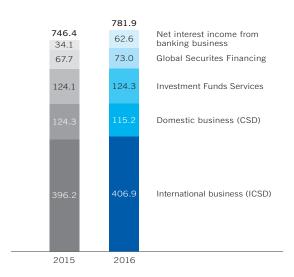
The TARGET2-Securities (T2S) settlement service, designed by the Eurosystem, commenced operations in 2016. Once T2S is fully functional in 2017 – according to schedule – it will harmonise cross-border securities settlements in central bank money throughout Europe. Directly following the launch date, Clear-stream provided its clients with the full range of benefits that the new settlement system offers. This enables clients to bundle their assets in a single pool, using the respective CSD as their access point to T2S.

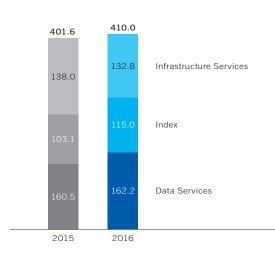
# Net revenue in the Clearstream segment

€ millions

Net revenue in the Market Data + Services segment

€ millions





At the same time, they can benefit from the ICSD's securities lending and collateral management services. For instance, it is now possible to settle triparty repos using commercial bank money (i.e. in multiple currencies) or central bank money (in euros), with positions being held with the ICSD and CSDs. On 6 February 2017, Clearstream Banking AG and LuxCSD S.A. migrated – on schedule and in full – to the ECB's settlement systems. Clearstream's systems, which were initially running in parallel during the test phase, have been switched off. The segment envisages at least compensating for lost settlement fees, through a sensitive pricing policy and additional offers to clients.

# Market Data + Services segment

The core business of the Market Data + Services segment is the distribution of capital market information, technology and infrastructure services to clients worldwide. These services include real-time trading and market signals, as well as indices such as EURO STOXX 50® and DAX. Capital market participants subscribe to this information, or licence it for their own use, processing, or dissemination. The segment generates much of its net revenue on the basis of long-term client relationships; it is relatively independent of trading volumes and capital markets volatility. The assets and liabilities related to its MNI subsidiary were sold by way of an asset deal, effective 8 July 2016. Deutsche Börse AG already sold its 50 per cent stake in Infobolsa S.A. in February.

Despite the deconsolidation of MNI and Infobolsa, Market Data + Services slightly increased net revenue during the year under review. Operating costs showed a significant marked decline, due to deconsolidation (amongst other factors), but also through strict cost management: they included non-recurring effects of €33.8 million (2015: €16.2 million), largely related to the planned business combination with LSEG as well as to the integration respective disintegration of companies (STOXX, MNI). Accordingly, the segment's EBIT rose considerably by 14 per cent, excluding non-recurring effects by 22 per cent.

The net revenue of the segment comprises the business areas Data Services (40 per cent), Index (28 per cent), and Infrastructure Services (32 per cent).

The Data Services business area mainly involves the distribution of licences for real-time trading and market signals, and for the provision of historical data to banks, trading firms, and fund management companies. The most important products in this respect are order book data from the cash and derivatives markets, as well as reference data of Deutsche Börse and its partner exchanges. Business remained largely stable during the year under review, despite the deconsolidation of MNI.

In its Index business area, which it conducts through its STOXX Ltd. subsidiary, Deutsche Börse generates revenue from calculating and marketing indices and benchmarks, which banks and fund management companies use as underlying instruments or benchmark references for financial instruments and investment vehicles. The extensive range of indices offered by STOXX Ltd. provides issuers with a wealth of opportunities for creating financial instruments for most diverse investment strategies. The Index business continued its growth path, driven especially by a vivid issuance of structured products on STOXX indices that are designed for investors to realise their investment strategies and higher trading volumes of Eurex contracts based on STOXX and Deutsche Börse indices. Conversely, assets under management in ETFs declined, due to investors withdrawing capital particularly from those ETFs which track the European capital markets – these make up a large part of the STOXX portfolio.

The Infrastructure Services business area generates revenue primarily from connectivity services for trading and clearing participants. Revenue generated from these services rose during the year under review, thanks to the segment's success in convincing a constantly rising number of clients to opt for data connections with higher bandwidth. In addition, Infrastructure Services provides development and operational services for technology clients outside the Group – such as partner exchanges, banks acting as Designated Sponsors, or the German regional stock exchanges. Deutsche Börse operates technology on

behalf of partner exchanges in Dublin, Vienna, Sofia, Ljubljana, Prague, Budapest, on Malta and the Cayman Islands, as well as domestic exchanges operated by brokers and banks in Frankfurt/Main, Berlin, Dusseldorf, Hamburg/Hanover and Munich.

# Development of profitability

Deutsche Börse Group's return on shareholders' equity expresses the ratio of net income after taxes to average equity available to the Group during the course of 2016. Mainly due to the increase in net income and equity, return on shareholders' equity remained largely unchanged at 17.3 per cent (2015: 17.0 per cent) in the 2016 financial year. Adjusted for the non-recurring effects described in the "Results of operations" section, the return on equity amounted to 19.4 per cent (2015: 19.6 per cent).

### Financial position

### Cash flow

Cash and cash equivalents at Deutsche Börse Group comprise cash and bank balances to the extent that these do not result from reinvesting current liabilities from cash deposits by market participants as well as receivables and liabilities from banking business with an original maturity of three months or less. Cash and cash equivalents as at 31 December 2016 amounted to  $\[ \in \]$  -1,579.4 million). The technical closing-date item is negative especially due to finan-cial assets with a maturity of more than three months. The latter do not qualify as cash and cash equivalents and the cash flows associated with them have been allocated to investing activities. Cash and bank balances amounted to  $\[ \in \]$  1,458.1 million as at 31 December 2016 (31 December 2015:  $\[ \in \]$  711.1 million).

Deutsche Börse Group's cash flow from operating activities is relevant only to a limited extent as it includes in particular CCP positions, which are subject to significant fluctuations on the reporting date. Due to this, the following refers in particular to the cash flow from operating activities excluding CCP positions. In the 2016 financial year, Deutsche Börse Group generated €856.6 million (2015: €796.6 million) in cash flow from operating activities, excluding changes in CCP positions on the reporting date.

Moreover, Deutsche Börse Group paid taxes in the amount of €277.8 million during the 2016 financial year (2015: €207.7 million). Higher tax payments were partly attributable to the sale of shares in U.S. Exchange Holdings, Inc.

Other non-cash income amounted to €52.3 million (2015: other non-cash expenses of €7.0 million); this was, in particular, due to income from the sale of shares in BATS Global Markets Inc. The transaction generated cash of €80.3 million, reported under cash flows from investing activities.

# Market Data + Services segment: key figures

|                       | 2016  | 2015  | Change |
|-----------------------|-------|-------|--------|
| Financial key figures | €m    | €m    | %      |
| Net revenue           | 410.0 | 401.6 | 2      |
| Operating costs       | 218.6 | 233.2 | -6     |
| EBIT                  | 191.4 | 168.4 | 14     |
| EBIT (adjusted)       | 225.2 | 184.6 | 22     |

Taking CCP positions into account, cash flow from operating activities totalled €1,621.4 million (2015: €10.1 million). The change in CCP positions was influenced by non-delivered GC Pooling transactions in a total amount of US\$869.5 million; these could not be delivered on the due date (31 December 2015), but only on 4 January 2016. The reason was a clearing participant's failure to provide the necessary cash in good time.

Cash inflows from investing activities amounted to  $\$ 578.5 million in the 2016 financial year (2015: cash outflows of  $\$ 1,592.3 million). These were attributable, in particular, to the sale of shares in ISE Group, which generated cash of  $\$ 916.3 million (adjusted for cash and cash equivalents sold of  $\$ 13.0 million that were originally included in the cash amount). Furthermore, the sale of shares in Infobolsa S.A. generated cash of  $\$ 1.1 million (adjusted for cash and cash equivalents sold of  $\$ 7.1 million).

In addition, cash inflows of €149.9 million (2015: €208.3 million) resulted from maturities and disposals of securities with an original maturity of more than one year.

Cash outflows of €178.9 million (2015: €815.5 million) were due to the acquisition of long-term financial instruments.

At €164.9 million, investments in intangible assets and property, plant and equipment were above the prior-year level (2015: €154.5 million); most were made in the Clearstream and Eurex segments. Clearstream's investments related primarily to the expansion of its settlement and collateral management systems, while Eurex invested in its trading and clearing systems.

# Consolidated cash flow statement (condensed)

|  | 2016    | 2015     |
|--|---------|----------|
|  | €m      | €m       |
| Cash flows from operating activities (excluding CCP positions) | 856.6   | 796.6    |
| Cash flows from operating activities                           | 1,621.4 | 10.1     |
| Cash flows from investing activities                           | 578.5   | -1,592.3 |
| Cash flows from financing activities                           | -848.8  | 76.1     |
| Cash and cash equivalents as at 31 December                    | -146.9  | -1,579.4 |
| Cash and other bank balances as at 31 December                 | 1,458.1 | 711.1    |

Cash outflows for the acquisition of subsidiaries totalled €3.9 million (2015: €641.5 million). Cash outflows included €676.6 million for the acquisition of shares in 360T in the previous year. Full consolidation of Powernext and EPEX at 1 January 2015 increased cash by €40.1 million. Since no purchase price was payable in the acquisition of Powernext and EPEX during the business year 2015, there were no cash outflows.

Cash outflows stood at €848.8 million in the 2016 financial year (2015: cash inflows of €76.1 million).

During the 2016 financial year Deutsche Börse AG repaid series B and C of private placements issued in 2008, prior to maturity and within the scope of the ISE acquisition; this led to cash outflows of  $\[ \le \]$ 321.6 million. In the previous year, cash outflows of  $\[ \le \]$ 150.5 million were attributable to the maturity of series A of private placements issued in 2008.

The acquisition of a 49.9 per cent stake in STOXX Ltd. led to aggregate cash outflows of  $\[ \in \]$ 653.8 million in the 2015 financial year. This transaction was financed through the issue of a debt security with a nominal amount of  $\[ \in \]$ 600.0 million. Moreover, the company placed Treasury shares in the amount of  $\[ \in \]$ 200.0 million as well as a bond with a nominal amount of  $\[ \in \]$ 500.0 million within the scope of the 360T acquisition.

Moreover, the company placed commercial paper of €400.0 million (2015: €2,100.0 million), and paid out €495.0 million (2015: €2,065.0 million) due to maturing commercial paper issues. No commercial paper was outstanding as at 31 December 2016.

In addition, Deutsche Börse AG distributed €420.1 million in dividends for the 2015 financial year (dividends for the 2014 financial year: €386.8 million).

As in previous years, the Group assumes it will have a strong liquidity base in financial year 2016 due to its positive cash flows from operating activities, adequate credit lines and flexible management and planning systems.

# Deutsche Börse Group's interest coverage ratio

| Interest expense from financing activities                      | Issue volume                | <b>2016</b><br>€m | <b>2015</b> €m |
|---|-----------------------------|-------------------|----------------|
| Fixed-rate bearer bond (term until March 2018)                  | €600 m                      | 7.4               | 7.4            |
| Fixed-rate bearer bond (term until October 2022)                | €600 m                      | 14.8              | 14.8           |
| Fixed-rate bearer bond (term until October 2025)                | €500 m                      | 8.7               | 2.0            |
| Fixed-rate bearer bond (hybrid bond)                            | €600 m                      | 17.2              | 7.0            |
| Private placements <sup>1)</sup>                                | US\$290 m                   | 9.3               | 18.5           |
| Commercial paper  | €142 m – 2015 <sup>2)</sup> |                   | 0.1            |
|   | €35 m - 2016 <sup>2)</sup>  | -                 |                |
| Other interest expense  |                             | 4.5               | 4.5            |
| Total interest expense (incl. 50 per cent of the hybrid coupon) |                             | 53.3              | 50.8           |
| EBITDA (adjusted)   |                             | 1,345.7           | 1,180.7        |
| Interest coverage <sup>3)</sup>                                 |                             | 25.3              | 23.2           |

<sup>1)</sup> Bought back with the proceeds from the sale of ISE mid-2016

<sup>2)</sup> Annual average

<sup>3)</sup> EBITDA / interest expense from financing activities (includes 50 per cent of the interest on the hybrid bond)

# Operating leases

Deutsche Börse Group mainly uses operating leases for the office building in Eschborn that the Group moved into in the second half of 2010 and for the buildings used by Clearstream Inter-national S.A. in Luxembourg (see  $\boxdot$  note 38 to the consolidated financial statements for details).

### Liquidity management

Deutsche Börse primarily meets its operating liquidity requirements from internal financing, i.e. by retaining generated funds. The aim is to provide enough liquidity to cover operating costs for one quarter (currently between €150 million and €250 million). An intra-Group cash pool is used for pooling surplus cash as far as regulatory and legal provisions allow. All of the Group's cash investments are short-term in order to ensure rapid availability and are largely collateralised using liquid bonds from prime-rated issuers. Moreover, Deutsche Börse AG has access to external sources of financing, such as bilateral and syndicated credit lines, and a commercial paper programme (see → note 36 to the consolidated financial statements for details on financial risk management). In recent years, Deutsche Börse AG has leveraged its access to the capital markets to issue corporate bonds in order to meet its structural financing needs.

# Capital management

The company's clients generally expect it to maintain conservative interest service cover and leverage ratios, and to achieve good credit ratings. Therefore, the Group targets a minimum consolidated interest service cover ratio (defined as the ratio of EBITDA to interest expenses from financing activities) of 16. During the reporting period, Deutsche Börse Group achieved this target, with an interest service cover ratio of 25.3 (2015: 23.2). This figure is based on relevant interest expenses of €53.3 million and adjusted EBITDA of €1,345.7 million.

Data included for the purpose of calculating interest service cover comprises interest expenses incurred for financing Deutsche Börse Group, less interest expenses incurred by subsidiaries which are also financial institutions, including Clearstream Banking S.A., Clearstream Banking AG and Eurex Clearing AG. Interest expenses incurred which are not related to Group financing are not included in the calculation of interest service cover.

Moreover, Deutsche Börse targets a maximum ratio of interest-bearing gross debt to EBITDA of 1.5 at Group level. During the reporting period, the Group achieved a 1.5 ratio of gross debt to EBITDA. This figure is based on gross debt of €1,984.7 million, and adjusted EBITDA of €1,345.7 million. Gross debt consisted of interest-bearing liabilities of €1,984.7 million.

# Debt instruments issued by Deutsche Börse AG (outstanding as at 31 December 2016)

| Туре                                 | Issue volume | ISIN         | Term   | Maturity                        | Coupon p.a.                    | Listing                  |
|--------------------------------------|--------------|--------------|--|---------------------------------|--------------------------------|--------------------------|
| Fixed-rate bearer bond               | €600 m       | DE000A1R1BC6 | 5 years  | March 2018                      | 1.125 %                        | Luxembourg/<br>Frankfurt |
| Fixed-rate bearer bond               | €600 m       | DE000A1RE1W1 | 10 years   | October 2022                    | 2.375 %                        | Luxembourg/<br>Frankfurt |
| Fixed-rate bearer bond               | €500 m       | DE000A1684V3 | 10 years   | October 2025                    | 1.625 %                        | Luxembourg/<br>Frankfurt |
| Fixed-rate bearer bond (hybrid bond) | €600 m       | DE000A161W62 | Call date<br>5.5 years/<br>final maturity in<br>25.5 years | February 2021/<br>February 2041 | 2.75 %<br>(until call<br>date) | Luxembourg/<br>Frankfurt |

The decline in gross debt is a result of the full repurchase of outstanding US private placements, in the amount of US\$290 million, which also led to the ratio of gross debt to EBITDA reaching the target at the end of the year.

Furthermore, the company endeavours to maintain the strong AA credit rating of Clearstream Banking S.A., in order to ensure the long-term success of its Clearstream securities settlement and custody segment. The activities of the Eurex Clearing AG subsidiary also require Deutsche Börse AG to have and maintain a strong credit quality.

Also, Deutsche Börse AG has publicly stated its intention to maintain certain additional financial indicators for Clearstream entities which the company believes to be consistent with an AA rating. Specifically, this involves a commitment to maintain minimum tangible equity (equity less intangible assets) of €700 million for Clearstream International S.A., and of €400 million for Clearstream Banking S.A. During the reporting period, Clearstream International S.A. fulfilled this commitment, reporting tangible equity of €1,092.1 million; the figure for Clearstream Banking S.A. was €1,179.4 million, also in line with this target. To the extent that the Clearstream sub-group has financial liabilities to non-banks, the sub-group is committed to a minimum interest service cover ratio of 25. During the reporting period as in the previous year, Clearstream had no financial liabilities to non-banks; for this reason, no interest cover ratio is being reported.

Deutsche Börse Group generally aims to distribute dividends equivalent to between 40 and 60 per cent of adjusted net profit for the period attributable to Deutsche Börse AG shareholders. In recent years (where the Group's net profit was lower), the dividend payout ratio was kept at the upper end of this range, in order to distribute stable dividends to shareholders. Given that the Group's profit targets were raised in 2015 in connection with the announcement of the "Accelerate" growth strategy, the company aims for a dividend payout ratio in the middle of the range between 40 and 60 per cent going forward.

Moreover, until 2012 the company distributed a part of freely available funds to shareholders, via share buy-backs. Since 2013, these funds have been used predominantly to support the company's development, as well as to fulfil credit rating and regulatory capital requirements. Against the background of the "Accelerate" growth strategy, the company anticipates that in future, freely available funds will increasingly be applied not only to support the Group's organic growth, but also to complementary external growth options.

### **Dividends**

For financial year 2016, Deutsche Börse AG is proposing that the Annual General Meeting resolve to pay a dividend of &2.35 per no-par value share (2015: &2.25). This dividend corresponds to a distribution ratio of 54 per cent of net profit for the period attributable to Deutsche Börse AG shareholders, adjusted for the special factors described in the  $\trianglerighteq$  "Results of operations" section (2015: &55 per cent, also adjusted for special items). Given 186.8 million no-par value shares bearing dividend rights, this would result in a total dividend of &439.0 million (2015: &420.1 million). The aggregate number of

# Relevant key performance indicators

|   | <b>2016</b><br>€m | <b>2015</b> €m |
|---|-------------------|----------------|
| Tangible equity of Clearstream Inter-national S.A. (as at the reporting date) | 1,092.1           | 1,079.2        |
| Tangible equity of Clearstream Banking S.A. (as at the reporting date)        | 1,179.4           | 1,071.6        |

### Credit ratings

|                          | Long-term | Short-term |
|--------------------------|-----------|------------|
| Deutsche Börse AG        |           |            |
| Standard & Poor's        | AA        | A-1+       |
| Clearstream Banking S.A. |           |            |
| Fitch                    | AA        | F1+        |
| Standard & Poor's        | AA        | A-1+       |

shares bearing dividend rights is produced by deducting the 6.2 million treasury shares from the ordinary share capital of 193.0 million shares.

### Credit ratings

Deutsche Börse AG regularly has its credit quality reviewed by the Standard & Poor's (S&P) rating agency, while Clearstream Banking S.A. is rated by Fitch and S&P.

On 7 October 2016, Fitch Ratings affirmed the AA credit rating of Clearstream Banking S.A. with a stable outlook. The rating reflects Clearstream Banking's leading position in the post-trade business and its very low risk appetite, combined with strict risk management systems, diligent liquidity management, as well as its impeccable capitalisation.

On 19 December 2016, S&P affirmed the AA credit rating of Deutsche Börse AG, but maintained the negative outlook it had set in 2015, in connection with the acquisition of 360T.

On the same date, S&P affirmed the AA credit rating of Clearstream Banking S.A. with a stable outlook. The rating reflects the strong risk management, minimum debt levels, as well as Clearstream's strong position on the international capital markets, especially through its international custody and transaction business.

As at 31 December 2016, Deutsche Börse AG was one of only two DAX-listed companies that had been awarded an AA rating by S&P. The ratings histories of Deutsche Börse AG and Clearstream are given in the  $\boxdot$  five-year overview.

### Net assets

Material changes to net assets are described below; the full consolidated balance sheet is shown in the consolidated financial statements.

Deutsche Börse Group's non-current assets include primarily of intangible assets and financial assets as well as financial instruments held by central counterparties. The last category represented the largest item. This asset item is matched by a liability item in the same amount. Receivables and securities from the banking business, which Deutsche Börse Group holds as financial assets, declined during the year under review, in line with goodwill and other intangible assets. This decline mainly results from the disposal of ISE.

Current assets also decreased, driven in particular by financial instruments held by central counterparties, while receivables and securities from banking business (as well as restricted bank balances) increased slightly. This was mainly driven by two factors: higher client cash deposits at Clearstream, and higher cash collateral provided by the clearing members of Eurex Clearing AG during the year under review. Cash and bank balances clearly improved due to the disposal of ISE.

The financing of assets was provided through equity and debt capital. Equity increased year-on-year, driven particularly by the accounting profit realised with the disposal of ISE.

### Consolidated balance sheet (extracts)

|  | 31 Dec 2016 | 31 Dec 2015 |
|--|-------------|-------------|
|  | m€          | m€          |
| ASSETS   |             |             |
| Non-current assets   | 11,940.4    | 14,386.9    |
| thereof intangible assets                                    | 3,973.7     | 4,633.0     |
| thereof goodwill   | 2,721.1     | 2,898.8     |
| thereof financial assets                                     | 1,920.9     | 2,309.0     |
| thereof receivables and securities from banking business     | 1,604.8     | 2,018.6     |
| thereof financial instruments held by central counterparties | 5,856.6     | 7,175.2     |
| Current assets   | 151,904.4   | 165,688.9   |
| thereof financial instruments held by central counterparties | 107,909.6   | 126,289.6   |
| thereof restricted bank balances                             | 27,777.6    | 26,870.0    |
| thereof other cash and bank balances                         | 1,458.1     | 711.1       |
| EQUITY AND LIABILITIES                                       |             |             |
| Equity   | 4,624.5     | 3,695.1     |
| Liabilities  | 159,220.3   | 176,380.7   |
| thereof non-current liabilities                              | 8,669.9     | 10,585.4    |
| thereof financial instruments held by central counterparties | 5,856.6     | 7,175.2     |
| thereof interest-bearing liabilities                         | 2,284.7     | 2,546.5     |
| thereof current liabilities                                  | 150,550.5   | 165,795.3   |
| thereof financial instruments held by central counterparties | 107,479.4   | 126,006.5   |
| thereof cash deposits by market participants                 | 27,777.6    | 26,869.0    |

Non-current liabilities declined, driven mainly by two factors: Firstly, financial instruments held by central counterparties decreased. This liability item is matched by an asset item in the same amount. Secondly, interest-bearing liabilities declined. In July, Deutsche Börse redeemed series B and C bonds for an amount of US\$290 million.

The main changes within the non-current liabilities item occurred in the following areas:

- a decline in financial instruments held by central counterparties
- an increase of liabilities from cash deposits by market participants as a result of higher cash collateral provided by the clearing members of Eurex Clearing AG; the main reason for this increase was that clearing participants provided a larger proportion of cash compared to securities as collateral for Eurex Clearing AG in the reporting period

Overall, Deutsche Börse Group invested €152.6 million in the continued business in intangible assets and property, plant and equipment (capital expenditure or capex) in the reporting period (2015: €147.7 million). The Group's largest investments were made in the Clearstream and Eurex segments.

### Working capital

Working capital comprises current assets less current liabilities, excluding technical closing-date items and commercial paper. Current assets excluding technical closing-date items amounted to €1,293.6 million (2015: €1,675.3 million). As Deutsche Börse Group collects fees for most of its services on a monthly basis, the trade receivables of €669.8 million included in current assets as at

31 December 2016 (31 December 2015: €554.1 million) were relatively low compared with net revenue. The current liabilities of the Group, excluding technical closing-date items, amounted to €1,453.0 million (2015: €1,196.2 million, excluding technical closing-date items). The Group therefore had slightly negative working capital of €159.4 million at the end of the year (2015: €479.1 million).

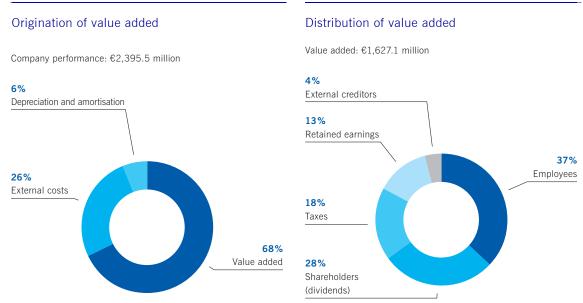
### Technical closing-date items

The "receivables and securities from banking business" and "liabilities from banking business" balance sheet items on the balance sheet are technical closing date items that were strongly correlated in the reporting period and that fluctuated between approximately &14 billion and &20 billion (2015: between &10 billion and &15 billion). These amounts mainly represent customer balances in Clearstream's international settlement business.

The "financial instruments of the central counterparties" item relates to the function performed by Eurex Clearing AG and European Commodity Clearing AG: since the latter act as the central counter parties for Deutsche Börse Group's various markets, their financial instruments are carried in the balance sheet at their fair value. The financial instruments of the central counterparties are described in detail in the  $\square$  risk report and in  $\square$  notes 3, 15 and 36 to the consolidated financial statements.

Market participants linked to the Group's clearing houses partly provide collateral in the form of cash deposits, which are subject to daily adjustments. The cash deposits are generally invested on a secured basis overnight by the central counterparties and reported in the balance sheet under "restricted bank balances". The total value of cash deposits at the reporting dates relevant for the reporting period (31 March, 30 June, 30 September and 31 December) varied between €24 billion and €29 billion (2015: between €27 billion and €36 billion).

# Value added: breakdown of company performance



neration components. Taxes accounted for 18 per cent (€291.8 million), while 4 per cent

(€56.8 million) was attributable to external creditors. The 13 per cent value added that remained in the company (€216.7 million) is available for investments in growth initiatives, among other things (see → "Origination of value added" and "Distribution of value added" charts).

### Overall assessment of the economic position by the Executive Board

Deutsche Börse Group's financial performance during the 2016 financial year was in line with the range expected by the Executive Board, given the Group's success on the derivatives and energy markets and – at least in the US – the accelerating interest rate curve. In total, the Group recorded an 8 per cent increase in net revenue. Operating costs were up 3 per cent year-on-year, a modest increase compared to 2015, despite consolidation effects. The increase was due in particular to costs incurred in connection with mergers and acquisitions. Adjusted by such effects, costs incurred during the year under review increased by only 1 per cent compared to the previous year, despite the consolidation of new subsidiaries. EBIT, as well as net profit for the period attributable to Deutsche Börse AG shareholders, increased considerably over the previous year, reaching the upper end of the forecast range.

The Executive Board believes that Deutsche Börse Group's financial position was extremely sound during the reporting period. The Group generated high operating cash flows, as in the previous year. Given the considerable increase in adjusted EBIT, Deutsche Börse Group was able to improve the ratio of interest-bearing gross debt to EBITDA at Group level: at 1.5, it was at the target value of 1.5.

Rating agencies again affirmed the Group's credit quality, awarding it excellent ratings in 2016. On 19 December 2016, Standard & Poor's affirmed the AA credit rating of Deutsche Börse AG, but maintained the negative outlook in connection with the acquisition of 360T, financed with equity and debt capital. Furthermore, Standard & Poor's – just like Fitch Ratings on 7 October 2016 – affirmed the AA credit rating of Clearstream Banking S.A. Both ratings were assigned a stable outlook.

The Group's net assets, financial position and results of operations can be considered to be in an orderly state.

# Deutsche Börse Group: five-year overview

|  |        | 2012               | 2013         | 2014                    | 2015                   | 2016              |
|--|--------|--------------------|--------------|-------------------------|------------------------|-------------------|
| Consolidated income statement  |        |                    |              |                         |                        |                   |
| Net revenue  | €m     | 1,932.3            | 1,912.3      | 2,047.8                 | 2,220.31)              | 2,388.7           |
| thereof net interest income from banking business                        | €m     | 52.0               | 35.9         | 37.6 <sup>2)</sup>      | 50.62)                 | 84.0              |
| Operating costs  | €m     | -958.6             | -1,182.8     | -1,114.8                | -1,283.2 <sup>1)</sup> | -1,317.4          |
| Earnings before interest and tax (EBIT)                                  | €m     | 969.4              | 738.8        | 1,011.3                 | 935.61)                | 1,108.2           |
| Net profit for the period attributable to Deutsche Börse AG shareholders | €m     | 645.0              | 478.4        | 762.3                   | 613.31)                | 722.1             |
| Earnings per share (basic)   | €      | 3.44               | 2.60         | 4.14                    | 3.311)                 | 3.87              |
| Consolidated cash flow statement   |        |                    | · (_         |                         | ·                      |                   |
| Cash flows from operating activities                                     | €m     | 707.7              | 728.3        | 677.3                   | 10.1                   | 1,621.4           |
| Consolidated balance sheet   |        |                    |              |                         | , :                    |                   |
| Non-current assets   | €m     | 5,113.9            | 8,796.9      | 11,267.2                | 14,386.9               | 11,940.4          |
| Equity   | €m     | 3,169.6            | 3,268.0      | 3,752.1                 | 3,695.1                | 4,624.5           |
| Non-current interest-bearing liabilities                                 | €m     | 1,737.43)          | 1,521.9      | 1,428.5 <sup>3)</sup>   | 2,546.5                | 2,284.7           |
| Performance indicators   |        |                    |              |                         |                        |                   |
| Dividend per share   | €      | 2.10               | 2.10         | 2.10                    | 2.25                   | 2.354)            |
| Dividend payout ratio  | %      | 585) 6) 7) 8)      | 619) 10) 11) | 58 <sup>6) 7) 11)</sup> | 55                     | 5412)             |
| Employees (average annual FTEs)  |        | 3,416              | 3,515        | 3,911                   | 4,4601)                | 4,731             |
| Personnel expense ratio (staff costs / net revenue)                      | %      | 216)               | 2213)        | 23 <sup>9)</sup>        | 27                     | 25                |
| EBIT margin, based on net revenue  | %      | 50                 | 39           | 49                      | 42                     | 46                |
| Tax rate   | %      | 26.07)             | 26.08) 13)   | 26.014)                 | 26.0                   | 27.0              |
| Return on shareholders' equity (annual average) <sup>15)</sup>           | %      | 22                 | 21           | 21                      | 2016)                  | 19 <sup>16)</sup> |
| Deutsche Börse shares  |        |                    |              |                         |                        |                   |
| Year-end closing price   | €      | 46.21              | 60.20        | 59.22                   | 81.39                  | 77.54             |
| Average market capitalisation  | €bn    | 8.5                | 10.0         | 10.8                    | 14.7                   | 14.0              |
| Rating key figures   |        |                    |              |                         |                        |                   |
| Gross debt / EBITDA  |        | 1.66               | 1.56         | 1.56                    | 1.96) 11)              | 1.5               |
| Interest coverage ratio  | %      | 15.2 <sup>6)</sup> | 20.16)       | 26.0 <sup>6)</sup>      | 23.21)                 | 25.3              |
| Deutsche Börse AG: Standard & Poor's                                     | Rating | AA                 | AA           | AA                      | AA                     | AA                |
| Clearstream Banking S.A.: Standard & Poor's                              | Rating | AA                 | AA           | AA                      | AA                     | AA                |
| Fitch  | Rating | AA                 | AA           | AA                      | AA                     | AA                |
| Market indicators  |        |                    |              |                         |                        |                   |
| Xetra®, Frankfurt Stock Exchange and Tradegate                           |        |                    |              |                         |                        |                   |
| Trading volume (single-counted) <sup>17)</sup>                           | €bn    | 1,160.2            | 1,157.6      | 1,282.6                 | 1,635.7                | 1,377.0           |
| Eurex®   |        |                    |              |                         |                        |                   |
| Number of contracts  | m      | 2,292.0            | 2,191.9      | 2,097.9                 | 1,672.61)              | 1,727.5           |
| Clearstream  |        |                    |              |                         |                        |                   |
| Value of securities deposited (annual average)                           | €bn    | 11,111             | 11,626       | 12,215                  | 13,274                 | 13,075            |
| Global Securities Financing (average outstanding volume for the period)  | €bn    | 570.3              | 576.5        | 609.8                   | 598.6                  | 515.9             |

1) Figures for 2015 without consideration of ISE, which represents a discontinued operation due to its disposal as at 30 June 2016 2) Clearstream and Eurex segments 3) Bonds that will mature in the following year are reported under "other current liabilities" (2012: €577.4 million; 2014: €139.8 million). 4) Proposal to the Annual General Meeting 2017 5) Adjusted for the non-taxable income related to the revaluation of the share component of the purchase price paid for the acquisition of the shares of Eurex Zürich AG held by SIX Group AG 6) Adjusted for the costs of mergers and acquisitions and of efficiency programmes 7) Adjusted for expenditure relating to the revaluation of the share component of the purchase price paid for the acquisition of the shares of Eurex Zürich AG held by SIX Group AG, a one-off gain from the reversal of deferred tax liabilities for STOXX Ltd. resulting from a decision by the Swiss Financial Supervisory Authority and a one-off gain from the recognition of deferred tax assets resulting from the future possible offsetting of losses carried forward by Eurex Global Derivatives AG 8) Adjusted for the tax benefit from initial recognition of deferred tax assets on tax loss carryforwards at a Group company 9) Adjusted for efficiency programme effects and costs incurred for the change of CEO in 2015 10) Adjusted for costs for mergers and acquisitions 11) Adjusted for costs largely related to criminal proceedings against Clear-stream Banking S.A. in the US 12) Amount based on the proposal to the Annual General Meeting 2017 13) Adjusted for the costs of the OFAC settlement 14) Adjusted for a one-off gain from the dissolution of the financing structure established in connection with the acquisition of ISE, and a one-off expense mainly attributable to the reduction in deferred tax assets in respect of a tax loss carryforward 15) Net profit for the period attributable to Deutsche Börse AG shareholders / average shareholders' equity for the financial year based on the quarter-end balance of sharehol

# Report on post-balance sheet date events

On 1 February 2017, Deutsche Börse AG announced that the Public Prosecutor's Office of Frankfurt/Main investigated at Deutsche Börse AG in respect of a share purchase by its Chief Executive Officer which was carried out on 14 December 2015 in implementation of the Executive Board's remuneration programme as approved by the Supervisory Board of Deutsche Börse AG. Such programme provides for an investment of the Executive Board members in shares of Deutsche Börse AG. Deutsche Börse AG and the Chief Executive Officer fully cooperate with the public prosecutor.

On 6 February 2017, the relevant bodies of Deutsche Börse AG and London Stock Exchange Group plc (LSEG) decided to formally submit the divestment of LCH.Clearnet SA by LCH.Clearnet Group Limited as a remedy to the European Commission in order to address anti-trust concerns raised by the European Commission in relation to the merger of both companies.

Following the market test in relation to the remedy proposal of 6 February 2017, the European Commission has raised new concerns regarding the viability of LCH SA as a divestment business in relation to access to bond and repo trading feeds currently provided for by MTS S.p.A., an Italian regulated electronic trading platform. The European Commission has therefore required that Deutsche Börse AG and LSEG commit to the divestment of LSEG's majority stake in MTS S.p.A. to secure merger clearance. LSEG has resolved to not commit to the required divestment of LSEG's majority stake in MTS S.p.A.

The parties will await the further assessment by the European Commission and currently expect a decision by the European Commission on the merger of Deutsche Börse AG and LSEG no later than 3 April 2017.

On 2 March 2017, Deutsche Börse Group announced that it had completed the divestiture of its remaining shareholding in BATS Global Markets, Inc. (BATS). After receiving a cash and share consideration as part of the acquisition of BATS by Chicago Board Options Exchange, Inc. (CBOE), the CBOE shares were sold in the market. Deutsche Börse AG expects a positive impact on its net profit for the period attributable to Deutsche Börse AG shareholders of around €68 million in the first quarter of 2017. In Q4/2016, Deutsche Börse already realised a net profit contribution of around €23 million by selling one third of its stake in BATS. This stake resulted from a participation of the divested International Securities Exchange Holdings, Inc. (ISE) in Direct Edge Holdings, LLC, which later merged with BATS.

On 3 March 2017, the Executive Board of Deutsche Börse AG communicated that its indirectly held subsidiary European Energy Exchange AG has reached an agreement in principle with the shareholders of Nodal Exchange Holdings, LLC on the purchase of all shares in Nodal Exchange Holdings, LLC. The total purchase price for all shares amounts to a low nine-digit sum (in US dollars). The execution of binding agreements is intended to take place shortly. The closing of the acquisition is still subject to customary conditions such as required regulatory approvals.

# Non-financial key performance indicators

# **Employees**

Committed, highly skilled employees are one of the cornerstones of Deutsche Börse Group's business success. Their dedication, flexibility and will to deliver outstanding performance shape its corporate culture. Deutsche Börse Group aims to make sure that staff with these qualities continue to join the company in the future and, ideally, that they stay for the long term. It does this by adopting a sustainable human resources policy. Within the scope of its "Accelerate" programme, the Group increased its emphasis upon a high-performance culture, with a more distinct focus on clients' needs and on innovation. This culture is supported by a remuneration system for executive staff which incorporates growth, performance, and financial indicators to a higher extent than before.

Deutsche Börse Group employs an international workforce at 37 locations worldwide: as at 31 December 2016, Deutsche Börse Group had 5,176 employees (31 December 2015: 5,100), while the average number of employees in the reporting period was 5,095 (2015: 4,760). The decrease in staffing levels was predominantly attributable to the deconsolidation of International Securities Exchange Holdings, Inc. (–183), Infobolsa S.A. (–79) and Market News International Inc. (–91) and their respective subsidiaries. On the other hand new jobs were created (+246) mainly in the context of the "Accelerate" growth initiatives and other strategically important projects, such as IT sourcing and outsourcing initiatives.

To recruit and retain the best talent for the company, Deutsche Börse Group offers flexible working time models. Including part-time employees, there was an average of 4,731 full-time equivalents during the year (2015: 4,460). As at 31 December 2016, the proportion of part-time employees was higher in the general workforce than in management, and it was higher among women than among men.

It is Deutsche Börse Group's declared intention to achieve a reasonable work-life balance. The company offers a number of options designed to achieve a positive work-life balance as part of its "Job, Life & Family" initiative:

- option to work from home (teleworking)
- childcare service for emergencies and during school holidays (a service used in Germany on a total of 78 days)
- emergency parent-child offices at the Eschborn, Luxembourg and Prague locations

# Employees per countries/regions

|                | 31 Dec 2016 | %   |
|----------------|-------------|-----|
| Germany        | 2,226       | 43  |
| Luxembourg     | 1,076       | 21  |
| Czech Republic | 793         | 15  |
| Ireland        | 314         | 6   |
| United Kingdom | 167         | 3   |
| Rest of Europe | 302         | 6   |
| North America  | 97          | 2   |
| South America  | 2           | 0   |
| Asia           | 192         | 4   |
| Middle East    | 7           | 0   |
| Total          | 5,176       | 100 |

# Employees by segment

|                        | 31 Dec 2016 | 31 Dec 2015 |
|------------------------|-------------|-------------|
| Eurex                  | 1,851       | 1,651       |
| Xetra                  | 323         | 326         |
| Clearstream            | 2,443       | 2,397       |
| Market Data + Services | 559         | 726         |
| Total                  | 5,176       | 5,100       |

- reservation of places for employees' children aged between six months and three years at a day care centre in Eschborn, whereby the number of dedicated places depends on demand within the company
- an "Elder and Family Care" programme to facilitate support for family members requiring care
- the option to take sabbaticals, used by three employees in Luxembourg and six in Prague in 2016

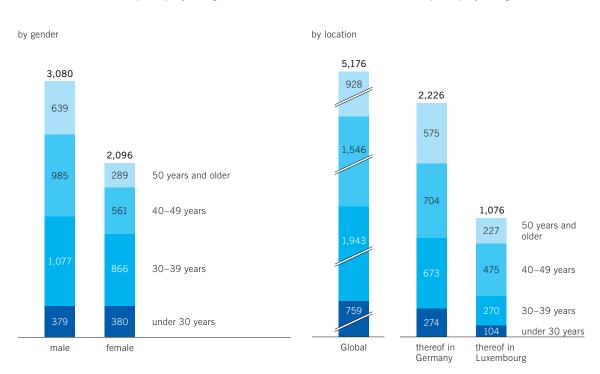
A total of 67 male and 81 female employees took parental leave in financial year 2016, thereof one male and one female in management positions. In the reporting period, 61 male and 53 female employees returned to the company after taking parental leave, while three male and five female employees left the company after their parental leave. Deutsche Börse Group supported its employees by subsidising childcare in the amount of €791 thousand in the reporting period (2015: €789 thousand). All employees receive a monthly net amount of up to €255.65 per child until it is six years old or starts school.

Employees may attend sports or relaxation courses. The purpose of these measures is to achieve a good work-life balance. One of the objectives pursued with these measures is to ensure that employees remain healthy, in spite of high workloads, and to keep sickness levels within the company as low as possible. For instance, the company assigns increased importance to the fact that employees take their annual vacation during the course of the year. The sickness ratio within Deutsche Börse Group amounted to 2.9 per cent in the year under review (2015: 3.1 per cent).

As at 31 December 2016, 70 per cent of Deutsche Börse Group employees were graduates (2015: 69 per cent). This figure is calculated on the basis of the number of employees holding a degree from a university, university of applied sciences or university of cooperative education; it also includes employees who have completed comparable studies abroad. In the area of continuing professional development, the Group invested an average total of 3.8 days per employee in 2016 (2015: 3.6 days) and, among other things, conducted 1,524 internal training events (2015: 1,079 internal training events). Of these, 40 per cent were on business-related issues, 26 per cent covered specialist topics, 10 per cent dealt with the work-life balance, 24 per cent were on IT subjects and

### Deutsche Börse Group employee age structure

### Deutsche Börse Group employee age structure



were part of induction training. The digital "Future Workplace" environment supports collaboration throughout the Group; it brings colleagues around the world closer together and facilitates everyday work routines for all members of staff. The Future Workplace comprises the Microsoft SharePoint collaboration platform, the Skype for Business messenger and video call service, as well as Good Work for mobile business communications. Numerous information sessions and training courses were held to train staff in using the Future Workplace.

Adjusted for efficiency programme costs, staff costs per employee stood at €121 thousand and corresponded approximately to those of the previous year (2015: €125 thousand). Deutsche Börse Group's Executive Board resolved a voluntary salary increase of 2.5 per cent in Germany in financial year 2016. Salaries were also adjusted at the Group's other locations.

The average age of Deutsche Börse Group's employees at the end of the reporting period was 39.7 years (2015: 39.8 years). The charts entitled "Deutsche Börse Group employee age structure" show the employee age structure as at 31 December 2016. In the course of the year, a total of 386 employees left Deutsche Börse Group (not including deconsolidation effects and colleagues who accepted one of the company's offers under the efficiency programmes and left the company or took early retirement). A total of 755 people joined the Group (excluding consolidation effects). The staff turnover rate was 9.8 per cent (adjusted: 7.7 per cent), an increase year-on-year (2015: 7.6 per cent and 7.2 per cent respectively). The average length of service at the end of the reporting period was 8.9 years (2015: 9.7 years).

# Intensified talent promotion

To motivate and promote top talent is a key instrument for Deutsche Börse Group to remain sustainably successful in this digital age. Two new programmes were launched to this end: the "Evolving Leaders" programme, which is designed to identify and promote future managers, and the "Show Your Talent" initiative, which is set to create visibility for – and to support – employees' entrepreneurial and innovative potential. The previous nomination process was replaced by an application scheme, which provides for a better overview of existing talent within the company. At the same time, the programmes are designed to strengthen staff commitment and their performance orientation, as outlined above.

# 360-degree feedback introduced for executive staff

During the year under review, executives' performance was for the first time not only assessed by their respective superiors but also by employees within their area of responsibility, and by fellow executives. The over 90 per cent response rate shows that the programme was very well received. The experience gained will be incorporated into career development planning for executive staff.

# Key data on Deutsche Börse Group's workforce as at 31 December 2016

|   | Global | Global thereof in Germany |       |       | ermany | thereof in Luxembourg |      |        |       |
|---|--------|---------------------------|-------|-------|--------|-----------------------|------|--------|-------|
|   | Male   | Female                    | Total | Male  | Female | Total                 | Male | Female | Total |
| Employees   | 3,080  | 2,096                     | 5,176 | 1,364 | 862    | 2,226                 | 646  | 430    | 1,076 |
| Senior and middle management                          | 282    | 48                        | 330   | 151   | 29     | 180                   | 70   | 14     | 84    |
| Junior<br>management                                  | 230    | 88                        | 318   | 111   | 31     | 142                   | 57   | 27     | 84    |
| Staff   | 2,568  | 1,960                     | 4,528 | 1,102 | 802    | 1,904                 | 519  | 389    | 908   |
| Part-time employees                                   |        |                           |       |       |        |                       |      |        |       |
| Senior and middle management                          | 5      | 4                         | 9     | 4     | 1      | 5                     | 1    | 3      | 4     |
| Junior<br>management                                  | 0      | 9                         | 9     | 0     | 4      | 4                     | 0    | 5      | 5     |
| Staff   | 80     | 432                       | 512   | 54    | 251    | 305                   | 19   | 122    | 141   |
| Disabled employees                                    | 32     | 28                        | 60    | 28    | 27     | 55                    | 3    | 0      | 3     |
| Proportion of graduates (%)                           | 73     | 66                        | 70    | 76    | 65     | 72                    | 57   | 54     | 56    |
| Apprentices   | 18     | 6                         | 24    | 18    | 6      | 24                    | _    | _      | _     |
| Interns and students <sup>1)</sup>                    | 105    | 116                       | 221   | 90    | 105    | 195                   | 15   | 11     | 26    |
| Length of service                                     |        |                           |       |       |        |                       |      |        |       |
| Under 5 years (%)                                     | 42     | 42                        | 42    | 36    | 39     | 37                    | 23   | 28     | 25    |
| 5-15 years (%)  | 33     | 35                        | 34    | 31    | 30     | 31                    | 31   | 31     | 31    |
| Over 15 years (%)                                     | 25     | 23                        | 24    | 33    | 31     | 32                    | 46   | 41     | 44    |
| Staff turnover  |        |                           |       |       |        |                       |      |        |       |
| Joiners   | 439    | 316                       | 755   | 160   | 132    | 292                   | 35   | 35     | 70    |
| Leavers   | 309    | 192                       | 501   | 126   | 61     | 187                   | 45   | 25     | 70    |
| Training days per staff member                        | 3.57   | 4.14                      | 3.80  | 3.70  | 4.96   | 4.19                  | 4.16 | 4.14   | 4.15  |
| Promotions  | 131    | 132                       | 263   | 34    | 45     | 79                    | 37   | 19     | 56    |
| Employees covered by collective bargaining agreements | 1,525  | 1,102                     | 2,627 | 966   | 689    | 1,655                 | 559  | 413    | 972   |

<sup>1)</sup> The global figures reported here refer solely to the locations in Germany, Luxembourg and the Czech Republic; this corresponds to 80 per cent of Group staff.

# Target female quotas adopted

In accordance with the Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (German Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors), Deutsche Börse AG's Supervisory Board and Executive Board have defined target quotas for women on these boards and for the two management levels directly beneath the Executive Board. These target quotas relate to Deutsche Börse AG (excluding subsidiaries) and will be valid until 30 June 2017.

At the time the Executive Board resolved the target quotas (15 September 2015), the share of female employees amounted to 6 per cent for the first management level, and 10 per cent for the second management level. The Executive Board resolved as a minimum target to maintain those quotas until 30 June 2017. As at 31 December 2016, female proportion for the first and second management level below Deutsche Börse AG's Executive Board was 11 per cent and 15 per cent, respectively.

In 2010, the Executive Board had already set a voluntary target for Deutsche Börse Group to increase the proportion of women in middle and senior management to 20 per cent, and in junior management to 30 per cent, by 2020. The Group has affirmed this ambition. These targets relate to Deutsche Börse Group worldwide, including subsidiaries. In contrast to statutory obligations, the voluntary commitment is based on a wider definition of management levels, including team leaders, for example. In Deutsche Börse Group's global operations, as at 31 December 2016, these quotas stood at 15 per cent (2015: 15 per cent) for middle and senior management and 28 per cent (2015: 27 per cent) for junior management levels. In the Group's German locations, they were 16 per cent (2015: 14 per cent) and 22 per cent (2015: 23 per cent), respectively.

In order to raise the share of women in executive positions, the company explicitly ensures that women are included in proposals for executive positions. In principle, however, qualifications are decisive when filling such vacancies. In addition, Deutsche Börse Group offers numerous additional tools to promote female employees, such as targeted succession planning, a mentoring programme involving internal and external mentors, a women's network, as well as training courses designed specifically for women. 12 of the current 25 members of the High Potential Circle, Deutsche Börse Group's training programme for potential future executives, are female (48 per cent).

Furthermore, the Group analyses at regular intervals whether there are remuneration differences between men and women. No systematic discrimination against men or women was detected. In fact, any differences in remuneration are based on qualifications, the length of service and function.

# Sustainable economic activity

Deutsche Börse Group acts "with an eye to the future". Its sustainability strategy of the same name defines the Group's understanding of entrepreneurial responsibility, and guides its operations. As an international capital markets organiser, Deutsche Börse aims to build and grow trust in market structures. As a listed company included in DAX®, it wants to lead by example. And as a corporate citizen, it endeavours to use its core business competence to contribute to resolving social challenges.

# **Building trust**

### Sustainable index products

To provide investors with responsible investment options that meet ecological, social and economic criteria, Deutsche Börse Group develops sustainable indices. Deutsche Börse Group aims to strengthen the future viability of capital markets by offering a wide variety of indices. The indices capture public attention for sustainably operating businesses and increase transparency.

STOXX Ltd., a subsidiary of Deutsche Börse AG, offers a broad spectrum of transparent sustainability indices. With the STOXX® Low Carbon index family, Deutsche Börse more than doubled its offering of indices from 35 to 100 in 2016. It comprises amongst others the index families STOXX® Global ESG Leaders and STOXX® Sustainability. The STOXX Global ESG Leaders indices are based on sustainability ratings covering environmental, social and governance (ESG) criteria. The STOXX Sustainability indices show the performance of sustainable companies.

The STOXX Low Carbon index family was introduced in February 2016. It was designed for investors wishing to "decarbonise", i.e. limit the exposure of their portfolios to reduce climate-related risks, such as stricter regulation or physical damage, while participating in the growth of low-carbon industries. To cater to different investment strategies, STOXX developed fully tailored solutions based on broad index universes, with four sub-families offering additional diversification potential across varying degrees of carbon exposure.

# Transparency and standardisation

As a marketplace organiser, Deutsche Börse Group considers ensuring transparency in the capital markets as its direct responsibility. In doing so, it fosters stability in these markets, thereby promoting their economic success. Positioning itself in this manner, Deutsche Börse Group is geared to the needs of market participants.

Today, ESG factors account for a considerable share of enterprise value, which is why institutional investors place more and more importance on this information in their decision-making processes. To support these processes, Deutsche Börse Group has conducted surveys amongst companies listed in the DAX, MDAX®, SDAX® and TecDAX® indices on their sustainability reporting every year since 2014. The results are openly accessible on Nen.boerse-frankfurt.de/sustainable-securities and provide an overview of the reporting formats the companies choose (annual report, separate sustainability report or combined/integrated report), the standards they apply as well as the contact details for sustainability-related questions for each company.

# Leading by example

Sustainability indices and ratings inform on the reporting and performance of companies in the area of sustainability, including a company's ecological, social and corporate governance performance, together with its management of opportunities and risks. As a listed company, Deutsche Börse itself is also subject to regular audits carried out by independent third-party providers. Given thoroughly positive assessments during the year under review, Deutsche Börse Group was again included in numerous sustainability indices:

- Dow Jones Sustainability Indices (DJSI) Europe: since 2005; World: since 2015; result of Robeco SAM rating: total score 71; average sector score 43
- ECPI Euro Ethical Equity Index: since 2008; ECPI EMU Ethical Equity Index: since 2008; ECPI Global Developed ESG Best in Class Equity Index: since 2013 (launch year); result of ECPI ESG rating
- Ethibel Sustainability Index (ESI) Excellence Europe: since 2013; based on Forum Ethibel rating (part of Vigeo)
- Euronext Vigeo Eurozone 120 Index: since 2014; based on Vigeo rating
- FTSE4Good Indices (Global and Europe): since 2009; result of FTSE ESG rating: total score 4.0 out of 5; supersector relative: 96 out of 100
- MSCI World ESG Index: since 2010; MSCI ACWI ESG Indices: since 2010; based on MSCI ESG research
- PAX ellevate Global Women's Index (PXWEX): since 2014; based on MSCI ESG research
- STOXX ESG Leaders Index: since 2011 (launch year). The entirely rule-based and transparent STOXX rating model means that there is no conflict of interests; result of Sustainalytics rating: total score of 75 (E: 78, S: 74, G: 73), ranking: 7th out of 248 companies
- STOXX Sustainability Indices (Europe and eurozone): since 2001; the entirely rule-based and transparent STOXX rating model means that there is no conflict of interests; based on Bank Sarasin analyses

# Raising public awareness

As Deutsche Börse Group is committed to sustainably empowering the non-profit sector, it founded Phineo gAG together with the Bertelsmann Foundation in 2009. Phineo is a charitable public limited company that provides advisory and analysis services to foundations, non-profit organisations and companies. In 2015 Deutsche Börse renewed its status as principal shareholder of Phineo for another two years. Deutsche Börse decided to continue this cooperation with the goal of interlocking its core competences more closely with those provided by Phineo, to jointly develop solutions for social challenges. During the year under review, both houses were among those successfully applying to participate in the EU project "Establishing a new early-stage impact fund for social-tech ventures", thereby establishing a thematic focus for their joint work in 2017.

### Key sustainability figures for Deutsche Börse Group

Within the scope of so-called materiality analyses, Deutsche Börse regularly assesses which topics are of particular significance for the Group. The • "Sustainability: key figures for Deutsche Börse Group" table summarises the non-financial key performance indicators that characterise the Group's sustainability profile according to these analyses. Key figures on transparency and security have been collected quarterly since 2013, and published in the yearly and half-yearly financial reports.

In July 2016, Deutsche Börse Group established its Group Sustainability Board to develop the Group-wide sustainability strategy and advise the Executive Board on sustainability issues. Thanks to the new Board, Deutsche Börse Group has already included additional steps in its value creation chain and linked the key figures more clearly to its core business.

### Comparison with the forecast for 2016

With regard to the development expected of its non-financial performance indicators for 2016, the Group succeeded in maintaining a very high level of systems availability whilst adhering to the highest security standards. In specific terms, the availability of the T7® trading system rose from 99.93 to 99.96 per cent, while Xetra® availability remained at a very high level of 99.99 per cent.

It was in 2010 that the Executive Board adopted a voluntary commitment to increase the share of women holding management positions to 20 per cent by 2020. These numbers cover Deutsche Börse Group in its entirety, on a global basis. During the year under review, the share of women in senior and middle management remained at 15 per cent, and rose to 28 per cent in junior management.

# Sustainability: key figures for Deutsche Börse Group

|   |            | 2016   | 2015   |
|---|------------|--------|--------|
| ESG criteria  |            |        |        |
| Assets under management in ESG index-related products <sup>1)</sup>                               | €m         | 12.5   |        |
| Transparency  |            |        |        |
| Proportion of companies reporting in accordance with maximum transparency standards <sup>2)</sup> | %          | 91     | 91     |
| Number of indices calculated  |            | 11,975 | 11,403 |
| Number of sustainable index concepts  |            | 100    | 35     |
| Security and reliability  |            |        |        |
| Availability of cash market trading system (Xetra®)   | %          | 99.999 | 99.999 |
| Availability of derivatives market trading system (T7®)   | %          | 99.962 | 99.930 |
| Market risk cleared via Eurex Clearing (gross monthly average)                                    | € trillion | 14.8   | 16.7   |
| Compliance  |            |        |        |
| Punished cases of corruption  |            | 0      | 0      |
| Proportion of business units reviewed for corruption risk   | %          | 100    | 100    |
| Number of employees trained in anti-corruption measures <sup>3)</sup>                             |            | 47     | 976    |
| Number of justified customer complaints relating to data protection                               |            | 0      | 0      |

<sup>1)</sup> Comprising FlexShares STOXX® Global ESG Impact Index and FlexShares STOXX® US ESG Impact Index, which are used as basis for two ETFs launched in 2016.

<sup>2)</sup> Ratio of the market capitalisation of companies listed in the Prime Standard to the market capitalisation of all companies listed on the Frankfurter Wertpapierbörse (FWB\*, the Frankfurt Stock Exchange)

<sup>3)</sup> In the fourth quarter of 2016, seven mandatory training modules were planned for implementation. Among these, one completely redesigned module is focused on anti-bribery and corruption. Since December 2016, this module has been successively rolled out for all employees of Deutsche Börse Group; the roll-out will continue into 2017. As of the reporting date, 31 December 2016, the roll-out included 504 employees, with a participation rate of 9 per cent. It will be ensured that all Group employees complete the mandatory trainings in 2017.

# Risk report

Deutsche Börse Group's core area of expertise includes solutions that enable its customers to efficiently manage risk and collateral. It is therefore all the more important for the Group to protect itself against risk. This section of the combined management report shows how the company deals with risks and threats. Despite the continuing tensions in the financial system and the regulatory developments, the Group's risk profile remained largely stable. Overall operational risk declined, although the threat of cyber crime increased.

The first section of this risk report explains the enhanced risk strategy and demonstrates how the Group manages its risk. In the second section of this risk report, the Group outlines approaches and methods employed for monitoring risk. In the third section, the various types of risks the Group is exposed to are described, and how the Group manages them. The fourth section provides a summary of the risk situation, together with an outlook on future developments for Deutsche Börse Group's risk management. Supplementing the risk report, senior management sets out what it believes the Group's future prospects are, in the  $\square$  report on opportunities.

Deutsche Börse Group includes, among other companies, Clearstream Banking S.A. and Clearstream Banking AG, which form part of the Clearstream Holding group (hereinafter "Clearstream"), and Eurex Clearing AG. These institutions are subject to the banking supervision regime and its corresponding statutory requirements, and therefore already meet the strictest requirements for risk management. In addition, European Commodity Clearing AG, Eurex Bonds GmbH and Eurex Repo GmbH are also subject to the regulatory requirements set out in EMIR, CRD IV and MiFID (for details on the requirements, see 3 note 20 to the consolidated financial statements). Rules and regulations directly affect the Group's institutions, Clearstream and Eurex Clearing AG, especially the Mindestanforderungen an das Risikomanagement (MaRisk, Minimum Requirements for Risk Management) issued by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin, German Federal Financial Supervisory Authority), as well as Circular 12/552 (Central Administration) issued by the Commission de Surveillance du Secteur Financier (CSSF, Luxembourg Financial Supervisory Authority). The so-called second pillar of Basel III contains requirements on how banks must manage their risks; accordingly, this applies to Clearstream and Eurex Clearing AG. Moreover, pursuant to the Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen (RiskAbschG, German Act on Ringfencing and Recovery and Resolution Planning for Credit Institutions and Financial Groups), which was amended to implement the EU Banking Recovery and Resolution Directive (BRRD), Clearstream and Eurex Clearing AG have prepared recovery plans. Over and above this requirement, Deutsche Börse Group has also voluntarily prepared a Group-wide recovery plan - in particular, in the event that a restructuring might become necessary for Clearstream and/or Eurex Clearing AG. At the request of the national supervisory authorities, Clearstream and Eurex Clearing AG made a substantial contribution to the resolution plans to be developed by the supervisory authorities. Management expects this work to continue in 2017. All other companies in the Group comply with best-in-class standards for comparable companies. As a result, risk management across the Group aims to meet the highest standards.

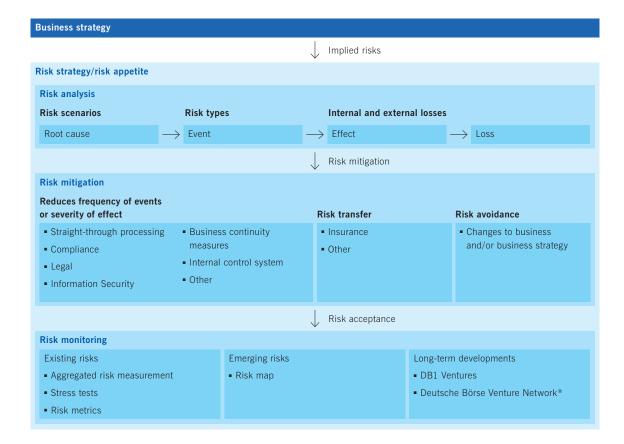
With its range of risk management services, Deutsche Börse Group strives to make a sustainable contribution – primarily through its role as an organiser of capital markets, securing market integrity and security; and also by enhancing market efficiency in distribution, through its price discovery function. On top of this, Deutsche Börse Group assumes key risk management functions for its clients – for example, through the centralised management of their market price risk exposure via the Group's clearing house, Eurex Clearing AG. In this way, Deutsche Börse Group contributes to the efficiency and systematic stability of the capital markets.

# Risk strategy and risk management

Deutsche Börse Group's risk strategy is aligned with its business model and business strategy. The Group provides the infrastructure for reliable and secure capital markets, assists constructively in their regulation and plays a leading role in all of the areas in which it does business. Deutsche Börse Group's risk strategy is based on three core principles:

- 1. Risk limitation protecting the company against liquidation and ensuring its continued operation "Capital exhaustion should not occur more than once in 5,000 years and an operating loss may not be generated more than once every hundred years." This means that one goal is to ensure a probability of 99.98 per cent or more that the total capital will not be lost within the next twelve months. Another objective is to guarantee for a probability of 99.0 per cent or more that Deutsche Börse will at least break even, expressed in terms of its EBIT. In other words, this principle establishes how much risk the Group must be able to withstand while also determining its risk appetite.
- 2. Support for growth in the various business segments
- "Risk management supports the business areas in expanding their business by working together to comprehensively identify and communicate risks." This principle aims to permit the Group to make informed strategic decisions within the scope of the risk appetite that it has defined.

# Interlocking business strategy and risk strategy



# 3. Appropriate risk/return ratio

"The return on equity should exceed the cost of equity." Deutsche Börse Group has set itself the goal of ensuring that risk and return should be reasonably balanced, both for specific business are-as in general and for individual regions, products and customers.

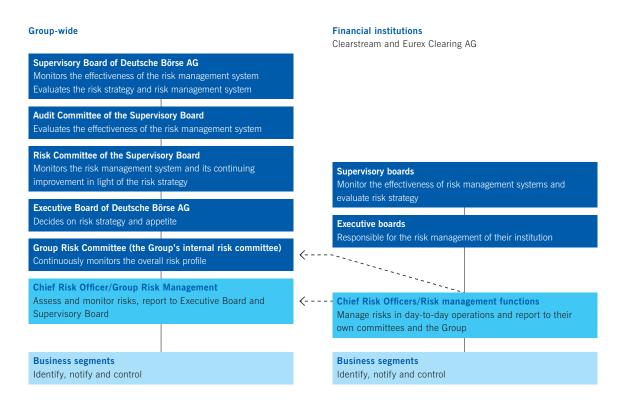
Internal risk management is based on the Group-wide detecting and managing of risk, which is focused on its risk appetite, see the "Interlocking business strategy and risk strategy" chart. Deutsche Börse AG's Executive Board has overall responsibility, and defines the framework, for risk management throughout the Group. Under these Group-wide risk management requirements, each business segment and each regulated company is responsible for managing its own risk. This coordinated process ensures, for example, that the Group and its companies can act just as quickly and effectively in the event that several systems fail simultaneously as if a single system fails.

### Implementation in the Group's organisational structure and workflow

The risk strategy applies to the entire Deutsche Börse Group. Risk management functions, processes and responsibilities are binding for all Group employees and organisational units. To ensure that all employees are risk-aware, risk management is firmly anchored in the Group's organisational structure and workflows and is flanked by measures such as risk management training. The Executive Board is responsible for risk management overall, whereas within the individual companies it is the responsibility of the management. The boards and committees given below regularly receive comprehensive information on risks.

Deutsche Börse AG's Supervisory Board evaluates the effectiveness of the risk management system, its continuing development and oversees the monitoring of risks. The Supervisory Board has delegated the regular evaluation of the appropriateness and the effectiveness of the risk management

# Risk management – organisational structure and reporting lines



system to the Risk Committee. The Risk Committee reviews the risk management system, its continuing improvement and oversees the monitoring of risks. In addition, it examines the risk strategy and risk appetite on an annual basis.

Deutsche Börse AG's Executive Board determines the Group-wide risk strategy and risk appetite and allocates the latter to the company's individual business segments and business units, respectively. It ensures that the Group's risk appetite is and remains compatible with its short- and long-term strategy, business and capital planning, risk-bearing capacity and remuneration systems. It also determines what parameters are used to assess risks, how risk capital is allocated and what procedures apply. It ensures that all business units comply with these requirements for the risk strategy, risk appetite and risk limits.

The Group Risk Committee (GRC) reviews the risk position of the Group every two months and involves the Executive Board in all decisive questions. The GRC is an internal Group committee, chaired by the Chief Financial Officer. In addition, the GRC regularly checks the levels of all parameters for appropriateness and, where necessary, makes recommendations to the Chief Risk Officer (CRO) or the Executive Board, as to any adjustments that should be made.

Group Risk Management (GRM) is headed by the CRO. This unit prepares the proposals to be adopted for risk levers, i.e. the Group's risk strategy, appetite, parameters, capital allocation and procedures. GRM continuously analyses and evaluates risks and produces quantitative and qualitative reports. These are submitted six times a year to the GRC, once a month to the Executive Board, once a quarter to the Risk Committee of the Supervisory Board and twice a year to the Supervisory Board. This system means that the responsible bodies can regularly check whether the defined risk limits are being adhered to consistently. In addition, GRM recommends risk management measures.

The Group's regulated subsidiaries act in the same way, always ensuring that they meet the requirements of the Group. In particular, they adhere to the risk appetite framework allocated to them by Deutsche Börse Group. The relevant supervisory boards and their committees are involved in the process, as are the executive boards and the risk management functions within the various business areas. Clearstream and Eurex Clearing AG, the Group's institutions, implement customised versions of the risk strategy, using parameters and reporting formats that are compatible with the higher-level, Group-wide structure. At Clearstream, responsibility lies with the executive boards of Clearstream Holding AG and Clearstream Banking S.A., which are supervised by their supervisory boards; at Eurex Clearing AG, responsibility lies with the executive board, which is also monitored by the supervisory board.

### Centrally coordinated risk management – a five-stage process

Risk management is implemented in a five-stage process. The objective is to identify all potential losses in good time, to record them centrally and to evaluate them in quantitative terms as far as possible; if necessary, management measures must then be recommended and their implementation monitored (see the "The five-stage risk management system" chart). The first stage identifies the risks and the possible causes of losses or operational hitches. In the second stage, the business areas regularly – or immediately, in urgent cases – report to GRM the risks that they have identified and quantified. In the third stage, GRM assesses the risk exposure, while in the fourth stage, the business areas manage the risks by avoiding, mitigating or transferring them, or by actively accepting them. The fifth and final stage involves, for example, monitoring different risk metrics and, where necessary, informing the responsible Executive Board members and committees of significant risks, their assessment and possible emergency measures. In addition to its regular monthly and quarterly reports, GRM compiles ad hoc reports for members of the executive and supervisory boards. The risk management functions at Clearstream and Eurex Clearing AG report to the respective executive boards and supervisory boards. Internal Auditing is responsible for monitoring compliance with the risk management system.

# Approaches and methods for risk monitoring

Deutsche Börse Group uses quantitative and qualitative approaches and methods for risk monitoring, with the objective of providing as complete a picture as possible of its risk situation at all times. To this end, the Group continuously reviews internal events with regard to their risk properties, whilst also considering regional as well as global developments. The Group is thus able to recognise and analyse existing risks; at the same time, it is able to swiftly and adequately respond to emerging risks, as well as to changes in the market and the business environment.

### **Existing risks**

Deutsche Börse Group employs a range of tools to monitor and evaluate its operational, financial and business risks on a continuous basis. Applying the liquidation principle, the going-concern principle, and the regulatory capital requirements of the Group's credit institutions, risks are aggregated at a Group level and quantified using the concept of value at risk (VaR). Moreover, so-called stress tests are carried out in order to simulate extreme, yet plausible, events and their impact upon the Group's risk-bearing capacity. Risk metrics, which are used as an early-warning system for quantified [internal] risks, represent an additional risk monitoring method.

# Aggregate risk measurement

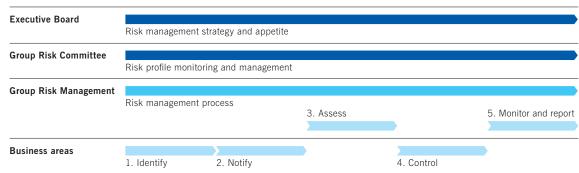
The purpose of the VaR model is to determine the amount of capital – given a confidence interval defined *ex ante* – required to cover potential losses incurred within one year. In this context, economic capital (EC) in accordance with the liquidation principle, as well as regulatory capital (RC) for credit institutions within Deutsche Börse Group are calculated. Conversely, the going-concern principle is based on earnings at risk (EaR).

### 1. Liquidation principle: what risk can the capital cover?

The first part of Principle 1 of its risk strategy specifies that Deutsche Börse Group is not expected to exhaust its risk-bearing capacity in more than 0.02 per cent of all years. For Clearstream and Eurex Clearing AG, EC calculated in this manner also complies with the requirements of the second pillar of Basel III. Deutsche Börse Group determines its risk-bearing capacity on the basis of its reported equity in accordance with International Financial Reporting Standards (IFRSs). It adjusts this figure for precautionary reasons, for example to take into account the fact that it may not be possible to dispose of intangible assets at their carrying amounts in cases of extreme stress. Clearstream and Eurex Clearing AG determine their risk-bearing capacity on the basis of their regulatory capital (for details, see  $\bigcirc$  note 20 to the consolidated financial statements).

# The five-stage risk management system

# Responsibility



For management purposes, GRM regularly determines the ratio of the EC to the risk-bearing capacity. This indicator is known as the utilisation of risk-bearing capacity and it answers a key risk management question: how much risk can the Group afford and what risk is it currently exposed to? The ratio of EC to risk-bearing capacity remained within the stipulated maximum risk throughout the reporting period. If this were not the case, the Group would in a worst-case scenario exhaust its entire risk-bearing capacity and would have to be liquidated ("gone concern"). The liquidation concept therefore assumes that the Group will not have to be liquidated.

# 2. Going-concern principle: what risks can be absorbed by earnings?

Deutsche Börse Group employs the going-concern principle that assumes an orderly continuation of the Group in the event of a crisis, and that uses EaR as an indicator. This indicator corresponds to the second part of Principle 1 of the Group's risk strategy, i.e. that an operating loss may occur no more than once in a hundred years. In other words, there should be a probability of 99.0 per cent or more that Deutsche Börse should at least break even (net profit/loss expressed in terms of earnings before interest and taxes (EBIT)). Under the going-concern principle, EaR determined in this way is compared with the Group's risk appetite – which is, in turn, measured in terms of projected EBIT.

# 3. Regulatory capital requirements

In addition, Clearstream and Eurex Clearing AG must calculate their capital requirements for various risk types (see the 

"Deutsche Börse Group's risk profile" chart) in line with the Pillar I requirements under Basel II and Basel III. In addition, Eurex Clearing AG must fulfil European Market Infrastructure Regulation (EMIR) requirements. A standardised approach is used for analysing and evaluating credit and market risk; risk weightings are applied on the basis of the relevant counterparty ratings.

The approach taken for operational risk is different: Clearstream has used the significantly more complex advanced measurement approach (AMA) for this in all business units since 2008. This means that it meets the regulatory capital requirements for operational risk set out in the EU's Capital Requirements Regulation (CRR). Similar to EC calculations, the model employed was fundamentally revised and improved during 2016. The method – which has been approved and is regularly tested by BaFin – allows required capital to be allocated to the regulated units. In contrast, Eurex Clearing AG employs the basic indicator approach in order to calculate regulatory capital requirements (for details, see  $\blacksquare$  note 20 to the consolidated financial statements).

# Deutsche Börse Group's risk profile



#### Stress tests

Stress tests are being carried out in order to simulate extreme, yet plausible, events for all material types of risk. Using both hypothetical as well as historical scenarios, stress tests simulate the occurrence of extreme losses, or an accumulation of large losses, within a single year. In addition, liquidity risk is evaluated by way of liquidity stress tests as well as so-called inverse stress tests; the latter analyse which loss scenarios would exceed the risk-bearing capacity.

### Risk metrics

Risk metrics are used to quantify the exposure to the most important internal operational risks against set limits. Any breach of these limits serves as an early warning signal, which is reported to the Executive Board and other boards and committees on a monthly basis. Furthermore, any such breach will immediately trigger the requisite risk mitigation processes.

### **Emerging risks**

With regard to risk management, Deutsche Börse Group pursues a sustainable, long-term strategy by also evaluating risks beyond a twelve-month horizon. For this purpose, the Group has developed so-called risk maps covering impending regulatory requirements, business risks, as well as IT and information security risks. Risk maps classify risks by their probability of occurring – and by their financial impact, should they materialise. This is based on a five-year planning horizon, which is equivalent to the development cycle for the operational risks relevant to Deutsche Börse Group: regulation and IT. Typically, regulatory requirements evolve over a period of up to five years, from the first draft to implementation. This horizon is also appropriate for the evaluation of IT risks, given that technology is subject to ongoing change.

### Long-term developments

For Deutsche Börse Group, risks that prevail throughout longer consideration periods mainly comprise the failure to respond to global changes in, or mega-trends on, the financial markets and the business environment, or a late response to such developments. In order to compensate for such risks, Deutsche Börse Group aspires to think ahead, and to set standards applicable throughout the industry. The Group pursues its targets by promoting mutual exchange with regulators and market participants (e.g. White Paper). A further trend worth noting is the potential of start-up companies to come up with innovations that may have a disruptive effect upon markets. Deutsche Börse Group not only actively invests in such enterprises, through its DB1 Ventures subsidiary – it also offers them a platform. Deutsche Börse Venture Network provides an opportunity to exchange ideas and experience, and also to find investors.

# **Risk description**

The following section describes the types of risk that Deutsche Börse Group generally has to manage and presents the risks it actually faces. It also explains the measures that Deutsche Börse Group uses to reduce the loss event and to minimise their financial effects. Firstly, however, what follows is a brief explanation of the risk profile, which differs from most other financial services providers, since financial risk plays a significantly smaller role for Deutsche Börse Group.

### Risk profile

Deutsche Börse Group differentiates between the three standard types of risk: operational, financial and business risk. Project risks also exist but the Group does not specifically quantify these as their impact is already reflected in the three traditional risk types.

# Low level of typical bank risk

The risks faced by Deutsche Börse Group's institutions differ fundamentally from those of other financial service providers. Clearstream and Eurex Clearing AG have a structurally lower risk in comparison with other banks because they act as intermediaries rather than, for example, having an own distinct business area that trades on the financial markets. Consequently, Deutsche Börse Group's institutions do not bear the associated market price risks. On the contrary, they offer market participants services such as collateral and risk management to reduce their risk from trading activities. The Group's banking business mainly consists of providing reliable clearing, settlement and custody services, as well as collateral management.

The regulatory capital requirements for Clearstream and Eurex Clearing AG are primarily due to operational risk (see the → "Regulatory capital requirements for Clearstream and Eurex Clearing AG" chart). Information on the additional capital requirements under EMIR for Eurex Clearing AG and European Commodity Clearing AG is provided in → note 20 to the consolidated financial statements.

# Operational risk greater than financial and business risk

Utilisation of risk-bearing capacity in the liquidation principle and of risk appetite in the going concern principle are used as internal management indicators throughout Deutsche Börse Group (see the \*\* "Approaches and methods for risk monitoring" section for an explanation of these terms). In addition to the financial and operational risk already mentioned, business risk is also identified and assessed. This relates in particular to potential threats to revenue such as price pressure or loss in market share as well as cost risks. Under the liquidation principle, financial risk amounts to approximately 23 per cent of Deutsche Börse Group's total risk, while business risk represents 14 per cent of the total. This makes the third typical risk type all the more important for Deutsche Börse Group: at 63 per cent, operational risk accounts for more than half of the total risk (see the \*\* "Required economic capital for Deutsche Börse Group, by risk type" chart).

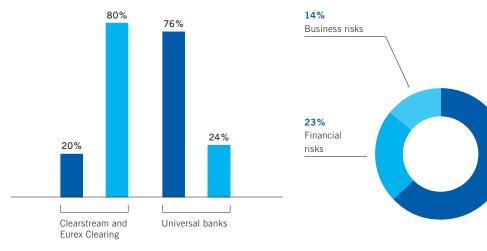
A larger part of the risk is associated with the Clearstream and Eurex segments (see the <u>③</u> "Required economic capital by segment" chart), in keeping with the proportion of sales revenue and earnings accounted for by this business. In contrast to the regulatory capital requirements, this calculation also includes business areas that are not covered by banking regulations.

Regulatory capital requirements for Clearstream and Eurex Clearing AG as at 31 December 2016

Required economic capital for Deutsche Börse Group, by risk type as at 31 December 2016

63%

Operational risks



Credit risks and market risks

Operational risks

A similar split can be seen for EaR. Here, too, the business segments with the largest proportions of revenues and earnings – Clearstream and Eurex – have the largest shares of earnings at risk (see the  $\boxdot$  "Earnings at risk by segment" chart).

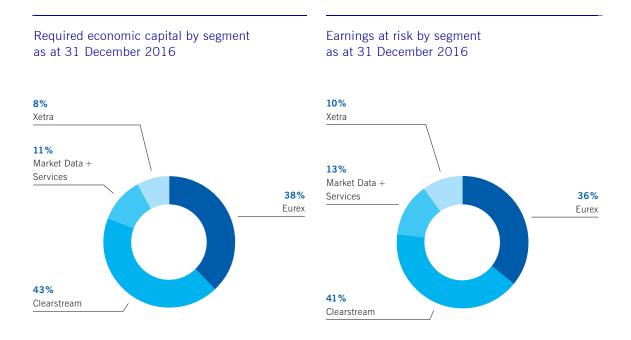
Deutsche Börse Group assigns indicators to each risk exposure to estimate how likely it is to occur and what financial effect it could have. It distinguishes four probability levels (very low, low, medium and high) and four financial impact levels (low, medium, substantial and a risk to the company as a going concern). However, none of the risks assessed reach the fourth impact level either individually or in total; in other words, none jeopardises the existence of the entire Group as a going concern.

These categories can be used to assess the risk types given below as examples. The estimated probabilities of the risks occurring are categorised as follows:

- very low (the probability of the risk occurring is less than 1 per cent)
- low (the probability of the risk occurring is equal to or greater than 1 per cent but less than 10 per cent)
- medium (the probability of the risk occurring is equal to or greater than 10 per cent but less than 50 per cent)
- high (the probability of the risk occurring is equal to or greater than 50 per cent)

The estimated financial effects can be classified into the following four categories:

- low (the financial loss could be up to 10 per cent of EBIT)
- medium (the financial loss could be up to 50 per cent of EBIT)
- substantial (the financial loss could be up to 100 per cent of EBIT)
- risk to the business as a going concern (the financial loss of Deutsche Börse AG could be up to the available risk cover amount)



In the following, the risk types are first illustrated with specific examples and then explained in detail.

- 1 Operational risk
- failure of a trading system
- cyber attacks
- incorrect processing of client instructions (e.g. corporate actions)
- incorrect handling of the default of a large customer
- losses from ongoing legal disputes
- conflicting laws of different jurisdictions

### 2. Financial risk

- default of a credit counterparty
- losses arising from the impairment of pension fund assets
- default by a customer and an associated liquidity squeeze

### 3. Business risk

- market share loss in European trading markets
- the return of the European government debt crisis
- implementation of a financial transaction tax

Risks which could jeopardise the Group's continued existence could arise only from a combination of extreme events that have a very low probability:

- failure of a trading system for several days in a highly volatile market environment
- simultaneous failure of several large systemically important banks
- deliberate breaches of sanctions

These extreme events that could lead to a loss corresponding to more than 100 per cent of annual EBIT are rated as having a probability of less than 0.1 per cent. Such extreme events, also known as "tail risks", have not occurred to date. Tail risks may represent going concern threats for certain subsidiaries, for example if sanctions were to be deliberately contravened. Group Risk Management (GRM) assesses these risks continuously and reports regularly to the Executive Board of Deutsche Börse Group on the results.

### Operational risk

Operational risk for Deutsche Börse Group relates to availability, processing, material goods, litigation and business practice (see the 🖸 "Operational risks at Deutsche Börse Group" chart). Human resources risks are quantified just like other operational risks. Operational risk accounts for 63 per cent of the total Group risk.

# System availability

Operational resources such as the Xetra® and T7® trading systems are essential for the services offered by Deutsche Börse Group. They should never fail, in order to ensure that market participants can trade securities or derivatives at any time and without delay. The Group therefore calculates the availability of these systems as an important risk indicator. In line with the Group's risk strategy, the business areas are responsible for monitoring the indicators.

The longer the downtime for one of these systems, the larger the potential loss. An outage could be caused by software or hardware issues, or in unlikely cases, the availability of the systems could be affected by acts of cyber crime or terrorist attack. In the past, only limited failures have occurred both

with Xetra and with T7 and its predecessor system. In practice, there has never been a system failure lasting longer than one day. Deutsche Börse Group has taken a number of measures to further minimise the risk of failure lasting an entire day or longer. This supports the view that the probability of a system failure lasting longer than a week in an extremely volatile market is very low. However, the potential financial effect of such an event could be significant if claims are justified and asserted.

In general, availability risk represents the largest operational risk for Deutsche Börse Group. The Group therefore subjects it to regular stress tests, which check not only what happens when its own systems fail but also when suppliers fail to deliver.

### Service deficiency

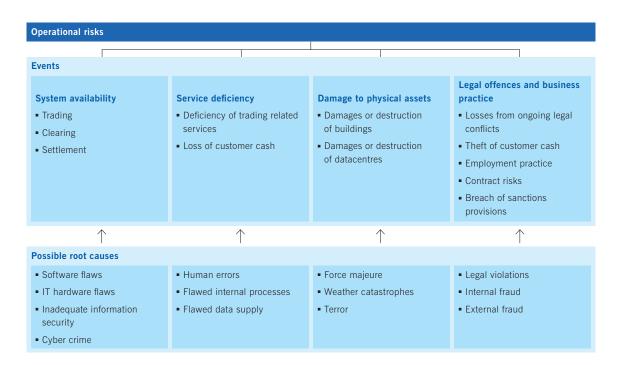
Risks can also arise if a service provided to a customer is inadequate and this leads to complaints or legal disputes. One example would be errors in the settlement of securities transactions due to defective products and processes or mistakes in manual entries. A second example is errors in handling the default of a large clearing customer. To date, defaults are rare, no such handling errors have occurred and related processes are tested at least annually, which is why the probability is considered to be very low. The potential financial loss is put at medium.

Other sources of error may be attributable to suppliers or to product defects or mistakes that may lead to the loss of client assets or mistakes in accounting processes. The Group registers all complaints and formal objections as a key indicator of processing risk.

# Damage to physical assets

Natural disasters, accidents, terrorism or sabotage are other operational risks that could, for example, cause the destruction of, or severe damage to, a data centre or office building. Business continuity management (BCM) aims at averting significant financial damage (see the  $\boxdot$  "Business continuity management" chart).

# Operational risks at Deutsche Börse Group



# Legal offences and business practice

Losses can also result from ongoing legal proceedings. Deutsche Börse judges the probability that this operational risk will occur to be medium, although the losses involved could be substantial. As a result, GRM continually monitors ongoing legal proceedings. These can be brought if Deutsche Börse Group breaches laws or other requirements, enters into inadequate contractual agreements or fails to monitor and observe case law to a sufficient degree. Legal risk also includes losses due to fraud and labour law issues. This could entail, for example, losses resulting from insufficient anti-money laundering controls or breaches of competition law or of banking secrecy. Such operational risks can also arise if government sanctions are not observed, e.g. in case of conflicting laws of different jurisdictions, or in the event of breaches of other governmental or higher-order regulations.

In its \alpha 2012 corporate report, Deutsche Börse Group informed about proceedings, Peterson vs Clearstream Banking S.A., the first Peterson proceeding, initiated by various plaintiffs seeking turnover of certain customer positions held in Clearstream Banking S.A.'s securities omnibus account with its US depository bank, Citibank NA, and asserting direct claims against Clearstream Banking S.A. for damages of US\$250 million. That matter was settled between Clearstream Banking S.A. and the plaintiffs and the direct claims against Clearstream Banking S.A. were abandoned.

In July 2013, the US court ordered turnover of the customer positions to the plaintiffs, ruling that these were owned by Bank Markazi, the Iranian central bank. Bank Markazi appealed, and the decision was affirmed on 9 July 2014 by the Second Circuit Court of Appeals, and then by the US Supreme Court on 20 April 2016. Once the process of distribution of funds to the plaintiffs is complete, a related case, Heiser vs Clearstream Banking S.A., also seeking turnover of the same assets, should be dismissed.

On 30 December 2013, a number of US plaintiffs from the first Peterson case, as well as other US plaintiffs, filed a complaint targeting restitution of certain assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. In 2014, the defendants in this action, including Clearstream Banking S.A., moved to dismiss the case. On 19 February 2015, the US court issued a decision granting the defendants' motions and dismissing the lawsuit. On 6 March 2015, the plaintiffs appealed the decision to the Second Circuit Court of Appeals, which heard oral arguments in the case on 8 June 2016.

On 14 October 2016, a number of US plaintiffs filed a complaint naming Clearstream Banking S.A. and other entities as defendants. The complaint in this proceeding, Havlish vs Clearstream Banking S.A., is based on similar assets and allegations as in the Peterson proceedings. The complaint seeks turnover of certain assets that Clearstream Banking S.A. holds as a custodian in Luxembourg. The complaint also asserts direct claims against Clearstream Banking S.A. and other defendants and purports to seek damages of up to approximately US\$6.6 billion plus punitive damages and interest.

On 2 April 2014, Clearstream Banking S.A. was informed that the United States Attorney for the Southern District of New York has opened a grand jury investigation against Clearstream Banking S.A. due to Clearstream Banking S.A.'s conduct with respect to Iran and other countries subject to US sanction laws. Clearstream Banking S.A. is cooperating with the US attorney.

A dispute has arisen between MBB Clean Energy AG (MBB), the issuer of a bond eligible in Clear-stream Banking AG, and end investors. MBB issued a first tranche of the bond in April 2013 and a second tranche of the bond in December 2013. The global certificates for the two tranches of the bond were delivered into Clearstream Banking AG by the paying agent of the issuer. The dispute relates to the non-payment of the second tranche of the bond with a nominal value of €500 million and the purported lack of validity of the bond. Clearstream Banking AG's role in the dispute on the purported lack of validity of the MBB Clean Energy AG bond is primarily to safekeep the global note, deposited by the paying agent of the issuer, as national central securities depository. At this stage, it is unclear if and to what extent potential damages exist and if so who would ultimately be responsible. Provisional insolvency proceedings have meanwhile been opened in respect of the issuer, MBB Clean Energy AG.

# Measures to mitigate operational risk

Deutsche Börse Group takes specific measures to reduce its operational risk. Among them are emergency and contingency plans, insurance policies, measures concerning information security and the physical safety of employees and buildings as well as precautions to ensure that the applicable rules are observed (compliance).

### **Emergency and contingency plans**

It is essential for Deutsche Börse Group to provide its products and services as reliably as possible. The Group has to maintain its business operations and safeguard against emergencies and disasters. If its core processes and resources are not available, this represents not only a substantial risk for the entire Group but also even a potential systemic risk for the financial markets in general. As a result, Deutsche Börse Group has set up a system of emergency and disaster plans covering the entire Group (business continuity management, BCM). This covers all processes designed to ensure continuity of operations in the event of a crisis and significantly reduces availability risk. Measures include precautions relating to all important resources (systems, workspaces, employees, suppliers), including the redundant design of essential IT systems and the technical infrastructure, as well as emergency measures designed to mitigate the unavailability of employees or workspaces in core functions at all important locations. Examples of such precautions are listed in the  $\ensuremath{\triangleright}$  "Business continuity management" chart.

# Business continuity management

# Emergency and crisis management process

# Systems

- Trading, clearing and settlement systems designed to be available at all times
- Duplication of all data centres to contain failure of an entire location

### Workstations

- Emergency arrangements for all essential functions
- Fully equipped emergency workspaces, ready for use at all times
- Remote access to systems by numerous employees

### Employees

- Option to move essential operational processes to other sites if staff in one site are not able to work
- Additional precautions to ensure that operations remain active in the event of a pandemic

### Suppliers

- Contracts and agreed plans of action for suppliers and service providers to specify emergency procedures
- Careful and continuous check of suppliers' emergency preparations
- Utilisation of multiple suppliers

## Preparations for emergencies and crises

The Group has introduced and tested a management process for emergencies and crises that enables it to respond quickly and in a coordinated manner. This is intended to minimise the effects on business processes and on the market and to enable a quick return to regular operations. All business segments have appointed emergency managers to act as central contacts and take responsibility during emergencies and crises. The emergency managers inform the Executive Board or raise the alarm with them in the case of severe incidents. In the event of a crisis, the Executive Board member responsible acts as the crisis manager. The emergency and contingency plans are tested regularly by realistically simulating critical situations. Such tests are generally carried out unannounced. The test results are evaluated based on the following criteria:

- Functionally effective: the measures must be technically successful.
- Executable: the employees must be familiar with the emergency procedure and be able to execute it.
- Timely: emergency measures must ensure that operations restart within the intended time period.

#### Information security

Information security attacks and cybercrime represent operational risks for Deutsche Börse Group. Cybercrime is increasingly becoming a focus for organised crime and now features high on the list of crime statistics year after year. It is a threat to all financial services providers, to credit institutions and to Deutsche Börse Group. Due to the growing danger from cyber criminals and increasing regulatory requirements, the Group is focused on mitigating these specific risks and expanding its information security measures. Besides mitigating availability risks, these serve in particular to reduce the risk of loss of confidential information and hence, to preserve Deutsche Börse Group's integrity as a transaction services provider. In this connection, the Group has extended its procedures to quantify cyber risks and has specified them in more detail, in order to facilitate implementation of targeted countermeasures.

The Group operates a situation centre (Computer Emergency Response Team, CERT), which detects and assesses threats from cybercrime in cooperation with national and international financial intelligence units at an early stage and coordinates risk mitigation measures in cooperation with the business areas. Moreover, procedures based on industry standards ISO 27001 and NIST 800-53 were established in order to bring Deutsche Börse Group's information security measures continuously into line with growing – and permanently changing – requirements, and to anticipate regulatory requirements at an early stage. In 2015, Group Information Security launched an extensive Group-wide programme designed to raise staff awareness for the responsible handling of information and to improve staff conduct in this aspect. Furthermore, Deutsche Börse Group has been a full member of national associations since 2016 (Cyber Security Sharing and Analytics, CSSA) and international networks (Financial Services Information Sharing and Analysis Center, FS-ISAC) which contribute significantly towards a forward-looking stance vis-à-vis cyber threats, and the development of strategies to fend off such threats.

# Physical security

Deutsche Börse Group places great importance on physical security issues. Corporate Security has developed an integral security concept to protect the company, its employees and values from external attacks. A highly qualified security staff assess the security situation permanently and are in close contact with local authorities and security departments of other companies.

In an increasingly competitive global market environment, know-how and confidential company information bear the potential of a major financial advantage to outsiders or competitors. Deutsche Börse applies state-of-the-art technology to prevent its knowledge from being obtained illegally, e.g. through wire-tapping. Furthermore, Corporate Security is tasked with providing support to employees while they are travelling or on foreign assignment. In this context, a world-wide travel security programme was established, supported by a travel-tracking system.

### Insurance policies

Operational risks that Deutsche Börse Group cannot or does not wish to bear itself are transferred to insurance companies, if this is possible at a reasonable price. The insurance policies are checked individually and are approved by Deutsche Börse AG's Chief Financial Officer.

#### Compliance

The compliance function, in cooperation with the individual business segments, has the task of protecting the Group against a variety of monetary and nonmonetary risks, such as reputational damage in the markets it serves, in the view of supervisors, or the general public. While endowed with appropriate autonomy from the business units, the compliance function nonetheless fulfils its mandate as an enabler of business to focus on the customers and markets the Group wishes to serve, while taking informed steps to mitigate compliance risks.

Deutsche Börse Group pursues an enterprise-wide approach to its compliance function, ensuring that applicable laws and regulatory requirements are followed with respect to individual legal entities, while aligning dedicated legal entity compliance and regulatory personnel through a common reporting structure to the Group Chief Compliance Officer. Wherever efficient and practical, the Group pursues the development of common compliance policies and supporting tools. As an example of adopting to evolving requirements, policies and procedures were revised in 2016 to implement provisions of the EU Market Abuse Regulation, which are of natural interest to the Group as a provider of reliable financial market infrastructures.

As a further step in the enhancement of Group compliance over the past few years, in the course of 2016, the Group significantly increased its dedicated compliance personnel in major offices around the world. The compliance officers closely align their work with the business areas and other control functions to form a solid second line of defence. Further investments continue to be made into compliance IT systems that provide for a more consistent and data driven approach to risk mitigation, with a current focus on review of trends and patterns as well as statistical anomalies that could be indicators of compliance risk.

Deutsche Börse Group has significantly enhanced its due diligence procedures with respect to its customers, members and counterparties, and in 2016, completed an enhanced review of all pre-existing relationships. In connection with evolving regulatory expectations, in particular the pending implementation of the EU 4th Anti-Money Laundering Directive, the Group is developing, where practicable, more centralised approaches to compliance risk management of customers served by multiple Group legal entities.

Since its products and services as a provider of financial market infrastructures are often focused on other financial intermediaries at the wholesale level, its cooperative approach seeks to raise the standards throughout the industry and enhance the integrity of financial markets for all participants. Among the notable efforts that continue to be championed by Deutsche Börse Group and Clearstream is the development by the International Securities Services Association (ISSA) of the Financial Crime Compliance Principles for Securities Custody and Settlement together with practical guidance for implementation. Senior Group Compliance officers are active participants in national and international industry groups such as this seeking to define and promote adoption of consistent industry standards.

The compliance function will continue its efforts to strengthen the compliance culture throughout the Group. It pursues a best-in-class approach and contributes to the business strategy through an advisory role to develop solutions for our customers in the ever evolving financial regulatory environment.

#### Financial risks

Deutsche Börse Group classifies its financial risk into credit, market and liquidity risk (see the  $\boxdot$  "Financial risks at Deutsche Börse Group" chart). At Group level, these risks account for about 23 per cent of the entire risk profile (this information only includes credit and market risk; liquidity risk is not quantified as part of the EC; see  $\boxdot$  note 36 to the consolidated financial statements). They primarily apply to the Group's institutions. As a result, the following explanation focuses on Clearstream and Eurex Clearing AG.

#### Credit risk

Credit risk describes the danger that a counterparty might not meet its contractual obligations, or not meet them in full. Measurement criteria include the degree to which the credit line has been utilised, the collateral deposited and concentration risk. Although Clearstream and Eurex Clearing AG often have short-term claims against counterparties totalling several billion euros overall, these are secured in most cases by collateral deposited by the market participants. Moreover, the Group regularly evaluates the reliability of its emergency plans at Clearstream and Eurex Clearing AG in the event of client defaults, and the resulting credit risk.

Furthermore, Clearstream Banking S.A. is exposed to credit risk arising from its strategic securities lending transactions (ASLplus). Only selected banks act as borrowers. All borrowing transactions are fully collateralised. Only selected bonds may be used as collateral; these must be rated at least A+ by the Standard & Poor's rating agency or the equivalent from other agencies. In the case of short-term securities without individual ratings, the issuers must be rated at least A-1.

Clearstream grants credits to its customers in order to make settlement more efficient. This type of credit business is, however, fundamentally different from the classic lending business. First, credit is extended solely on a very short-term basis, normally for less than a day. Second, it is largely collateralised and granted to clients with high creditworthiness. Furthermore, the credit lines granted can be revoked at any time.

# Financial risks at Deutsche Börse Group



Under its terms and conditions, Eurex Clearing AG only enters into transactions with its clearing members. Clearing mainly relates to defined securities, rights, derivatives and emission allowances that are traded on specific stock exchanges. Eurex Clearing AG also offers this service for some overthe-counter (OTC) products such as interest rate swaps and forward rate agreements. As a central counterparty, it steps in between transactional counterparties. Through offsetting mutual claims and requiring clearing members to post collateral, Eurex Clearing AG mitigates its clients' credit risk exposure.

To date, no default by a borrower with a secured credit line has resulted in material financial losses. Deutsche Börse Group continues to view the probability that one of its counterparties could become insolvent and that this could lead to losses for the Group as low. It considers the impact of such an event to be low if the credit line in question is collateralised and medium if it is uncollateralised. The probability of a counterparty to an uncollateralised credit defaulting is considered to be very low. If several large, systemically relevant banks were to default simultaneously, the financial impact might be significant. The probability of this scenario is considered to be very low.

Credit risk can also arise from cash investments. The Treasury department is responsible here, and has Group-wide authority. Treasury largely makes collateralised investments of funds belonging to Group companies as well as Clearstream and Eurex Clearing AG customers. To date, counterparty default has not led to any material loss for the Group. The probability that the default of a counterparty to an uncollateralised cash investment could lead to a loss is considered to be low, the financial loss itself could have a medium impact.

Investment losses on currencies for which Eurex Clearing AG has no access to the respective central banks will be borne, on a pro-rata basis, by Eurex Clearing AG and by those clearing members active in the currency where losses were incurred. The maximum amount which each clearing member will have to contribute in this manner is the total amount such clearing member has pledged with Eurex Clearing AG as cash collateral in this currency. The maximum amount to be borne by Eurex Clearing AG is €50 million.

# Reducing credit risk

Clearstream and Eurex Clearing AG assess the creditworthiness of potential customers or counterparties to an investment before entering into a business relationship with them. The companies do this in the same way: they determine the size of individual customers' credit lines based on regular creditworthiness checks, which they supplement with ad hoc analyses if necessary. They define haircuts for securities posted as collateral depending on the risk involved, and continually review their appropriateness. They include all relevant risk factors when determining the haircut and allocates a specific deduction to each. The total haircut is calculated by adding together the individual margins for the risk factors concerned.

In addition, in order to identify potential concentration risks from individual counterparties, Clear-stream analyses the VaR at the level of the Clearstream Holding group. For this purpose, a credit risk VaR is calculated at the level of individual counterparties and compared with the overall credit risk VaR. Due to its business model, Clearstream focuses almost exclusively on financial sector customers. However, there is no material concentration of credit risk either on individual counterparties or on individual countries.

Given the size and volatility of its clients' liabilities, Eurex Clearing AG has developed a leading-edge collateral management system, which is described in detail in the following section.

# Safety for both participants and the clearing house

Each clearing member must prove that it has capital equal to at least the amounts that Eurex Clearing AG has defined for the different markets. The amount of capital for which evidence must be provided depends on the risk. To mitigate Eurex Clearing AG's risk that clearing members might default before settling open transactions, members are obliged to deposit collateral in the form of cash or securities (margins) on a daily basis and, if required, to meet additional intraday margin calls.

Eurex Clearing AG only permits securities with a high credit quality to be used as collateral. It continually reviews what collateral it will accept and uses haircuts with a confidence level of at least 99.9 per cent to cover market risk. It applies an additional haircut to collateral from issuers in high-risk countries or excludes them from being furnished as collateral altogether. Risk inputs are checked regularly and the safety margins are calculated daily for each security. In addition, a minimum safety margin applies to all securities.

Margins are calculated separately for clearing member accounts and client accounts. Gains and losses resulting from intraday changes to the value of financial instruments are either settled in cash by the counterparties (variation margin) or deposited with Eurex Clearing AG as collateral by the seller due to the change in the equivalent value of the item (premium margin). In the case of bond, repo or equity transactions, the margin is collected from either the buyer or the seller (current liquidating margin), depending on how the transaction price performs compared to the current value of the financial instruments. The purpose of these margins is to offset gains and losses.

In addition, Eurex Clearing AG uses additional collateral to protect itself in the case of default by a clearing member against any risk that the value of the positions in the member's account will deteriorate in the period before the account is settled. This additional collateral is known as the initial margin. The target confidence level here is at least 99.0 per cent (with a minimum two-day holding period) for exchange-traded transactions, or 99.5 per cent (with a five-day holding period) for OTC transactions. Eurex Clearing AG checks regularly whether the margins match the requested confidence level: initial margin is currently calculated using the legacy risk-based margining method, and the new Prisma method, which is already available for all derivative contracts traded. The new method takes the clearing member's entire portfolio – as well as historical and stress scenarios – into account when calculating margin requirements. The objective is to cover market fluctuations for the entire liquidation period until the account is settled. At present, the risk-based margining method is still used for cash market products, physical deliveries, as well as for securities lending and repo transactions. The Prisma method is set to fully replace risk-based margining in the future.

In addition to the margins for current transactions, each clearing member contributes to a clearing fund, with the contributions based on its individual risk profile. This fund is jointly liable for the financial consequences of a default by a clearing member to the extent that this cannot be covered by the member's individual margin, and its own and Eurex Clearing AG's contributions to the clearing fund. Eurex Clearing AG uses regular stress tests to check whether its clearing funds match the risks. This involves subjecting all current transactions and their collateral to market price fluctuations at a confidence level of at least 99.9 per cent. In order to be able to determine potential losses in excess of a clearing member's individual margins, the impact on the clearing fund of a potential default is simulated. Eurex Clearing AG has defined limits which, when exceeded, trigger an immediate adjustment to the size of the clearing fund if necessary. The following lines of defence are available for the case that a clearing member is unable to meet its obligations to Eurex Clearing AG due to a delay in performance or a default:

- First, the relevant clearing member's outstanding positions and transactions can be netted and/or closed from a risk perspective by entering into appropriate back-to-back transactions, or they can be settled in cash.
- Any potential shortfall that might be incurred in connection with such a closing or cash settlement, as well as the associated costs, would be covered in the first instance by the collateral provided by the clearing member concerned. As at 31 December 2016, collateral amounting to €49,431.6 million had been provided for the benefit of Eurex Clearing AG (after haircuts).
- After this, the relevant clearing member's contribution to the clearing fund would be used to cover the open amount. Contributions ranged from €1 million to €432 million as at 31 December 2016.
- Any remaining shortfall would initially be covered by a contribution to the clearing fund by Eurex Clearing AG. Eurex Clearing AG's contribution amounted to €100 million as at 31 December 2016.
- Only then would the other clearing members' contributions to the clearing fund be used proportionately. As at 31 December 2016, aggregate clearing fund contribution requirements for all clearing members of Eurex Clearing AG amounted to €3,002.7 million. After the contributions have been used in full, Eurex Clearing AG can request additional contributions from each clearing member, which can be maximum twice as high as their original clearing fund contributions. In parallel to these additional contributions, Eurex Clearing AG provides additional funds of up to €300 million, provided via a Letter of Comfort from Deutsche Börse AG (see below). These additional funds will be realised together with the additional clearing member contributions, on a pro-rata basis.
- Next, the portion of Eurex Clearing AG's equity which exceeds the minimum regulatory equity would be realised.
- Finally, the remaining minimum regulatory equity of Eurex Clearing AG would be drawn upon.
- In addition, Deutsche Börse AG has issued a Letter of Comfort in favour of Eurex Clearing AG. With this Letter of Comfort, Deutsche Börse AG commits to provide the funds to Eurex Clearing AG required to fulfil its duties including the duty to provide additional funds of up to €300 million, as mentioned before. The maximum amount to be provided under the Letter of Comfort amounts to €600 million, including the payments made already. Third parties are not entitled to any rights under the Letter of Comfort.

As at 31 January 2017, Eurex Clearing AG increased its contribution to the clearing fund by €50 million, to €150 million.

In the event of default by a clearing member, Eurex Clearing AG triggers the Default Management Process (DMP). Its purpose is to rebalance the CCP, and thus to protect the non-defaulting participants from any negative consequences resulting from the default. Every product cleared by Eurex Clearing AG is clearly assigned to a so-called liquidation group. Products within a single liquidation group share similar risk characteristics, and can be liquidated using the same process if a clearing member defaults. The DMP is conducted at liquidation group level; all positions held by the defaulted clearing member and belonging to the same liquidation group are jointly transferred to other participants via an auction or an independent sale. The clearing fund is segmented along these liquidation groups, based on their respective margin requirements. Should the cost of liquidation exceed the defaulter's resources, Eurex Clearing AG will always make a contribution itself before the mutual clearing fund is utilised. During the DMP, Eurex Clearing AG can convene committees of market experts (default management committees) to advise on and support all liquidation activities.

Eurex Clearing AG has dealt with four defaults of clearing members to date: Gontard & MetallBank (2002), Lehman Brothers (2008), MF Global (2011) and Maple Bank (2016). In all cases, the non-defaulters were fully protected, as the liquidation costs were met without resort to Eurex Clearing AG's own capital or the clearing fund. A substantial portion of the defaulters' margin remained unused and was returned to them.

Deutsche Börse Group reduces its risk when investing funds belonging to Group companies and client funds by distributing investments across multiple counterparties, all with a high credit quality, by de-fining investment limits for each counterparty and by investing funds primarily in the short term and in collateralised form if possible. Investment limits are established for each counterparty on the basis of regular credit checks and using ad hoc analyses, as necessary. Since extending its licence as an investment and credit institution under the Kreditwesengesetz (German Banking Act), Eurex Clearing AG can also use Deutsche Bundesbank's permanent facilities.

Clearstream and Eurex Clearing AG run stress tests to analyse scenarios such as the default of their largest counterparty. The figures determined in this way are compared with the limits defined as part of the companies' risk-bearing capacity. In addition, the impact of several clearing counterparties defaulting at the same time is calculated for Eurex Clearing AG. A special stress test examines Clearstream Banking S.A.'s credit risk exposure from the settlement procedure with Euroclear. Moreover, inverse stress tests are calculated to determine the number of counterparties that would have to default for losses to exceed the risk cover amount. In the course of the stress tests run in financial year 2016, the identified risks have been further analysed and appropriate measures to reduce risk have been implemented.

Deutsche Börse Group tracks a variety of risk indicators in addition to its risk measures (EC, EaR and the credit risk stress tests performed). These include the extent to which individual clients utilise their credit lines, and credit concentrations.

# Market risk

Market risk in the operating business results from interest rate or currency fluctuations. Deutsche Börse Group measures this risk using earnings-based sensitivity analyses for extreme interest rate or exchange rate fluctuations. It avoids open currency positions whenever possible. Additional market risk could result from Deutsche Börse Group's ring-fenced pension plan assets (Contractual Trust Agreement, Clearstream pension plan in Luxembourg). The Group reduced its market risk exposure by deciding to invest a predominant proportion of the pension fund on the basis of a value preservation mechanism. The probability of a significant market risk occurring in this context is low, and the Group also considers the impact to be low.

### Liquidity risk

Liquidity risk applies if a Deutsche Börse Group company is unable to meet its daily payment obligations or if it can only do so at a higher refinancing cost. Operational liquidity requirements are met primarily internally by retaining funds generated. The aim is to maintain enough liquidity to meet operating costs for one quarter (currently between €150 million and €250 million). An intra-Group cash pool is used to pool surplus cash from subsidiaries on a Deutsche Börse AG level, as far as regulatory and legal provisions allow. Liquid funds are invested exclusively in the short term in order to ensure that they are available. Short-term investments are also largely secured by liquid bonds from first-class issuers. Deutsche Börse AG has access to short-term external sources of financing, such as agreed credit lines with individual banks or consortia, and a commercial paper programme. In recent years, Deutsche Börse AG has leveraged its access to the capital markets to issue corporate bonds in order to meet its structural financing needs.

Since Clearstream's investment strategy aims to be able to repay customer deposits at all times, liquidity limits are set carefully. In addition, extensive sources of financing are available at all times, such as ongoing access to the liquidity facilities at Deutsche Bundesbank and Banque Centrale du Luxembourg.

Due to its role as a central counterparty, Eurex Clearing AG has strict liquidity guidelines and its investment policy is correspondingly conservative. Regular analyses ensure the appropriateness of the liquidity guidelines. In addition, Eurex Clearing AG can use Deutsche Bundesbank's permanent facilities.

The key liquidity risk for Deutsche Börse Group lies in customer default. If a clearing member of Eurex Clearing AG defaults, its member position is liquidated. If a Clearstream customer defaults, the – generally collateralised and intraday – credit line granted to increase settlement efficiency would be called in, and the collateral provided by the client could then be liquidated. Deutsche Börse Group estimates the probability of this liquidity risk to be low, with the possibility of medium financial losses. A decline in market liquidity, following a counterparty default, would further increase Deutsche Börse Group's liquidity risk exposure. On a daily basis, Clearstream and Eurex Clearing AG calculate their liquidity needs which would result from a default of their two biggest clients, and maintain sufficient liquidity in order to cover the liquidity needs determined.

To consider different scenarios, regular stress tests are being carried out to examine the liquidity risk exposure of Clearstream and Eurex Clearing AG. Risks identified in the course of stress tests carried out during the 2016 financial year were analysed further, and corresponding risk-reduction measures initiated.

# Business risk

Business risk reflects the fact that the Group depends on macroeconomic developments and is influenced by other external events, such as changes in the competitive environment or regulatory initiatives. It therefore expresses the risks associated with the Group's business environment and sector. It also includes business strategy risk, i.e. the impact of risks on the business strategy and possible adjustments to it. These business risks are represented as variance analyses of planned and actual EBIT, and are monitored constantly by the divisions. Their weighting for the Group accounts for about 14 per cent of the total risk. Business risk may result in revenues lagging budget projections or in costs being higher.

Business risk includes the risk that competitors, such as the CurveGlobal, Chicago Mercantile Exchange (CME) and Intercontinental Exchange (ICE) derivatives exchanges or the Nasdaq OMX stock exchange or Euronext, might increase their market shares on the European trading markets (both on- and off-exchange). Deutsche Börse Group estimates the probability of a minor loss in market share as medium but the resulting impact to be relatively low.

If a state were to leave the eurozone or if a state were to become insolvent, this could mean that government bonds would not be redeemed or only would be redeemed in part. This might have a negative influence on Deutsche Börse Group's customers and reduce their trading volume in the future. Currently, the Group still views the probability of this risk occurring as low, and the possible consequences as medium.

Additional business risk may arise from regulatory requirements, or from the economic environment. For example, the introduction of a financial transaction tax, which continues to be supported by ten European states, might have a negative impact upon Deutsche Börse AG's business activities. Moreover, the UK's exit from the European Union might negatively affect our customers' trading activity. A sustained period of weak trading activity on the market also represents a risk to the Group. Deutsche Börse Group simulates different scenarios in stress tests. These take into account the simultaneous occurrence of different business risks, such as the negative effects of stronger competition combined with a simultaneous loss of business due to new regulations.

### Project risk

Project risk could result from the implementation of ongoing projects (such as the launch of new products, processes or systems) and could have a material impact on one or more of the three other risk categories (operational, financial and business risk). Project risk is not broken down further. Such risks are evaluated by the project owner and GRM and are already taken into account in the initial phase of substantial projects. For example, the implementation of the TARGET2-Securities settlement system is an important project for Clearstream at present. The realisation of the projected revenue synergy potential identified with the acquisition of 360T, the migration of equity trading onto the T7 market architecture as well as the activities in connection with regulatory changes, especially Mi-FID II, are other important projects. Ultimately, project risk has an operational, financial or business impact, which is why it is quantified as part of these risk types. Ongoing monitoring and controls ensure that project delivery risks are continually analysed and evaluated.

### Overall assessment of the risk situation by the Executive Board

Deutsche Börse AG's Executive Board is responsible for risk management throughout the Group and regularly reviews the entire Group's risk situation. Its summary of the situation in 2016 is given here, and is followed by a brief look at the coming financial year.

#### **Summary**

Additional external risk factors emerged for Deutsche Börse Group's business in the past financial year. Despite the increasing threat of cyber crime, overall operational risk declined, given that availability risks decreased. All in all, the Group's risk profile remained stable. Deutsche Börse Group's risks were covered by sufficient risk-bearing capacity at all times during the reporting period, i.e. the allocated risk appetite limits were complied with.

As at 31 December 2016, the Group's EC amounted to €2,056 million, a 5 per cent decrease year-on-year (31 December 2015: €2,159 million). In contrast, the available risk-bearing capacity increased by 27 per cent to €3,810 million year-on-year (31 December 2015: €2,999 million). EaR as at 31 December 2016 were €678 million, while risk appetite was €1,230 million, based on the adjusted budgeted EBIT in 2016.

Deutsche Börse AG's Executive Board is convinced that the risk management system is effective. The Board continues to strengthen the system and the control function responsible for it. The Group-wide strategy to capture and manage risk, which focuses on risk appetite, forms the basis for internal risk management. It is codified in the three principles described in the  $\boxdot$  "Risk strategy and risk management" section.

#### Outlook

The Group continually assesses its risk situation. Based on stress tests, on the required EC, which was calculated, and on the risk management system, Deutsche Börse AG's Executive Board concludes that the available risk cover amount is sufficient. Furthermore, it cannot identify any risk that could endanger the Group's existence as a going concern.

In 2017, the aim is to further strengthen Group-wide risk management. For instance, the Group plans to concentrate on the digitisation of information in order to improve quality and efficiency. In addition, the data made available with these efforts will be used to identify risks and opportunities, and to improve our services. Moreover, the Group launched an initiative aimed at a streamlined cooperation between the different control functions through the Group-wide standardisation of documentation and control processes. The Group also plans to extend its business continuity measures in the event of emergencies (or crises), to include additional functions over and above business-critical units.

# Report on opportunities

# Organisation of opportunities management

Deutsche Börse Group's opportunities management aims to identify, evaluate and assess opportunities as early as possible and to take appropriate measures in order to transform opportunities into business success.

Deutsche Börse Group evaluates organic growth opportunities both on an ongoing basis throughout the year in the individual business areas and systematically at Group level as part of its annual budget planning process. Suggestions from the Group's business areas for new products, services or technologies serve as the starting point. The process begins with a careful analysis of the market environment: this considers both customer wishes and factors such as market developments, competitors and regulatory changes.

Ideas for growth initiatives are developed further using uniform, Group-wide templates and subjected to a profitability analysis. Qualitative aspects are documented in a business plan, and expenses and revenues are projected in detail for multiple years.

Once a business plan and profitability analysis have been prepared for a specific growth initiative, the Executive Board of Deutsche Börse AG decides on its implementation. This decision is taken as part of the annual budget planning process. The initiatives that, after taking into consideration the associated risks, add the most value and that can be financed from the budget allocated are selected by the Executive Board and included in the budget.

Budgeting for growth initiatives involves reserving a full-year budget comprising expenditures and expenses for each selected growth initiative included in the investment portfolio. The Group Project Committee (GPC) monitors progress of growth initiatives throughout the year, checking and overseeing projects on a regular basis. In this context, the GPC focuses on whether defined milestones have been reached, on the potential impact of changes in the competitive environment on commercial performance, and on the utilisation of budgets compared to planning.

Where budget adjustments are required during the course of the year, project management must first submit a corresponding application to the GPC. Following a discussion of the application, the GPC will submit a recommendation for a resolution to the Group Management Committee (GMC), which also comprises the members of Deutsche Börse AG's Executive Board. On this basis, the GMC will decide upon whether to increase the budget. The GPC may also recommend adjustments to full-year budgeted funds, to bring them into line with general business developments. Where needed, this also provides for the opportunity to approve new growth initiatives during the course of the year.

Furthermore, supervision of growth initiatives is supported by regular reporting. GPC and GMC receive a monthly report on the status and progress of initiatives that are currently being implemented. This report is coordinated by central functions and created in cooperation with the individual projects from the business areas and compares planned costs with actual budget utilisation. In addition, the financial planning is adjusted, forecasts are updated and changes to the scope of the project are made transparent. Checks are made to establish whether milestones have been reached and project-specific risks, and the countermeasures taken are described.

#### Organic growth opportunities

When assessing organic growth opportunities, Deutsche Börse Group makes a basic distinction between structural and cyclical opportunities. Structural opportunities arise, for example, as a result of regulatory changes or new customer requirements, and can be influenced directly by the company. Cyclical opportunities, which cannot be influenced directly by the company and are driven by macroeconomic changes.

### Structural growth opportunities

The focus of Deutsche Börse Group's structural growth potential is on product- and service-driven initiatives designed to satisfy new client needs as well as regulatory requirements. In order to ensure the Group is optimally positioned and in order to explore new opportunities, the Group has gradually realigned its organisational structure since announcing the "Accelerate" growth programme in 2015. Moreover, it regularly examines options for growth in high-potential asset classes, products or services – organically or through external acquisitions and cooperations.

Organisational measures supporting the Group's growth ambitions include the global coordination of sales activities, as well as cross-divisional product development. In addition, Deutsche Börse AG realigned the distribution of responsibilities in its Group Executive Board at the beginning of 2016 – placing client focus at the heart of its organisation, as announced upon the launch of "Accelerate". With the steps taken, Deutsche Börse Group has bundled related areas in Executive Board portfolios, thus accelerating process flows and simplifying them – in the interest of the Group's clients. Within the framework of "Accelerate" and the related organisational changes, the Group anticipates realising potential for additional new business – especially through bundling Group-wide product development as well as sales activities. These opportunities will develop over time, which is why they have not been quantified in expected additional revenue.

Overall, the Group anticipates the strongest revenue increases in its Eurex segment. Besides the initiatives of the "Accelerate" programme, this includes clearing of over-the-counter (OTC) derivatives and further growth in the trading of power and gas products. 360 Treasury Systems (360T) will also provide a contribution to net revenue growth in this segment. In the Clearstream segment, the focus is on developing the investment funds business, cross-border securities settlements via TARGET2-Securities (T2S), as well as collateral and liquidity management. The growth focus in the MD+S segment is on the expansion of the index business. While building its business in growth regions, Deutsche Börse continues to focus on Asia; developments there will impact all reporting segments. The business potential of the above-mentioned initiatives are described in more detail below.

#### Clearing of OTC derivatives

The liquidity problems experienced by major market participants during the financial crisis were triggered by the failure to settle bilateral OTC transactions that were mainly entered into on an unsecured basis. In light of this, the leading industrialised nations (G20) agreed to create an effective regulatory environment to make off-exchange derivatives transactions more transparent and more secure. In response, the European Union developed the European Market Infrastructure Regulation (EMIR), which is aimed at regulating OTC trading in derivatives. EMIR includes the following regulatory requirements:

- an obligation to clear standardised OTC derivatives transactions using a central counterparty
- special risk management requirements for transactions in non-standardised derivatives
- an obligation to report the transactions to a trade repository

The obligation for market participants to comply with EMIR requirements kicked in on 21 June 2016, with the first of four phases. Preparing for mandatory clearing, Eurex Clearing AG has developed a central counterparty to clear OTC derivatives. The offering, which may later be extended to other asset classes, is aimed primarily at institutional customers and the interest rate swaps they enter into. It especially focuses on security and efficiency, allowing customers to gain the full benefit of Eurex Clearing's risk and collateral management services for their OTC transactions as well. The majority of transactions entered into by these clients has been subject to mandatory clearing since the start of phase 2 on 21 December 2016.

## Trading and clearing of power and gas products (EEX)

With the acquisition of a majority stake in the European Energy Exchange AG (EEX), based in Leipzig, Deutsche Börse Group expanded its product range to include trading and clearing of spot and derivatives contracts on power and gas as well as emission certificates - in order to benefit from markedly higher demand for energy trading and clearing services. The double-digit growth rates which the Group has achieved since then have been the result of external growth but also reflect structural organic growth which Deutsche Börse Group has been able to exploit, thanks to its good position. For instance, EEX has evolved into the central marketplace for energy, energy-related and commodities products in Continental Europe; its product range includes the markets in Germany, France, the Netherlands, Belgium, Italy and Spain. EEX also generated organic growth, especially in the power and gas business. Whilst this growth momentum is based on the changing importance of renewable energy sources – wind power in particular – for power generation, the resulting gains are difficult to predict, also due to the strong fragmentation of the European energy market, and the fact that market participants predominantly trade off-exchange. Given this high degree of fragmentation, as well as the inefficiency of OTC markets, demand for on-exchange trading and clearing solutions for such transactions has been growing over recent years. Whilst OTC trading clearly continues to be the bigger market, EEX was able to significantly increase market share, to around 30 per cent in 2016. EEX continues to anticipate strong demand for efficient trading and clearing solutions for the energy markets, and resulting structural growth.

# **Expansion into foreign exchange trading (360T)**

Deutsche Börse AG successfully explored a new asset class – foreign-exchange trading – with the full acquisition of 360T. 360T. is a leading, globally active foreign-exchange trading platform which has generated double-digit annual growth rates since its inception in 2000. The broad client base of 360T includes corporate and buy-side clients as well as banks. The acquisition of 360T by Deutsche Börse is expected to further boost the company's organic growth momentum. On a medium-term horizon, the combination offers the potential for revenue synergies in a double-digit million euro amount, with 360T using Deutsche Börse Group's international sales network and expertise for growing business, especially through the introduction of electronic trading in order to further improve liquidity and transparency. To date, regulatory obligations such as EMIR have not yet been expanded to cover the foreign exchange market. If this were to happen, Deutsche Börse Group would be able to tap further growth opportunities from its extensive portfolio of products and services it offers in the context of regulatory requirements. For instance, the Group plans to establish a foreign exchange clearing house in order to service the fundamental demand for capital-efficient solutions. Thanks to its leading position, 360T further benefits from a structural trend. Even though, at present, the vast majority of daily foreign-exchange trading volumes are executed off-exchange, demand for transparent, electronic multi-bank trading platforms such as 360T is rising. By combining the skills and experience of 360T in foreign-exchange trading with Deutsche Börse's IT competence, the Group will be able to explore the resulting revenue potential.

#### Cross-border settlement of investment funds

Clearstream completed the integration of the hedge fund custody business, acquired from Citco. This enables clients of Deutsche Börse Group to use Clearstream's settlement and custody services for their entire fund portfolio – covering traditional investment funds, exchange-traded index funds (ETFs) as well as hedge funds. Given that regulatory authorities demand more efficient settlement and custody solutions in order to achieve a maximum safety level for customer assets, the Group anticipates that it will acquire additional client portfolios.

#### **Cross-border securities settlement (T2S)**

Initiated by the ECB, the purpose of the T2S project is to harmonise cross-border securities settlement using central bank funds across Europe. Clearstream has undertaken substantial investments over recent years to bring its systems into line with the new settlement structure. For Deutsche Börse Group, this holds the opportunity of winning new clients for Clearstream's innovative services, such as global liquidity management. Furthermore, the Group expects higher custody volumes and new services from T2S, which can only be provided through Clearstream via its integrated international central depository (ICSD). Clearstream has been connected to T2S within the scope of the fourth migration wave in February 2017. Once this connection is in place, clients will be able to use Clearstream as a central point of access for domestic and international settlements, both in central bank and commercial bank funds. National central securities depositories (CSDs) – Clearstream in Germany and LuxCSD S.A. in Luxembourg – will offer their clients T2S settlements at ECB terms, without any mark-up. Full interoperability between national and international CSDs will enhance liquidity and collateral management.

## Collateral and liquidity management

Clearstream's collateral and liquidity management offering, developed as part of its Global Liquidity Hub growth initiative, helps customers cope with the structural changes they are facing, such as those resulting from the additional liquidity requirements under Basel III and the clearing obligations under EMIR which came into force in December 2015. The Global Liquidity Hub allows banks to use the assets held in custody by Clearstream on their behalf more efficiently across different platforms and countries.

# **Expansion of the index business**

Deutsche Börse Group's objective in its index business is to re-position its established European index provider STOXX with a global profile, in order to develop further indices (on top of its DAX® and STOXX® index families) and to market them on a worldwide basis. The goal is to acquire new client groups, both within Europe as well as in Asia and the Americas, through diversification. In addition, we will position our index business to better exploit the structural trend towards passive investment products (ETFs). An increasing number of private clients and asset managers now follow this trend; not only are the costs lower, but many active investment strategies have been returning under-average performance.

#### **Expansion in Asia**

In addition to growth in its core markets and products, the Group is focusing on expanding its business in growth regions. A particular emphasis is on Asia, where the Group is already successfully represented by Clearstream subsidiaries in particular. Among other things, Clearstream has been operating a permanent establishment with its own banking licence in Singapore since 2009. The China Europe International Exchange (CEINEX) commenced trading in November 2015, initially with cash market products such as ETFs based on Chinese underlyings, and renminbi-denominated bonds. CEINEX is a joint venture between Deutsche Börse and the Shanghai Stock Exchange (holding 40 per cent each) and the Chinese Financial Futures Exchange (holding a 20 per cent stake). CEINEX provides international investors with access to investment products based on Chinese underlying instruments. The marketplace is the first regulated and authorised trading platform outside China for financial products denominated in renminbi, the Chinese currency. CEINEX thus offers investors new opportunities for efficiently trading Chinese securities; at the same time, it effectively promotes the renminbi's internationalisation.

### Other structural growth opportunities

In addition to these initiatives, the Group has identified a number of other structural factors that should have a positive impact on its business success.

- In January 2014, agreement was reached at a European level on the MiFID II Directive: among other things, OTC derivatives transactions will in future have to be settled via organised trading facilities, a requirement that is expected to benefit Eurex. In addition, a decision was taken to limit the volume of equities traded in dark pools. The Group expects this restriction to have a positive impact on the volumes traded on Xetra®. The Group will apply MiFID II as from January 2018.
- Risk management is becoming more important in the wake of the financial crisis. The company expects market participants to make greater use of Eurex Clearing's clearing services to net out transactions in different asset classes and hence to eliminate counterparty risk.
- In line with the European legal and administrative framework governing certain undertakings for collective investment in transferable securities (UCITS V), the company expects that traditional investment funds will increasingly include derivatives in their portfolio strategies. This could result in additional business for the Eurex segment.
- With respect to Clearstream's post-trade activities, the company anticipates a long-term increase in capital raising through equity and debt financing on the capital markets. This ties in with the higher capital and liquidity requirements for banks and the resulting negative impact on the total volume

of available credit. For Clearstream, this could have a positive effect on custody volumes, especially in the international bond segment. In addition, given the growing internationalisation of the capital markets, the company is continuing to expect a sharper rise in the bond volume issued internationally compared with national bond issues.

# **Cyclical opportunities**

In addition to its structural growth opportunities, Deutsche Börse Group has cyclical opportunities, for instance as a result of positive macroeconomic developments. Although the company cannot influence these cyclical opportunities directly, they could lift Deutsche Börse Group's net revenue and net profit for the period attributable to Deutsche Börse AG shareholders significantly in the medium term:

- In the cash and derivatives market segments (Xetra and Eurex), sustained positive economic development, a lasting rise in investor confidence in the capital markets leading to a renewed rise in risk appetite among market participants and a sustained increase in market volatility could again stimulate trading activity by market participants and boost trading volumes.
- The volumes of interest rate derivatives traded on the Group's derivatives markets could rise if speculation on trends in long-term yields on German and other European government bonds grows, and if the spread between the various European government bonds continues to narrow.
- While the company does not expect the ECB to change its low interest rate policy during the fore-cast period, the US Federal Reserve could incrementally continue to raise interest rates. Among other things, this would positively impact Clearstream's net interest income from banking business as some 49 per cent of its daily cash balances are denominated in US dollars. A rise in key interest rates of one basis point affecting all customer cash deposits could lift income by some €100 million.
- In the market data business, an increase in the number of employees at companies active on the financial markets could lead to growing demand for data packages.

#### **External growth opportunities**

In addition, the company regularly explores external growth opportunities, which are subject to the same kind of stringent analysis as its organic growth initiatives. For this reason, only a small number of the opportunities analysed are ultimately realised. Examples of external growth in the past few years include the takeover of Citco's hedge fund custody business, the majority interests in EEX and Powernext, the full acquisition of the joint ventures STOXX including Indexium, as well as the full acquisition of 360T. Furthermore, the planned merger with London Stock Exchange Group plc was pursued in 2016 (see the  $\Box$  "Planned merger with London Stock Exchange Group" section for details).

# Report on expected developments

The report on expected developments describes Deutsche Börse Group's expected performance in financial year 2017. It refers to the Group's standalone business operations. It does not refer to either the new HoldCo established in the context of the merger with London Stock Exchange Group (LSEG), nor does it refer to Deutsche Börse AG as a subsidiary of the new HoldCo. It contains statements and information on events in the future and is based on the company's expectations and assumptions at the time of publication of this corporate report. In turn, these are subject to known and unknown opportunities, risks and uncertainties. Numerous factors influence the Group's success, its business

strategy and its financial results, many of them outside the company's control. Should opportunities, risks or uncertainties materialise or should one of the assumptions made turn out to be incorrect, the Group's actual performance could deviate either positively or negatively from the expectations and assumptions contained in the forward-looking statements and information contained in this report on expected developments.

# Developments in the operating environment

#### Macroeconomic environment

Deutsche Börse Group anticipates that the global economy will grow moderately during the forecast period. In the case of the emerging markets, the Group expects that countries with a current account surplus will expand at an above-average rate. Due to cyclical as well as structural factors, these countries will no longer be able to match the high growth rates seen in the past. Furthermore, the Group expects the economies of industrialised nations to recover slowly following a series of challenging years in the aftermath of the financial crisis, with economic growth picking up slightly over the previous years. Looking at Europe, the Group expects an improvement of the economic situation, driven by developments in Germany and France, the two largest economies. Against this generally positive background, we are assuming that market participants will have more confidence in the capital markets compared to the previous year, which was marked events, such as the Brexit referendum and the US presidential elections. However, current uncertainties could once again unsettle the markets. These include geopolitical crises, the development of commodity prices, monetary policy moves by the Fed in the US and the ECB in Europe, or a crisis of confidence in the growth of certain emerging market countries, especially in Asia. Regarding interest rate trends, the Group does not expect to see any fundamental departure from the current low interest rate policy in Europe. While the monthly volumes of the ECB's bond-buying programme will be slightly reduced, the deposit rate is expected to remain at -0.4 per cent. Now that the positive effects during 2016 of this monetary policy on cash and derivatives markets trading volumes have largely run their course, the Group does not expect any such stimulus for 2017. The turnaround in US interest rates continued at the end of 2016, and we expect further hikes in 2017 - provided that the economy (and inflation) accelerate further.

In its economic development forecast for 2017 published in January 2017, the International Monetary Fund (IMF) predicts an increase of around 1.6 per cent in the euro zone and growth of around 1.5 per cent in Germany. Expectations for the United States are slightly higher than for the euro zone: the US economy is forecast to grow by around 2.3 per cent. The highest growth by far in 2017 – approximately 6.5 per cent – is again expected in Asian countries (and especially China), due to expected high domestic demand. Given the extremely varied estimates for the different economic regions, global economic growth is projected to be around 3.4 per cent in 2017.

# Regulatory environment

Governments and central banks are currently working to enhance regulation of the financial markets so as to stabilise the financial sector and prevent future crises of the magnitude experienced. The measures planned, and in some cases already initiated, range from revising the legal framework for banking business and capital adequacy requirements through rules for clearing over-the-counter (OTC) derivatives transactions down to improving financial market supervision (for more information, please see the "Regulatory environment" section of the report on economic position). For Deutsche Börse Group's customers, the ultimate impact of these far-reaching regulatory reform projects on market structures and business models is difficult to gauge accurately at present. Deutsche Börse anticipates that this uncertainty will continue to weigh on market participants' business activities during

the forecast period. For the Group itself, the various regulatory projects will have both positive and negative consequences. Overall, however, the Group sees the changing regulatory environment as an opportunity to expand its business further; see the property on opportunities for further details.

In addition to the structural opportunities arising from regulation, the Group expects to see further debate in the forecast period on the potential introduction of a financial transaction tax. The introduction of a financial transaction tax will continue to be pursued in 2017 by a number of EU Member States, which have formed an alliance to achieve greater cooperation. The introduction of such a tax would negatively impact Deutsche Börse Group's business performance. Since the ten Member States concerned have been unable to date to reach agreement on the tax base, tax rates and technical collection and remittance methods, it is not possible to gauge the concrete impact on the Group's business.

# Future development of results of operations

Given its diversified business model and multiple sources of revenue, Deutsche Börse Group continues to consider itself very well positioned and expects to see a positive trend in its results of operations over the medium and long term. This expectation is based on, among other things, the growth opportunities that the company intends to exploit over the same period. The Group expects net revenue to increase further in the forecast period. This assumption is based on two main factors. Firstly, a further slight increase in economic growth could improve investor confidence, and motivate US investors to return to European markets. Against the background of the UK's exit from the EU, the general elections to be held in a series of European countries, and the development of US policies, we anticipate elevated stock market volatility in 2017, at least temporarily. Both of these factors, i.e. returning US investors and elevated equity market volatility, would have positive effects on trading volumes in equities and equity index derivatives. Moreover, market speculation on interest rate developments in the US and Europe may boost trading activity in interest rate derivatives at Eurex derivatives exchange – whilst higher, or increasing US interest rates could lead to a further increase in net interest income from the banking business in 2017. Secondly, the Group expects a further increase of the contribution from its structural growth initiatives as well as from new growth opportunities being explored within the scope of its "Accelerate" growth programme launched in 2015 (for details, please refer to the ∃ report on opportunities).

Depending on developments in the operating environment, the impact of both cyclical and structural growth drivers and the success of new products and functionalities, Deutsche Börse Group expects net revenue to increase by approximately 5 per cent to 10 per cent during the forecast period. Net revenue growth expected during the forecast period is based on net revenue of around €2,389 million achieved in 2016.

Even if, contrary to expectations, the operating environment turns out to be worse than described above, and clients were to scale back their business activities, particularly in the Group's business divisions which depend upon trading, Deutsche Börse Group believes it is in a position to continue to do business profitably thanks to its successful business model and its cost discipline.

Within the scope of its "Accelerate" growth strategy, in 2015 Deutsche Börse Group introduced principles for managing operating costs. The core element of these principles is to ensure the scalability of the Group's business model. To this end, the Group continuously manages operating costs adjusted for non-recurring effects relative to the development of net revenue. Accordingly, the lower end of the net revenue growth range during the forecast period and the following years, of approximately 5 per cent, would imply stable operating costs compared to the previous year. If net revenue reaches

the upper end of the growth range, at around 10 per cent, operating costs would be permitted to rise by up to 5 per cent per annum during the period under review and the following years – for instance, for the purpose of increasing investment in growth initiatives. Operating costs expected during the forecast period are based on adjusted operating costs of €1,174.2 million in 2016.

Essentially, the Group achieves the necessary flexibility in managing operating costs through two different initiatives designed to enhance operating efficiency. Firstly, the Group has implemented a continuous process to improve operating efficiency by focusing even more on client needs in order to further enhance quality and efficiency of the services offered. At the same time, Group-internal processes are simplified, generating costs savings. Secondly, the Group resolved a series of structural cost reduction measures during the reporting period, and has already commenced implementation. For instance, we started to reduce the number of external service providers. This included the shift of tasks from external to internal staff, or the hiring of external service providers as internal staff. As at the publication date of this combined management report, the company expects that operating costs will be affected by non-recurring effects of some €80 million. The majority of these is due to mergers and acquistions (excluding performance-related components) but also due to efficiency measures and costs incurred in connection with criminal proceedings against Clearstream Banking S.A. in the US.

Given the expected increase in net revenue of approximately 5 to 10 per cent, with operating costs rising by between 0 and 5 per cent as a result, the Group anticipates a growth rate of between approximately 10 and 15 per cent (excluding non-recurring effects) for net profit for the period attributable to Deutsche Börse AG shareholders during the forecast period. This assumption is based on an adjusted figure of €810.8 million for 2016.

With regard to the cyclical environment and structural growth initiatives, Deutsche Börse AG's expected business development is based on the same factors that influence the expected business development of Deutsche Börse Group as a whole. These are described in this report on expected developments. For 2017, the company expects sales revenue to be above the 2016 level (2016: €1,300.2 million) and to rise by approximately 5 to 10 per cent depending on how the factors described above develop.

Given the expected increase in sales revenue of approximately 5 to 10 per cent, with operating costs rising by between 0 and 5 per cent as a result, the Group anticipates a growth rate of between approximately 10 and 15 per cent (excluding non-recurring effects) for adjusted net profit for the period attributable to Deutsche Börse AG shareholders (2016: €553.2 million) for the forecast period.

# **Eurex segment**

In the past year, cyclical factors (see the  $\boxdot$  "Future development of results of operations" section for details) led to an overall rise in derivatives trading volumes. Higher stock market volatility since the end of 2014 resulted in a significant rise in trading volumes, especially in equity index derivatives. Deutsche Börse Group believes that structural growth factors will remain the dominant feature over the long term, and that they will positively influence trading volumes in all product segments (see the  $\boxdot$  report on opportunities for further details). In the short term, a positive economic environment would result in increasing trading volumes, in particular for equity index derivatives — whilst the present direction of monetary policy, especially in the US, would have positive effects on interest rate derivatives trading.

Eurex will continue to invest systematically in expanding its product offering in the forecast period in order to take advantage of structural factors, such as regulation or changing customer needs. The focus of our efforts will be on the acquisition of new business, which is currently not settled through an exchange

or clearing house. We are expecting positive developments along these lines due to regulatory requirements determining that OTC derivative transactions must be settled via central counterparties. This requirement has entered into force during 2016. Consequently, the Group expects this initiative to deliver additional net revenue for the first time in the 2017 financial year, and significant net revenue in the medium to long term. Looking at the once again very positive development of EEX group's trading volumes during the year under review and the continued positive market environment for trading in power and gas products, the Group expects further structural growth in business activity during the forecast period, e.g. by gaining additional market share at the expense of OTC energy markets. Moreover, the Group expects rising demand for multi-bank platforms to further boost business activity at the foreign-exchange (FX) platform 360T. In addition, we plan to include clearing services in the value chain of fully electronic FX trading during the 2017 financial year, in order to realise the revenue synergies projected in the context of this acquisition.

### Xetra segment

As in the past, net revenue in the Xetra cash market segment will continue to depend heavily on stock market cyclicality and volatility. Trading volumes could rise during the forecast period, driven by a gradual improvement in economic growth as well as a rise in investor confidence. Furthermore, the company expects stock market volatility to increase, at least temporarily, making further positive contribution to business development.

As well as enhancing its cash market offering, the company will continue to closely track changes in the competitive environment for the European cash markets. As in the past, it considers itself well positioned to retain its status as the market leader for trading German blue chips and to offer its customers across the globe an attractive range of products and services for cash trading in German and European equities, and for equities clearing. However, the stronger competition in the cash market means that further shifts in the market shares of all competitors cannot be ruled out.

# Clearstream segment

The Clearstream segment's main net revenue driver is the settlement and custody of international bonds – a business that is much more stable than the trading business and only subject to less significant capital market fluctuations. The Group anticipates a structurally driven increase in demand for collateral and liquidity management services due to regulatory requirements. In the medium to long term, Clearstream expects its attractive collateral and liquidity management and its strong position in the TARGET2-Securitites (T2S) network to result in increased business activity and hence in significant additional net revenue. As Clearstream did not migrate to T2S until February 2017, the Group anticipates only a moderate contribution to net revenue for 2017. Another factor to impact Clearstream's business in the forecast period will be central bank monetary policy, as it has been in the past. Transaction activity is expected to increase in the medium term, as a result of the ECB's ongoing commitment (at least for 2017) to the programme for purchasing government and corporate bonds. At the same time, however, the continuation of the programme could have a dampening effect on securities issuance and liquidity management. If, contrary to expectations, monetary policy becomes more restrictive, this would have positive consequences for securities issuance, the use of collateral and liquidity management services, as well as for net interest income in the banking business. As a significant portion of customer balances are denominated in US dollars, the turnaround in US interest rate policy - initiated at the end of 2015 and continued in December of 2016 - will cause a rise in net interest income in 2017, at steady cash balance levels.

With regard to its customer structure, the company continues to expect that consolidation in the financial sector will persist and that customers in Clearstream's domestic and international business will merge. These larger customers would benefit from greater discounts, which would lead to a

decline in average fees. Although Deutsche Börse faces especially intense competition in the settlement and custody of international bonds, the company does not expect this to have a major impact on its net revenue or to result in a loss of market share during the forecast period.

## Market Data + Services segment

This segment aims to accelerate expansion of Deutsche Börse's technology leadership and expertise in the area of market data by pooling all relevant resources within the company in a dedicated, market-driven business unit. The goal is to open up untapped growth opportunities in the medium to long term.

The company anticipates that net revenue in the Market Data + Services segment will increase slightly during the forecast period. This expectation is based on the continuous expansion of the product range in all areas and greater marketing of these products in growth regions. The Group's index business is set to benefit from this development in particular. Moreover, the Group considers the significant structural growth in the market for passively managed assets as an additional growth driver that is expected to further strengthen demand for index licences for exchange-traded funds. In addition to distributing index licences, the Group also benefits from the growing investment volumes in these products. In light of this, the Group believes it is well placed to increasingly extend the positioning of its globally focused range of indices to the Asian market as well.

#### Changes in pricing models

Deutsche Börse anticipates sustained price pressure in some of its business areas during the forecast period. The company's objective is to cushion this price pressure by continually improving its products and services and by offering selective incentives for price-elastic business.

Over the long term, the average net revenue per unit (e.g. trading or clearing fees per transaction, or fees for custody services) is expected to decline slightly in all areas of the Group. This is a result of laddered pricing models that lead to a decline in income per unit as customers' business activities increase.

### Trends in non-financial performance indicators

Initiatives to promote the transparency and security of the markets will continue to be a key focus during the forecast period, ensuring that Deutsche Börse Group adds value to society. Against this backdrop, the company expects to maintain the availability of the different trading systems Xetra<sup>®</sup> and T7<sup>®</sup> at the very high level seen in previous years throughout the forecast period.

Responsible management that focuses on long-term value creation is of considerable importance for Deutsche Börse Group as a service company. Given demographic change and the resulting shortage of specialist staff, the company aims to continue to position itself adequately and among other things to increase the number of women in management positions. The Executive Board already set a voluntary target in 2010 for Deutsche Börse Group to increase the proportion of women in middle and senior management to 20 per cent and in junior management to 30 per cent by 2020. These targets remain in place. They relate to Deutsche Börse Group worldwide, including subsidiaries.

In accordance with the Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (German Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors), the Supervisory and Executive Boards of Deutsche Börse AG additionally resolved to maintain the existing quotas of women on the two management levels below the Executive Board, i.e. 6 per cent on the first and 10 per cent on the second management level. These target quotas relate to Deutsche Börse AG (excluding subsidiaries) and will be valid until 30 June 2017.

## Future development of the Group's financial position

The company expects operating cash flow, which is Deutsche Börse Group's primary funding instrument, to remain clearly positive in the forecast period. The Group expects that two significant factors will influence changes in liquidity. Firstly, the company plans to invest some €150 million per year in intangible assets and property, plant and equipment at Group level during the forecast period. These investments will be included in cash flows from investing activities, and will serve primarily to develop new products and services in the Eurex and Clearstream segments and to enhance existing ones. The total amount mainly comprises investments in trading infrastructure and in risk management functionalities. Secondly, the Executive Board and Supervisory Board of Deutsche Börse AG will propose a dividend of €2.35 per share to the Annual General Meeting to be held in May 2017. This would correspond to a liquidity outflow of about €440 million. Apart from the above, no other material factors were expected to impact the Group's liquidity at the time the management report was prepared. As in previous years, the Group assumes that it will have a sound liquidity base due to its positive cash flow, adequate credit lines (see → note 36 to the consolidated financial statements for details), and flexible management and planning systems.

Within the framework of a programme to optimise its capital structure, Deutsche Börse Group generally aims to distribute dividends equivalent to between 40 and 60 per cent of adjusted net profit for the period attributable to Deutsche Börse AG shareholders. In recent years (where the Group's net profit was lower), the dividend payout ratio was kept at the upper end of this range, in order to distribute stable dividends to shareholders. Given that the Group's profit targets were raised in July 2015, in connection with the announcement of the "Accelerate" growth strategy, the company aims for a dividend payout ratio in the middle of the range between 40 and 60 per cent going forward.

Moreover, until 2012 the company distributed a part of freely available funds to shareholders, via share buy-backs. Since 2013, these funds have been used predominantly to support the company's development, as well as to fulfil credit rating and regulatory capital requirements. Against the background of the growth strategy announced in 2015, the company anticipates that in future, freely available funds will increasingly be applied not only to support the Group's organic growth, but also to complementary external growth options.

To maintain its strong credit ratings at Group level, the company aims at a ratio of interest-bearing gross debt to EBITDA of no more than 1.5. The Group expects to reach or slightly come below this figure in 2017, depending on net revenue developments.

The parent company, Deutsche Börse AG, plans to invest some €30 million in intangible assets and property, plant and equipment during the forecast period.

#### Overall assessment by the Executive Board

The Executive Board of Deutsche Börse AG believes that the company continues to be in a very good position compared with the international competition thanks to its comprehensive offering along the securities trading value chain and its innovative strength. Against this background, it therefore expects to

see a positive trend in its results of operations in the long term. The purpose of the measures resolved – and mostly implemented – in 2015, as part of the "Accelerate" programme, is to further accelerate the Group's growth. In this context, the Group aims to act in a more agile and effective manner, and with increased client focus, to turn Deutsche Börse into the global market infrastructure provider of choice, being top-ranked in all its activities. However, for the forecast period, the uncertainty as to how capital market participants will react to the economic and regulatory situation makes it difficult for the Executive Board to make a specific forecast. Deutsche Börse Group's goal for the forecast period is to ensure the scalability of its business model. To this end, the Executive Board will actively manage operating costs in a way that net profit for the period attributable to Deutsche Börse AG shareholders will grow at a stronger rate than net revenue. Specifically, annual growth rates of approximately 10 to 15 per cent (excluding non-recurring effects) are projected for the forecast period. Overall, the Executive Board assumes on this basis that cash flow from operating activities will be clearly positive and that, as in previous years, the liquidity base will be sound. The overall assessment by the Executive Board is valid as at the publication date for this combined management report.

# Deutsche Börse AG (Disclosures based on the HGB)

In contrast to the consolidated financial statements, the single-entity financial statements of Deutsche Börse AG are not prepared in accordance with International Financial Reporting Standards (IFRSs) but with the German Commercial Code (Handelsgesetzbuch, HGB) and the supplementary provisions of the German Stock Corporation Act (Aktiengesetz, AktG).

Deutsche Börse AG compiled its annual financial statements for the 2016 financial year pursuant to the Bilanzrichtlinie-Umsetzungsgesetz (German Accounting Directive Implementation Act, BilRUG), which called for changes in particular to the definitions of revenue and other operating income. To ensure comparability, the BilRUG has also been applied to the previous year's figures for these two items as reported in the following.

### **Business and operating environment**

#### General position

# Deutsche Börse AG's course of business in the reporting period

Revenue for the 2016 financial year remained within the company's guidance. At the same time, total costs increased only slightly, thanks to continuous enhancements in operating efficiency due to the "Accelerate" programme launched in 2015. Net profit increased significantly, due, among others, to the divestment of International Securities Exchange Holdings, Inc. (ISE), and exceeded the company's expectations. Against this background, Deutsche Börse AG's Executive Board considers the company's performance during the 2016 financial year as satisfactory. The 2016 financial year was largely characterised by plans for the merger of Deutsche Börse with London Stock Exchange Group (LSEG).

# Results of operations of Deutsche Börse AG

Deutsche Börse AG's revenue for the 2016 financial year rose by 1.5 per cent, to €1,300.2 million (2015: €1,280.5 million). The → "Sales revenue by segment" table provides a breakdown of revenue by company segment.

The lion's share of revenue was generated in the Eurex segment, with €799.4 million (2015: €700.9 million). Regarding the performance of the Eurex derivatives market segment, general reference is made to the → "Eurex segment" section. Any divergence from the statements in that segment are essentially due to the fact that developments of the energy market (EEX group) and the foreign exchange market (360T group) do not directly impact upon the business of Deutsche Börse AG. The financial performance of the Market Data + Services segment is described, in general, in the → "Market Data + Services segment" section. It is worth noting that the business development of the STOXX Ltd. subsidiary does not directly impact the business performance of Deutsche Börse AG. Details concerning the business development in the Xetra segment are largely provided in the → "Xetra segment" section. Revenue attributable to the Clearstream segment is generated from IT services that Deutsche Börse AG provides to entities within the Clearstream Holding AG subgroup.

Other operating income rose to €149.1 million during the year under review (2015: €70.3 million). This increase was attributable in particular to the €99.0 million in sales proceeds recognised from the sale of ISE.

Total costs (comprising staff costs, amortisation of intangible assets and depreciation of property, plant and equipment, as well as other operating expenses) were €946.1 million, up 2 per cent on the previous year (2015: €927.0 million). They also include expenses of €65.8 million related to the proposed merger with LSEG; adjusted for these, total costs were down by 5 per cent compared with the previous year. For a breakdown, please refer to the  $\boxdot$  "Overview of total costs" table. Staff costs rose by 4 per cent compared to the previous year, to €201.8 million (2015: €194.2 million) mainly due to expenses related to bonus payments of €43.0 million (2015: €26.8 million), and lower expenses for the "Accelerate" growth programme, of €6.3 million (2015: €21.3 million).

Amortisation of intangible assets and depreciation of property, plant and equipment remained nearly unchanged and amounted to €24.3 million in the year under review (2015: €24.4 million). Other operating expenses were up by 2 per cent year-on-year, to €720.0 million (2015: €708.4 million). The

### Performance figures for Deutsche Börse AG

|  | <b>2016</b><br>€m  | <b>2015</b><br>€m | Change<br>% |
|--|--------------------|-------------------|-------------|
| Sales revenue                                    | 1,300.2            | 1,280.51)         | 2           |
| Total costs                                      | 946.1              | 927.0             | 2           |
| Net profit from equity investments               | 289.9              | 123.9             | 134         |
| EBIT   | 697.5              | 543.9             | 28          |
| Profit before tax from ordinary activities (EBT) | 603.2              | 443.9             | 36          |
| Net profit for the period                        | 553.2              | 315.9             | 75          |
| Earnings per share (€)                           | 2.96 <sup>2)</sup> | 1.712)            | 73          |

#### 1) Calculation based on the definition of revenue pursuant to the BilRUG

### Sales revenue by segment

|                           | <b>2016</b><br>€m | <b>2015</b><br>€m | Change % |
|---------------------------|-------------------|-------------------|----------|
| Eurex                     | 799.4             | 700.9             | 14       |
| Market Data +<br>Services | 275.8             | 281.3             | -2       |
| Xetra                     | 175.8             | 185.4             | -5       |
| Clearstream               | 49.2              | 14.3              | 244      |
| Total                     | 1,300.2           | 1,181.91)         | 10       |

1) Calculation based on the definition of revenue not pursuant to the BilRUG

Calculation based on weighted average of shares outstanding

increase was largely attributable to higher expenses for advisory services, incurred in particular in connection with the planned merger with LSEG.

Deutsche Börse Group's result from equity investments for the 2016 financial year totalled  $\[ \]$ 289.9 million (2015:  $\[ \]$ 123.9 million). In particular, this rise reflects the increase in income from the disposal of equity investments, to  $\[ \]$ 99.0 million (2015:  $\[ \]$ 5.7 million), and the higher profit transfer from Clear-stream Holding AG of  $\[ \]$ 167.2 million (2015:  $\[ \]$ 147.1 million). Income from dividends was  $\[ \]$ 37.3 million in the year under review (2015:  $\[ \]$ 18.2 million), of which the largest part of  $\[ \]$ 34.5 million was attributable to distributions made by STOXX Ltd. (2015:  $\[ \]$ 16.6 million).

Earnings before interest and taxes (EBIT) increased to €697.5 million (2015: €543.9 million). Net income for the period totalled €553.2 million, a 75 per cent increase year-on-year (2015: €315.9 million), among others due to the proceeds from the disposal of ISE.

Profit from ordinary activities rose by 36 per cent year-on-year, to €603.2 million (2015: €443.9 million). The profit margin before taxes (the ratio of profit from ordinary activities to revenue) increased from 35 per cent to 46 per cent.

# **Profitability**

Deutsche Börse AG's return on equity expresses the ratio of net income after taxes to average equity available to the company during the course of 2016. Due to the better results, return on equity rose to 21 per cent, compared to 13 per cent in 2015.

# Financial position of Deutsche Börse AG

Cash and cash equivalents on the 31 December 2016 balance sheet date amounted to €935.4 million (2015: €172.3 million), comprising cash on hand, current account balances with banks and term deposits.

The company received dividends totalling €37.3 million (2015: €18.2 million). The main reason for this increase is a higher dividend distributed by STOXX Ltd.

Deutsche Börse AG has available external credit lines in the amount of €605.0 million (2015: €605.0 million), which were not drawn upon as at 31 December 2016. Moreover, the company has a Commercial Paper programme in place, which allows for flexible and short-term financings of up to €2.5 billion, in various currencies. At the end of the year, there was no Commercial Paper outstanding (2015: €95.0 million).

Through a Group-wide cash-pooling system, Deutsche Börse AG ensures an optimum allocation of liquidity throughout Deutsche Börse Group; in this way, the parent entity makes sure that all subsidiaries are in a position to honour their payment obligations at any time.

# Overview of total costs

|                          | <b>2016</b> €m | <b>2015</b><br>€m | Change<br>% |
|--------------------------|----------------|-------------------|-------------|
| Staff costs              | 201.8          | 194.2             | 4           |
| Write-offs               | 24.3           | 24.4              | 0           |
| Other operating expenses | 720.0          | 708.4             | 2           |
| Total                    | 946.1          | 927.0             | 2           |

# Cash flow statement (condensed)

|                                      | <b>2016</b> €m | <b>2015</b><br>€m |
|--------------------------------------|----------------|-------------------|
| Cash flows from operating activities | 156.4          | 372.8             |
| Cash flows from investing activities | 141.4          | -1,444.9          |
| Cash flows from financing activities | -697.9         | 841.9             |
| Cash and cash equivalents as at      |                |                   |
| 31 December                          | -1,006.8       | -606.7            |

Deutsche Börse AG has issued three corporate bonds with a nominal value of €600 million each and one corporate bond with a nominal value of €500 million. For more details concerning these bonds, please refer to the  $\boxdot$  "Financial position" section. Moreover, as part of Group-internal restructuring measures in 2014, the company raised loans from associates, in a total amount of €375.6 million, which will fall due during the 2017 financial year.

Deutsche Börse AG generated €156.4 million (2015: €372.8 million) in cash flow from operating activities during the 2016 financial year. The decline was especially attributable to higher receivables from affiliated entities and a decrease in medium- and short-term provisions.

Cash flow from investing activities amounted to &141.4 million (2015: &-1,444.9 million). This increase is strongly correlated with a decline in investments in financial assets. In 2015, cash flow from investing activities had been largely influenced by the acquisition of an additional stake in STOXX Ltd., and the acquisition of 360T Group, resulting in a cash outflow of &1,403.5 million.

Cash flow from financing activities amounted to €-697.9 million in the year under review (2015: €841.9 million). In addition to €420.1 million in dividends paid for the 2015 financial year, the company raised loans of €400.0 million and repaid loans of €683.1 million. Cash and cash equivalents amounted to €-1,006.8 million on the balance sheet date of 31 December 2016 (2015: €-606.7 million), comprising liquid funds of €935.4 million (2015: €172.3 million) less cash-pooling liabilities of €1,942.2 million (2015: €779.0 million).

# Net assets of Deutsche Börse AG

Deutsche Börse AG's property, plant and equipment amounted to €6,141.2 million on 31 December 2016 (2015: €6,220.7 million). The lion's share of this figure was attributable to investments in affiliated companies of €6,001.8 million (2015: €6,092.8 million), mainly comprising investments in Clearstream Holding AG and Eurex Frankfurt AG. Investments in affiliated companies declined to €91.0 million, mainly due to the sale of the ISE stake (€81.9 million).

At €41.6 million (2015: €21.5 million), Deutsche Börse AG's investments in intangible assets and property, plant and equipment were higher than the amount of €30.0 million expected at the end of 2015. Amortisation, depreciation and impairment amounted to €24.3 million (2015: €24.4 million).

Receivables from and liabilities to affiliated companies include settlements for intra-Group services and amounts invested by Deutsche Börse AG within the scope of cash-pooling arrangements. Receivables from affiliated companies of  $\[ \in \]$ 167.2 million (2015:  $\[ \in \]$ 147.1 million) mainly related to the existing profit transfer agreement with Clearstream Holding AG. Liabilities to affiliated companies predominantly resulted from cash pooling ( $\[ \in \]$ 1,942.2 million – 2015:  $\[ \in \]$ 779.0 million); short-term loans ( $\[ \in \]$ 375.6 million); and trade liabilities ( $\[ \in \]$ 82.1 million – 2015:  $\[ \in \]$ 59.3 million).

# Non-current assets (condensed)

|                          | 2016    | 2015    |
|--------------------------|---------|---------|
|                          | €m      | €m      |
| Intangible assets        | 12.3    | 11.3    |
| Tangible assets          | 66.3    | 51.9    |
| Financial assets         | 6,062.6 | 6,157.5 |
| Non-current assets as at |         |         |
| 31 December              | 6,141.2 | 6,220.7 |
|                          |         |         |

# Employees per country/region

|                         | 31 Dec 2016 | %     |
|-------------------------|-------------|-------|
| Germany                 | 1,098       | 97.0  |
| United Kingdom          | 22          | 1.9   |
| France                  | 7           | 0.6   |
| Rest of Europe          | 4           | 0.4   |
| Total Deutsche Börse AG | 1,132       | 100.0 |

Deutsche Börse AG collects fees for a large part of services provided immediately after each month-end; accordingly, trade receivables totalled €157.1 million at the year-end (2015: €131.0 million).

Working capital amounted to €–2,064.0 million during the year under review (2015: €–1,158.1 million). The change was mainly attributable to an increase in liabilities to affiliated companies.

# Deutsche Börse AG employees

In the reporting period, the number of people employed by Deutsche Börse AG decreased by 21 to total 1,132 as at 31 December 2016 (31 December 2015: 1,153). On average, 1,118 people worked for Deutsche Börse AG during financial year 2016 (2015: 1,131).

In the course of financial year 2016, 31 employees left Deutsche Börse AG, resulting in a fluctuation rate of 2.8 per cent.

Deutsche Börse AG employed staff at six locations throughout the world as at 31 December 2016. Details on the countries/regions concerned, the employee age structure and the length of service of the company's employees are given in the following tables and those on the previous page.

As at 31 December 2016, 75 per cent of Deutsche Börse AG's employees were graduates. This figure is calculated on the basis of the number of employees holding a degree from a university, a university of applied sciences or a university of cooperative education, and employees who have completed comparable studies abroad. In total, the company invested an average of 5.9 days per employee in staff training in 2016.

# Remuneration report of Deutsche Börse AG

As the structure and design of the remuneration system correspond to those of Deutsche Börse Group, please refer to the latter's  $\supseteq$  remuneration report.

# Employee age structure

|                         | 31 Dec 2016 | %   |
|-------------------------|-------------|-----|
| Under 30 years          | 105         | 9   |
| 30 to 39 years          | 283         | 25  |
| 40 to 49 years          | 386         | 34  |
| 50 years and older      | 358         | 32  |
| Total Deutsche Börse AG | 1,132       | 100 |

# Employee length of service

|                         | 31 Dec 2016 | %   |
|-------------------------|-------------|-----|
| Less than 5 years       | 384         | 34  |
| 5 to 15 years           | 320         | 28  |
| Over 15 years           | 428         | 38  |
| Total Deutsche Börse AG | 1,132       | 100 |

# Corporate governance declaration in accordance with section 289a HGB

The corporate governance declaration in accordance with section 289a HGB applies to Deutsche Börse Group and Deutsche Börse AG, please refer to the ⊡ corporate governance declaration made on behalf of the Group.

### Opportunities and risks facing Deutsche Börse AG

As the opportunities and risks facing Deutsche Börse AG and the measures and processes for dealing with them are essentially the same as for Deutsche Börse Group, please refer to the risk report and the report on opportunities for more information. As a matter of principle, Deutsche Börse AG's share of the opportunities and risks of its equity investments and subsidiaries is proportionate to the size of its shareholdings. Risks that threaten the existence of the Eurex Clearing AG subsidiary have a direct impact on Deutsche Börse AG as it has issued a letter of comfort ("Patronatserklärung"). Further information on the letter of comfort issued to Eurex Clearing AG is available in the "Other financial obligations and transactions not included in the balance sheet" section in the notes to the annual financial statements of Deutsche Börse AG.

The description of the internal control system (ICS) required by section 289 (5) HGB is given in the ∃ "Internal management" section.

### Report on expected developments at Deutsche Börse AG

The expected developments in Deutsche Börse AG's business are largely subject to the same factors as those influencing Deutsche Börse Group. The relevant disclosures and quantitative information on Deutsche Börse AG are provided in the ☑ report on expected developments.

# Remuneration report

This remuneration report outlines the principles of the remuneration system for members of Deutsche Börse AG's Executive Board, and describes the structure and amount of Executive Board remuneration. Furthermore, it describes the principles applicable to, and the amount of Supervisory Board remuneration. The remuneration report is part of the combined management report; it follows the requirements of the Handelsgesetzbuch (HGB, German Commercial Code), the International Financial Reporting Standards (IFRSs) and the German Accounting Standard No. 17. In addition, it largely follows the recommendations of the German Corporate Governance Code (GCGC). For details, see the  $\bigcirc$  corporate governance declaration. The remuneration report is structured in two parts:

- 1. Remuneration system and aggregate Executive Board remuneration
- 2. Supervisory Board remuneration

# Remuneration system and aggregate Executive Board remuneration

### **Principles and targets**

The Supervisory Board resolved to adopt a new remuneration system for the Executive Board, to come into effect on 1 January 2016. The system was approved by the Annual General Meeting on 11 May 2016, in accordance with section 120 (4) of the Aktiengesetz (AktG, German Stock Corporation Act).

The new remuneration system is based on three key guidelines: firstly, a marked performance orientation – with a more differentiated appraisal through ambitious internal and external targets – ensures that the focus is on the company's above-average growth. Secondly, various assessment bases extending over several years, sustainability elements, and the deferral of disbursements over time discourage excessive risk-taking. Thirdly, the new remuneration system promotes a strong equity culture, and thereby contributes to aligning the interests of shareholders, senior management and other stakeholders.

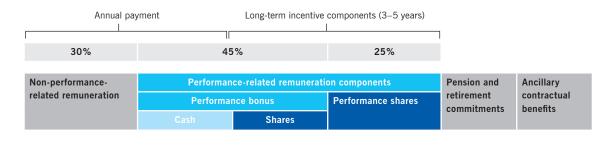
The Executive Board remuneration is determined by the entire Supervisory Board. The Personnel Committee is responsible for preparing the Supervisory Board's decision. The Supervisory Board reviews the appropriateness of the Executive Board remuneration on a regular basis – at least every two years – including the ratio of Executive Board remuneration to the remuneration of first-level managers and the workforce as a whole, as well as the development of the various salary levels over time. The remuneration system applies equally to all members of the Executive Board.

### Structure and remuneration components

The remuneration system for the members of the Executive Board consists of four components:

- non-performance-related fixed remuneration
- performance-related remuneration components
- ancillary benefits
- pension and retirement commitments

# Composition of the total target remuneration



% = Proportion of the total target remuneration

- Non-performance-related component (cash component)
- Performance-related component (cash component)
- Performance-related component (share-based payment)

In addition, Share Ownership Guidelines apply, according to which Executive Board members are obliged to hold a substantial amount of Deutsche Börse AG shares during their term of office.

The Chief Executive Officer also participates in a Co-Performance Investment Plan which was resolved by the Supervisory Board in 2015.

The final amount of the stock bonus for outstanding tranches within the previous Stock Bonus Plan (SBP) for members of the Executive Board was determined as at 31 December 2015; the SBP was prematurely terminated by way of a settlement process.

The individual components of the Executive Board's remuneration are laid out in detail below.

### Non-performance-related fixed remuneration

The members of the Executive Board receive a fixed basic salary, payable in twelve monthly instalments. This non-performance-related remuneration comprises approximately 30 per cent of the total target remuneration for one year.

# Performance-related remuneration components

Performance-related remuneration accounts for approximately 70 per cent of the total target remuneration for one year. This variable remuneration element comprises a performance bonus as well as performance shares.

#### Performance bonus

The performance bonus is measured using the Performance Bonus Plan (PBP). It amounts to approximately two-thirds of the performance-related remuneration, and to approximately 45 per cent of the total target remuneration. It consists of a share-based component (the share-based performance bonus) and a cash component, in equal proportions.

#### Performance shares

Performance shares are measured and granted within the framework of the Performance Share Plan (PSP). As they reflect the performance of the Deutsche Börse share price over a five-year performance period (the vesting period), they are disbursed after the year under review. Performance shares amount to approximately one-third of the performance-related remuneration, and to approximately 25 per cent of the total target remuneration.

The criteria which the Supervisory Board uses to assess target achievement of individual Executive Board members are described below. These criteria are used to determine the respective performance bonus, as well as the number and value of performance shares.

Principles governing the PBP and assessment of target achievement for the performance bonus. Target achievement for the performance bonus is determined for one financial year on the basis of the PBP. The underlying assessment is based on two components: growth of net profit for the year concerned attributable to Deutsche Börse AG shareholders (hereinafter referred to as net income) with a weighting of two-thirds, and the Executive Board member's individual performance with a one-third weighting.

Once the Supervisory Board has determined the overall target achievement level from these two components, it may conduct a final appraisal, adjusting it via a performance multiplier for individual Executive Board members, but also for the entire Executive Board. The total performance bonus will be disbursed in cash, no later than the regular salary payment for the calendar month following approval of Deutsche Börse AG's consolidated financial statements. Executive Board members are obliged to invest 50 per cent of the total disbursement amount after tax in Deutsche Börse AG shares, which they will have to hold for at least three years.

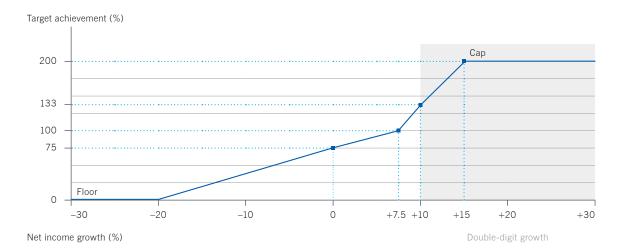
## Overview of the performance bonus



# Assessment of net income growth for the performance bonus

Net income is derived – independently of the budget – by comparing the net income for the remuneration year with the previous year's figure. Target achievement may range between 0 and 200 per cent, whereby a decline in net income of 20 per cent or more means a 0 per cent target achievement (floor). Where net income remains stable (i.e. unchanged year-on-year), this is deemed a 75 per cent target achievement; a 7.5 per cent increase is equivalent to a 100 per cent target achievement. An increase in net income of 15 per cent or more means a 200 per cent target achievement (cap). Accordingly, a stronger incentive is provided for net income growth rates between 7.5 per cent and 15 per cent, via a steeper slope of the target achievement curve (please refer to the  $\bigcirc$  chart "Assessment of net income for the performance bonus").

## Assessment of net income for the performance bonus



# Assessment of individual target achievement

The individual targets are set by the Supervisory Board at the beginning of each financial year for each Executive Board member – taking into account general targets regarding the company's strategy as well as those with particular importance for the individual Executive Board portfolios (e.g. on financial indicators, clients, employees and control systems). The Supervisory Board assesses target achievement for each member of the Executive Board after the end of the respective remuneration year. In a similar manner to the assessment of net income growth, a range from a lower limit of 0 per cent to an upper limit of 200 per cent has been defined for achievement regarding individual targets.

# Determining a performance multiplier

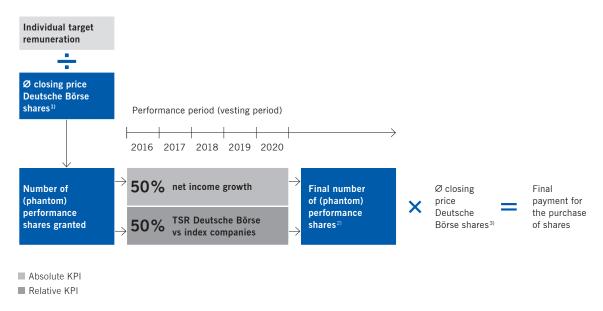
The performance multiplier for the performance bonus enables the Supervisory Board to account for a dilution of equity, or to incorporate achievement of qualitative or quantitative targets (especially integration parameters) in the final assessment of overall target achievement, in the event of mergers, acquisitions or divestments. The performance multiplier may be set in a range between at least 0.8 and at most 1.2; it is multiplied by the performance assessment for the performance bonus, taking the 200 per cent cap into account.

Principles governing the PSP and assessment of target achievement for performance shares At the beginning of each financial year, the PSP provides for a prospective quantity of so-called performance shares to be allotted to each member of the Executive Board. The number of initial (phantom) performance shares is determined by dividing the amount of individual target remuneration (in euros) by the average Xetra® closing price of Deutsche Börse shares over the last calendar month prior to the start of the performance period (fair value of the performance shares). A claim on allocation of phantom performance shares will only arise upon expiry of the five-year performance period (vesting period). Target achievement in relation to performance shares is determined on the basis of two components: firstly, growth in net income over a five-year period, and secondly, the relative performance of Deutsche Börse's total shareholder return (TSR) compared to the TSR of the industry benchmark STOXX® Europe 600 Financials index during the same period. The final number of phantom performance shares is multiplied by the average Xetra closing price of Deutsche Börse shares in the last calendar month prior to the end of the vesting period. The result of this calculation is the disbursement amount to be used for the purchase of tradeable shares (taking into account the dividends per share paid out during the vesting period). The disbursement takes place no later than the regular salary payment for the calendar month following approval of Deutsche Börse AG's consolidated financial statements after the end of the respective vesting period. The members of the Executive Board are obliged to invest the disbursement amount after tax in Deutsche Börse AG shares.

Therefore, the PSP is variable in two dimensions:

- The first variable is the number of performance shares, which is derived from the growth path of net income and from the TSR of Deutsche Börse shares relative to the TSR of the reference index, each over a five-year period. In this context, the maximum number of performance shares is capped at 250 per cent of performance shares determined at the beginning of the vesting period.
- The second set of variables is the development of share price and dividends during the vesting period, with no cap applied to the share price.

# Structure of the Performance Share Plan (PSP)

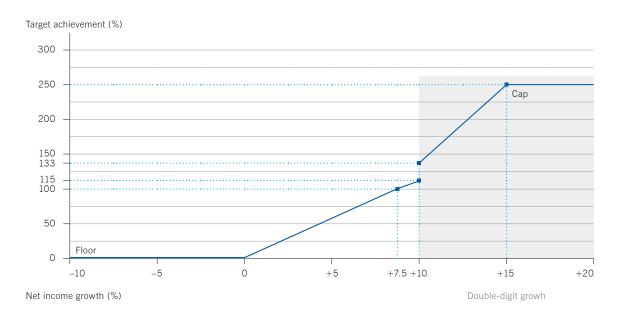


- 1) Of the last calendar month before the start of the vesting period
- 2) Cap at 250 per cent of the number granted
- 3) Of the last calendar month prior to the end of the vesting period, including the dividends from the entire vesting period

## Assessment of net income for performance shares

During the five-year performance period, the Supervisory Board measures the target achievement level in terms of net income growth and determines it for the Executive Board members accordingly. The target achievement level at the end of the respective performance period is calculated as the sum of the annual target achievement levels of each of the five years, divided by five. The level of target achievement may range between 0 and 250 per cent. If net income declines, or remains unchanged year-on-year, this is deemed a 0 per cent target achievement level (floor). A 7.5 per cent increase in net income is equivalent to a 100 per cent target achievement. An increase in net income of 15 per cent or more means a 250 per cent target achievement (cap). The target achievement level increases more strongly for growth rates between 10 and 15 per cent, compared to single-digit growth rates, providing a stronger incentive to Executive Board members to strive for double-digit net income growth. Please also refer to the chart "Assessment of net income growth for performance shares".

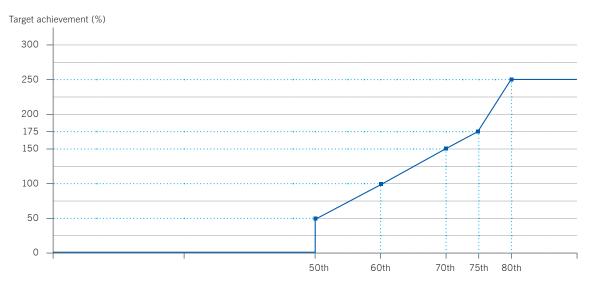
## Assessment of net income for performance shares



# Assessment of TSR performance of Deutsche Börse shares

The TSR performance of Deutsche Börse shares is derived from Deutsche Börse AG's ranking, relative to the constituents of the STOXX Europe 600 Financials index. Executive Board members' target achievement may range from 0 per cent (floor) to 250 per cent (cap). A 0 per cent target achievement is assumed in the event of Deutsche Börse AG's relative five-year TSR falling short of the median, i.e. being lower than that of at least half of index constituents. Where Deutsche Börse AG's TSR has outperformed 60 per cent of index constituents, this represents a target achievement of 100 per cent. A target achievement of 175 per cent is reached if Deutsche Börse AG's TSR has outperformed 75 per cent of index constituents. The 250 per cent target achievement cap is reached if Deutsche Börse AG's TSR ranks amongst the top 20 per cent of index constituents – in other words, if it is ranked in the 80th percentile of the index or higher. Please also refer to the ⊇ chart "Assessment of the Total Shareholder Return (TSR) of the Deutsche Börse share for performance shares".

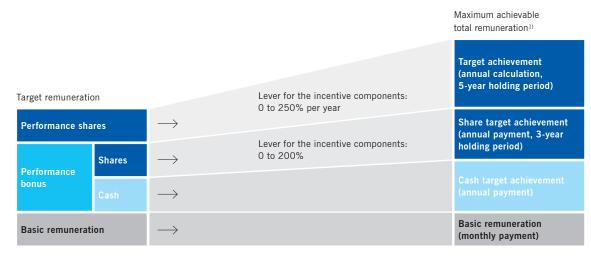
### Assessment of the Total Shareholder Return (TSR) of the Deutsche Börse share for performance shares



Relative TSR vs index (percentile rank)

Performance-related remuneration for Executive Board members is predominantly share-based. Furthermore, it is largely calculated on the basis of long-term performance, with various target criteria being assessed over a period of five years (performance shares) or four years (share-based performance bonus: annual disbursement and three-year holding period for shares to be invested), respectively (see also the  $\boxdot$  section "Share Ownership Guidelines"). The cash component of the performance bonus (annual disbursement) is the only short-term component within variable remuneration.

# Basic remuneration as well as annual and long-term incentive components



- % = Proportion of the total target remuneration
- Performance-related component (share-based payment)
- Performance-related component (cash component)
- Non-performance-related component (cash component)
- 1) Unlimited share price performance

# **Ancillary contractual benefits**

The members of the Executive Board receive certain ancillary contractual benefits, such as the provision of an appropriate company car for business and personal use (with tax being payable by the Executive Board members on the pecuniary benefit arising from personal use). They also receive taxable contributions towards private pensions. The company has also taken out insurance cover for them, such as personal accident insurance and a Directors & Officers (D&O) insurance.

### Pension and retirement commitments

# **Retirement benefits**

Messrs Kengeter, Pottmeyer and Tessler are entitled to pension benefits after reaching the age of 60, Ms Stars after reaching the age of 62, and Mr Preuss after reaching the age of 63, provided that they are no longer in the employment of Deutsche Börse AG in each case at that time. As a matter of principle, the Supervisory Board reviews and determines the pensionable income from which retirement benefits are derived. There are two different retirement benefit systems for Executive Board members. Executive Board members who were appointed for the first time prior to 1 January 2009 receive a defined benefit pension. Executive Board members who were appointed for the first time after that date receive a defined contribution pension. The pensionable income and the present value of the existing pension commitments as at 31 December 2016 are presented in the → table "Retirement benefits".

**Defined benefit pension system:** After reaching the contractually agreed retirement age, members of the Executive Board to whom the defined benefit pension system is applicable receive a specified percentage (replacement rate) of their individual pensionable income as a pension. This is subject to the Executive Board member in question having served on the Executive Board for at least three years, and having been reappointed at least once. Pensionable income is determined and regularly reviewed by the Supervisory Board. When the term of office began, the replacement rate was 30 per cent. It rose by 5 percentage points with each reappointment, up to a maximum of 50 per cent. The provisions of the defined benefit pension system apply to Messrs Preuss and Tessler.

**Defined contribution pension system:** For Executive Board members to whom the defined contribution pension system applies, the company makes a contribution in the form of a capital component in each calendar year they serve on the Executive Board. This contribution is determined by applying an individual replacement rate to the pensionable income. As in the defined benefit pension system, the pensionable income is determined and regularly reviewed by the Supervisory Board. The annual capital components calculated in this manner bear annual interest of 3 per cent. The provisions of the defined contribution pension system apply to Messrs Kengeter and Pottmeyer, and to Ms Stars.

# Early retirement pension

Members of the Executive Board who have a defined benefit pension are entitled to an early retirement pension if the company does not extend their contract, unless the reason for this is attributable to the Executive Board member or would justify termination without notice of the Executive Board member's contract. The amount of the early retirement pension is calculated in the same way as the retirement benefits – by applying the relevant replacement rate to the pensionable income. Again, this is subject to the Executive Board member having served on the Executive Board for at least three years, and having been reappointed at least once. Members of the Executive Board who have a defined contribution pension are not eligible for early retirement benefits.

### Death and permanent occupational incapacity benefits

In the event of the permanent occupational incapacity of a member of the Executive Board, the company is entitled to retire the Executive Board member in question. Permanent occupational incapacity exists if an Executive Board member is unable to perform his or her professional activities for more than six months, and if it is not expected that his or her occupational capacity will be regained within a further six months. In such cases, Executive Board members who have a defined benefit pension plan receive the amount calculated by applying the relevant replacement rate to the pensionable income. Executive Board members with a defined contribution pension plan receive the benefit assets acquired when the benefits fall due, plus an allocated amount. The allocated amount corresponds to the full annual pension contribution that would have been due in the year of leaving service, multiplied by the number of years between the benefits falling due and the Executive Board member reaching the age of 60, 62, or 63, respectively.

In the event of the death of an Executive Board member, his or her spouse receives 60 per cent of the above amount and each dependent child receives 10 per cent (25 per cent for full orphans), up to a maximum of 100 per cent of the pension contribution.

#### Transitional payments

In the event of permanent occupational incapacity, the agreements under the defined benefit pension system for the Executive Board provide for a transitional payment in addition to the benefits described above. The amount of this payment corresponds to the target amount of the variable remuneration (cash and stock bonuses) in the year in which the benefits fall due. It is paid out in two tranches, in the two subsequent years. In the case of the death of an Executive Board member, his or her spouse receives 60 per cent of the transitional payment.

### Severance payments

In the event of early termination of an Executive Board member's contract of service other than for good cause, any payments made to the Executive Board member may not exceed the remuneration for the residual term of the contract of service and may also not exceed the value of two total annual remuneration payments (severance payment cap). The payment is calculated based on the total remuneration in the past financial year and, where appropriate, the expected total remuneration for the current financial year. The Supervisory Board may exceed the upper limit in exceptional, justified cases. Performance shares granted will lapse where the company has good cause to terminate employment or where a member of the Executive Board terminates his or her contract before the end of the performance period without good cause and without a mutual agreement.

## Change of control

If an Executive Board member is asked to stand down within six months of a change of control, he or she is entitled to a severance payment equal to two total annual remuneration payments or the value of the residual term of his or her contract of service, where this is less than two years. This entitlement may be increased to 150 per cent of the severance payment. If an Executive Board member resigns within six months of the change of control because his or her position as a member of the Executive Board is negatively impacted to a significant degree as a result of the change of control, the Supervisory Board may decide at its discretion whether to grant a severance payment of the above-mentioned amount. In case of a change of control, all performance periods ongoing at that time shall end with the day the contract of service is terminated. The respective performance shares will be accounted for prematurely.

# **Share Ownership Guidelines**

Under the Share Ownership Guidelines, members of the Executive Board are obliged to continuously hold a multiple of their average fixed remuneration in Deutsche Börse AG shares during their term of office. A multiple of 3 applies to the CEO, and a multiple of 2 to the Deputy CEO and to ordinary Executive Board members. This pertains to a relevant period between 1 January 2016 and 31 December 2018. Shares of the following three categories will be considered to assess compliance with the Share Ownership Guidelines: (i) shares purchased from the performance bonus, during the holding period; (ii) shares from allocation of performance shares; and (iii) shares held in private ownership. Such shareholdings must be built up over a three-year period ending on 31 December 2018.

#### **Co-Performance Investment Plan (CPIP)**

The Chief Executive Officer participates in a Co-Performance Investment Plan which was resolved by the Supervisory Board in 2015. In December 2015, he used private funds to invest an amount of €4,500,000 in Deutsche Börse AG shares (investment shares) within the investment period provided for in the Co-Performance Investment Plan. These shares must be held at least until the end of the 2019 financial year. In return for his acquisition of investment shares, Mr Kengeter was granted 68,987 co-performance shares in the company, which are generally subject to the same criteria as performance shares. Performance shares are explained in the → section "Principles governing the PSP and assessment of target achievement for performance shares". The performance of the co-performance shares is based on (i) the growth in Deutsche Börse AG's net income and (ii) the ratio of the Deutsche Börse shares' total shareholder return (TSR), relative to the TSR of companies included in the STOXX Europe 600 Financials index.

The performance period for the co-performance shares commenced on 1 January 2015 and will end on 31 December 2019. The equivalent of these shares will be paid out in three steps:

- Prepayment on the disbursement amount as at 31 March 2019 (first prepayment): the amount of the first prepayment will be determined by the Supervisory Board; it is supposed to be approximately one-third of the expected amount to be disbursed.
- Prepayment on the disbursement amount as at 31 March 2020 (second prepayment): the amount of the second prepayment will be one-third of the disbursement amount determined.
- Disbursement of the remaining disbursement amount as at 31 March 2021 (final disbursement): the final disbursement will be equivalent to the total disbursement amount, less the first and second prepayments.

### Supercession of the previous Share Bonus Plan (SBP)

The final amount of stock bonuses for all tranches outstanding within the previous Share Bonus Plan for Executive Board members was calculated as at 31 December 2015 and settled during 2016. For the tranches 2014 and 2015, retention periods shall apply until 31 December 2016 and 31 December 2017, respectively. Where not restricted by takeover legislation, with regard to the intended merger with London Stock Exchange Group plc, or other legal provisions, the stock bonuses had to and have to be invested in shares of Deutsche Börse AG.

#### Miscellaneous

#### Post-contractual non-compete clause

A post-contractual non-compete clause applies to members of the Executive Board of Deutsche Börse AG who were appointed or reappointed to the Board on or after 1 October 2014. This means that the respective members of the Executive Board are contractually prohibited from acting for a competing company, or from undertaking competing activities, for a period of one year from the end of the employment relationship. The compensation payable during the non-compete period amounts to 75 per cent of the member's final fixed remuneration and 75 per cent of the final cash bonus; it is payable for the term of the post-contractual non-compete clause. Benefits under the pension agreement are deducted from the compensation. In addition, 50 per cent of other benefits are deducted if the other benefits plus the compensation exceed the final remuneration. The company may waive the post-contractual non-compete clause before termination of the contract of service.

# Secondary employment

Additional appointments or sideline activities entered into by individual members of the Executive Board require the approval of the entire Executive Board and the Chairman of the Supervisory Board or, in certain cases, the entire Supervisory Board, which has delegated granting such approval to the Personnel Committee. If a member of the Executive Board is remunerated for an office performed at an affiliate of Deutsche Börse AG, this is offset against the Executive Board member's entitlement to remuneration from Deutsche Börse AG.

#### Loans to Executive Board members

The company did not grant any loans or advances to members of the Executive Board during the financial year 2016, and there are no loans or advances from previous years to members of the Executive Board.

# Payments to former members of the Executive Board

Former members of the Executive Board or their surviving dependents received payments of €4.5 million in the year under review (2015: €2.3 million). The actuarial present value of the pension obligations as at the balance sheet date was €74.2 million in the year under review (2015: €71.8 million).

### **Amount of Executive Board remuneration**

The following tables contain the corresponding figures for the above-mentioned individual components of the Executive Board's remuneration for the financial years 2016 and 2015. The remuneration awarded to each Executive Board member in accordance with No. 4.2.5 (3) of the GCGC is shown in the  $\boxdot$  tables "Granted contributions" and "Inflows". Details disclosed in accordance with section 314 of the HGB are shown in the "Inflows" table.

# Retirement benefits

|                             | Pensionable income | Replacement ra       | ate                  | Present value/o      |                      | Pension expense |          |  |
|-----------------------------|--------------------|----------------------|----------------------|----------------------|----------------------|-----------------|----------|--|
|                             | 2016               | as at<br>31 Dec 2016 | as at<br>31 Dec 2015 | as at<br>31 Dec 2016 | as at<br>31 Dec 2015 | 2016            | 2015     |  |
|                             | € thous.           | %                    | %                    | € thous.             | € thous.             | € thous.        | € thous. |  |
| Defined benefit system      |                    |                      |                      |                      |                      |                 |          |  |
| Andreas Preuss              | 800.0              | 50.0                 | 50.0                 | 11,241.2             | 10,082.6             | 1,331.7         | 997.3    |  |
| Jeffrey Tessler             | 577.8              | 45.0                 | 40.0                 | 5,550.2              | 4,756.8              | 403.8           | 169.0    |  |
| Total                       | 1,377.8            |                      |                      | 16,791.4             | 14,839.4             | 1,735.5         | 1,166.3  |  |
| Defined contribution system |                    |                      |                      |                      |                      |                 |          |  |
| Carsten Kengeter            | 1,000.0            | 40.0                 | 40.0                 | 989.2                | 449.0                | 548.2           | 436.0    |  |
| Gregor Pottmeyer            | 500.0              | 48.0                 | 48.0                 | 2,711.5              | 2,009.7              | 279.9           | 290.0    |  |
| Hauke Stars                 | 500.0              | 36.0                 | 36.0                 | 978.8                | 652.5                | 209.0           | 209.3    |  |
| Total                       | 2,000.0            |                      |                      | 4,679.5              | 3,111.2              | 1,037.1         | 935.3    |  |

# 2016 total expense for share-based payments

(Prior-year figures in brackets)

|                                | Expense recognised (total) € thous. | Carrying amount as at the balance sheet date (total) € thous. |
|--------------------------------|-------------------------------------|---|
| Carsten Kengeter <sup>1)</sup> | 3,011.7<br>(2,550.2)                | 4,091.3<br>(2,550.2)  |
| Andreas Preuss                 | 164.2<br>(4,095.1)                  | 164.2<br>(4,578.1)  |
| Gregor Pottmeyer               | 131.1<br>(3,422.8)                  | 131.1<br>(3,887.9)  |
| Hauke Stars                    | 120.9<br>(2,693.6)                  | 120.9<br>(3,184.1)  |
| Jeffrey Tessler                | 130.3<br>(3,261.8)                  | 130.3<br>(3,645.4)  |
| Total <sup>2)</sup>            | 3,558.2<br>(16,023.5)               | 4,637.8<br>(17,845.7)   |

<sup>1)</sup> Includes the expense recognised for the Co-Performance Investment Plan as well as the Performance Share Plan

<sup>2)</sup> Prior-year figures were adjusted due to the resignation of Reto Francioni (former Chief Executive Officer); thus, they do not match the figures published in the previous year.

# Number of phantom shares

|                  |                             | Number of<br>phantom shares<br>on the<br>grant date | Adjustments of<br>number of phantom<br>shares since<br>the grant date | Number of<br>phantom shares<br>as at<br>31 Dec 2016 |
|------------------|-----------------------------|---|---|---|
| Carsten Kengeter | Tranche 2016                | 16,593  | 3,320   | 19,913  |
|                  | Tranche 2015 <sup>1)</sup>  | 84,092  | 50,437  | 134,529   |
|                  | Total 2015 to 2016 tranches |   |   | 154,442   |
| Andreas Preuss   | Tranche 2016                |   | 1,791   | 10,743  |
|                  | Tranche 2015                | 12,693  | -12,693   | 0   |
|                  | Tranche 2014                | 14,391  | -14,391   | 0   |
|                  | Total 2014 to 2016 tranches |   |   | 10,743  |
| Gregor Pottmeyer | Tranche 2016                | 7,148   | 1,430   | 8,578   |
|                  | Tranche 2015                | 10,752  | -10,752   | 0   |
|                  | Tranche 2014                | 12,045  | -12,045   | 0   |
|                  | Total 2014 to 2016 tranches |   |   | 8,578   |
| Hauke Stars      | Tranche 2016                | 6,595   | 1,320   | 7,915   |
|                  | Tranche 2015                | 9,706   | -9,706  | 0   |
|                  | Tranche 2014                | 9,669   | -9,669  | 0   |
|                  | Total 2014 to 2016 tranches |   |   | 7,915   |
| Jeffrey Tessler  | Tranche 2016                | 7,105   | 1,422   | 8,527   |
|                  | Tranche 2015                | 10,154  | -10,154   | 0   |
|                  | Tranche 2014                | 11,512  | -11,512   | 0   |
|                  | Total 2014 to 2016 tranches |   |   | 8,527   |
|                  | Total 2014 to 2016 tranches |   |   | 190,205   |

<sup>1)</sup> Includes 68,987 phantom shares of the Co-Performance Investment Plan

# **Granted contributions**

Carsten Kengeter CEO (since 1 June 2015, appointed as at 4 Apr 2015)

|  |                  | app                       |                           |                      |  |
|--|------------------|---------------------------|---------------------------|----------------------|--|
|  | 2016<br>€ thous. | 2016<br>(min)<br>€ thous. | 2016<br>(max)<br>€ thous. | <b>2015</b> € thous. |  |
| Fixed remuneration   | 1,500.0          | 1,500.0                   | 1,500.0                   | 819.7                |  |
| Ancillary benefits   | 129.3            | 129.3                     | 129.3                     | 76.4                 |  |
| Total  | 1,629.3          | 1,629.3                   | 1,629.3                   | 896.1                |  |
| One-year variable remuneration   | 1,100.0          | 0                         | 2,200.0                   | 397.4                |  |
| variable cash remuneration (individual targets) 1)                             | -                | _                         | _                         | 397.4                |  |
| cash component performance bonus (50%) <sup>2)</sup>                           | 1,100.0          | 0                         | 2,200.0                   | _                    |  |
| Multi-year variable remuneration   | 2,400.0          | 0                         | no max.                   | 1,614.6              |  |
| variable cash component (net income target, 3-year term) 1)                    | -                | _                         |                           | 794.9                |  |
| SBP (3-year term) <sup>1)</sup>  | -                | _                         |                           | 819.7                |  |
| share component performance bonus (50%, 3-year holding period) <sup>2)3)</sup> | 1,100.0          | 0                         | no max.                   | _                    |  |
| performance shares (5-year term) <sup>2)4)</sup>                               | 1,300.0          | 0                         | no max.                   | _                    |  |
| Total  | 5,129.3          | 1,629.3                   | no max.                   | 2,908.1              |  |
| Service cost   | 548.2            | 548.2                     | 548.2                     | 436.0                |  |
| Total remuneration   | 5,677.5          | 2,177.5                   | no max.                   | 3,344.1              |  |

- 1) Remuneration components under the remuneration system which was applicable until the end of 2015
- $2) \ Remuneration \ components \ under the \ remuneration \ system \ which \ has \ been \ applicable \ since \ 2016$
- 3) The target achievement level is capped at 200 per cent. As there is no cap on the development of the share price, no maximum amount has been specified
- (no max.). For further information, please refer to the corporate governance declaration.

  4) Target achievement levels for net income and total shareholder return as well as for the maximum number of performance shares are all capped at 250 per cent. As there is no cap on the development of the share price, no maximum amount can be stated (no max.). For further information, please refer to the 🖸 corporate governance declaration.

# Hauke Stars

|  | <b>2016</b> € thous. | 2016<br>(min)<br>€ thous. | 2016<br>(max)<br>€ thous. | <b>2015</b> € thous. |  |
|--|----------------------|---------------------------|---------------------------|----------------------|--|
| Fixed remuneration   | 650.0                | 650.0                     | 650.0                     | 650.0                |  |
| Ancillary benefits   | 24.5                 | 24.5                      | 24.5                      | 24.6                 |  |
| Total  | 674.5                | 674.5                     | 674.5                     | 674.6                |  |
| One-year variable remuneration   | 516.7                | 0                         | 1,033.4                   | 300.0                |  |
| variable cash remuneration (individual targets) <sup>1)</sup>                  | -                    | _                         | _                         | 300.0                |  |
| cash component performance bonus (50%) <sup>2)</sup>                           | 516.7                | 0                         | 1,033.4                   | _                    |  |
| Multi-year variable remuneration   | 1,033.4              | 0                         | no max.                   | 1,250.0              |  |
| variable cash component (net income target, 3-year term) <sup>1)</sup>         | -                    | _                         | _                         | 600.0                |  |
| SBP (3-year term) <sup>1)</sup>  | -                    | _                         | _                         | 650.0                |  |
| share component performance bonus (50%, 3-year holding period) <sup>2(3)</sup> | 516.7                | 0                         | no max.                   |                      |  |
| performance shares (5-year term) <sup>2)4)</sup>                               | 516.7                | 0                         | no max.                   |                      |  |
| Total  | 2,224.6              | 674.5                     | no max.                   | 2,224.6              |  |
| Service cost   | 209.0                | 209.0                     | 209.0                     | 209.3                |  |
| Total remuneration   | 2,433.6              | 883.5                     | no max.                   | 2,433.9              |  |

### Andreas Preuss Deputy CFO

| Deputy CE            |                           |                           |                      | Gregor Pottmeyer     |                           |                           |                      |
|----------------------|---------------------------|---------------------------|----------------------|----------------------|---------------------------|---------------------------|----------------------|
| <b>2016</b> € thous. | 2016<br>(min)<br>€ thous. | 2016<br>(max)<br>€ thous. | <b>2015</b> € thous. | <b>2016</b> € thous. | 2016<br>(min)<br>€ thous. | 2016<br>(max)<br>€ thous. | <b>2015</b> € thous. |
| 800.0                | 800.0                     | 800.0                     | 800.0                | 720.0                | 720.0                     | 720.0                     | 720.0                |
| 31.7                 | 31.7                      | 31.7                      | 31.5                 | 28.5                 | 28.5                      | 28.5                      | 28.4                 |
| 831.7                | 831.7                     | 831.7                     | 831.5                | 748.5                | 748.5                     | 748.5                     | 748.4                |
| 701.4                | 0                         | 1,402.8                   | 418.0                | 560.0                | 0                         | 1,120.0                   | 320.0                |
| _                    | _                         | _                         | 418.0                | -                    | _                         | _                         | 320.0                |
| 701.4                | 0                         | 1,402.8                   | _                    | 560.0                | 0                         | 1,120.0                   | _                    |
| 1,402.8              | 0                         | no max.                   | 1,686.1              | 1,120.0              | 0                         | no max.                   | 1,360.0              |
| _                    | _                         | _                         | 836.0                | -                    | _                         | _                         | 640.0                |
| _                    |                           |                           | 850.1                | -                    |                           |                           | 720.0                |
| 701.4                | 0                         | no max.                   |                      | 560.0                | 0                         | no max.                   |                      |
| 701.4                | 0                         | no max.                   |                      | 560.0                | 0                         | no max.                   |                      |
| 2,935.9              | 831.7                     | no max.                   | 2,935.6              | 2,428.5              | 748.5                     | no max.                   | 2,428.4              |
| 1,331.7              | 1,331.7                   | 1,331.7                   | 997.3                | 279.9                | 279.9                     | 279.9                     | 290.0                |
| 4,267.6              | 2,163.4                   | no max.                   | 3,932.9              | 2,708.4              | 1,028.4                   | no max.                   | 2,718.4              |

# Jeffrey Tessler

| Jeilley les | 3101          |               |          |
|-------------|---------------|---------------|----------|
| 2016        | 2016<br>(min) | 2016<br>(max) | 2015     |
| € thous.    | € thous.      | € thous.      | € thous. |
| 761.6       | 761.6         | 761.6         | 761.6    |
| 18.2        | 18.2          | 18.2          | 19.2     |
| 779.8       | 779.8         | 779.8         | 780.8    |
| <br>556.7   | 0             | 1,113.4       | 330.0    |
| -           |               |               | 330.0    |
| 556.7       | 0             | 1,113.4       |          |
| <br>1,113.4 | 0             | no max.       | 1,340.0  |
| <br>_       |               |               | 660.0    |
| _           |               |               | 680.0    |
| <br>556.7   | 0             | no max.       |          |
| 556.7       | 0             | no max.       |          |
| 2,449.9     | 779.8         | no max.       | 2,450.8  |
| 403.8       | 403.8         | 403.8         | 169.0    |
| 2,853.7     | 1,183.6       | no max.       | 2,619.8  |

#### Inflows

Carsten Kengeter CEO (since 1 June 2015, appointed as Andreas Preuss at 4 Apr 2015) Deputy CEO 2015 2015 2016 2016 € thous. € thous. € thous. € thous. 800.0 Fixed remuneration 1,500.0 819.7 800.0 Ancillary benefits<sup>2)</sup> 1293 76 4 31.7 31.5 Total 1,629.3 896.1 831.7 831.5 477.0 2.200.0 476.9 1,363.0 One-year variable remuneration 476.9 477.0 variable cash remuneration (individual targets)3) cash component performance bonus (50%)4) 2,200.0 1,363.0 Multi-year variable remuneration 3,670.6 953.9 5,941.1 2,047.2 variable cash component (consolidated net income target, 3-year term)3) 953.9 954 0 variable share component (SBP tranches 2013-2015/2012)3)5) 1,470.6 4,578.1 1,093.2 share component performance bonus (50%, 3-year holding period)<sup>4)</sup> 2,200.0 1,363.0 performance shares (5-year term)4) 3,355.7 Total 7,499.9 8,135.8 2,326.9 Service cost 548.2 436.0 1,331.7 997.3 8,048.1 9,467.5 Total remuneration (GCGC) 2,762.9 4,353.0 plus SBP tranche for the remuneration year<sup>6)</sup> 819.7 850.1 plus performance shares 4) 1,300.0 701.4 -1,470.6 -4,578.1 -1,093.2 less variable share component3) less service cost -548.2 -436.0 -1,331.7-997.3 Total remuneration (section 314 of the HGB) 7,329.3 3,146.6 4,259.1 3,112.6 16,593 15,1058) 8,952 Number of phantom shares 7) 12.693

<sup>1)</sup> Prior-year figures were adjusted due to the resignation of Reto Francioni (former Chief Executive Officer); thus, they do not match the figures published in the previous year.

<sup>2)</sup> Ancillary benefits (other remuneration) comprise salary components such as taxable contributions towards private pensions, company car arrangements, travel arrangements, living allowances, and expenses for tax and legal consultations.

<sup>3)</sup> Remuneration components under the remuneration system which was applicable until the end of 2015  $\,$ 

<sup>4)</sup> Remuneration components under the remuneration system which has been applicable since 2016

<sup>5)</sup> Figures for financial year 2016 refer to the 2013, 2014 and 2015 tranches of the SBP; figures for financial year 2015 refer to the 2012 tranche of the SBP.

<sup>6)</sup> Corresponds to a 100 per cent target achivement level for the 2015 phantom share bonus. For further information on the supercession of the previous SBP, please refer to the 🗵 section "Supercession of the previous Share Bonus Plan (SBP)".

<sup>7)</sup> The number of prospective performance shares for the performance period determined at the 2016 grant date is calculated by dividing the target number by the average share price (Xetra® closing price) of Deutsche Börse shares in December 2015 (€78.35)

<sup>8)</sup> The average share price (Xetra closing price) of Deutsche Börse shares was €54.27 for the calculation of the number of phantom shares in the assessment period from August to September 2014.

| Gregor Pottmeyer |          |          |               | Jeffrey Tessler |          |           |          |  |  |  |
|------------------|----------|----------|---------------|-----------------|----------|-----------|----------|--|--|--|
| 2016             | 2015     | 2016     | '             | 2016            | 2015     | 2016      | 20151)   |  |  |  |
| € thous.         | € thous. | € thous. | 2015 € thous. | € thous.        | € thous. | € thous.  | € thous. |  |  |  |
| 720.0            | 720.0    | 650.0    | 650.0         | 761.6           | 761.6    | 4,431.6   | 3,751.3  |  |  |  |
| 28.5             | 28.4     | 24.5     | 24.6          | 18.2            | 19.2     | 232.2     | 180.1    |  |  |  |
| 748.5            | 748.4    | 674.5    | 674.6         | 779.8           | 780.8    | 4,663.8   | 3,931.4  |  |  |  |
|                  |          | -        |               |                 |          |           |          |  |  |  |
| 952.0            | 359.8    | 682.0    | 327.3         | 851.7           | 376.6    | 6,048.7   | 2,017.6  |  |  |  |
| _                | 359.8    | _        | 327.3         | _               | 376.6    | _         | 2,017.6  |  |  |  |
| 952.0            | _        | 682.0    | _             | 851.7           | _        | 6,048.7   | _        |  |  |  |
| 4,839.9          | 1,448.4  | 3,866.1  | 722.4         | 4,497.1         | 1,617.0  | 22,814.8  | 6,788.9  |  |  |  |
| _                | 719.6    | -        | 654.7         | _               | 753.1    | _         | 4,035.3  |  |  |  |
| 3,887.9          | 728.8    | 3,184.1  | 67.7          | 3,645.4         | 863.9    | 16,766.1  | 2,753.6  |  |  |  |
| 952.0            | _        | 682.0    | _             | 851.7           | _        | 6,048.7   | _        |  |  |  |
| _                | _        | -        | _             | -               | _        | -         | _        |  |  |  |
| 6,540.4          | 2,556.6  | 5,222.6  | 1,724.3       | 6,128.6         | 2,774.4  | 33,527.3  | 12,737.9 |  |  |  |
|                  |          |          |               |                 |          |           |          |  |  |  |
| 279.9            | 290.0    | 209.0    | 209.3         | 403.8           | 169.0    | 2,772.6   | 2,101.6  |  |  |  |
| 6,820.3          | 2,846.6  | 5,431.6  | 1,933.6       | 6,532.4         | 2,943.4  | 36,299.9  | 14,839.5 |  |  |  |
|                  |          |          |               |                 |          |           |          |  |  |  |
| _                | 720.0    | -        | 650.0         | _               | 680.0    | _         | 3,719.8  |  |  |  |
| 560.0            |          | 516.7    |               | 556.7           |          | 3,634.8   |          |  |  |  |
| -3,887.9         | _728.8   | -3,184.1 | -67.7         | -3,645.4        | -863.9   | -16,766.1 | -2,753.6 |  |  |  |
| -279.9           | -290.0   | -209.0   | -209.3        | -403.8          | -169.0   | -2,772.6  | -2,101.6 |  |  |  |
| 3,212.5          | 2,547.8  | 2,555.2  | 2,306.6       | 3,039.9         | 2,590.5  | 20,396.0  | 13,704.1 |  |  |  |
|                  |          |          |               |                 |          |           |          |  |  |  |
| 7,148            | 10,752   | 6,595    | 9,706         | 7,105           | 10,154   | 46,393    | 58,410   |  |  |  |

# **Supervisory Board remuneration**

The members of the Supervisory Board receive a fixed annual remuneration of €70 thousand. The Chairman receives remuneration of €170 thousand and the Deputy Chairman receives €105 thousand. Members of Supervisory Board committees receive additional fixed annual remuneration of €30 thousand for each committee position they hold. This amount rises to €35 thousand for members of the Audit Committee. Committee Chairmen's remuneration is €40 thousand, or €60 thousand for the Chairman of the Audit Committee. If a Supervisory Board member belongs to several Supervisory Board committees, only the work in a maximum of two committees is remunerated. The remuneration for the work in the two most highly remunerated committees is awarded. Supervisory Board members who only belong to the Supervisory Board for part of the financial year, receive one-twelfth of the fixed annual remuneration and, if applicable, of the remuneration for their committee membership, for each month or part-month of membership.

With the Annual General Meeting on 11 May 2016, an attendance fee was introduced. For every meeting of the Supervisory Board or one of its committees attended by a member of the Supervisory Board in person, be it as a member of the Board or committee or a guest, they will receive an attendance fee of €1 thousand. Where two or more meetings are held on the same day or on consecutive days, the attendance fee will only be granted once.

# Remuneration paid to members of the Supervisory Board for advisory and agency services

There were no further agreements in the reporting period for advisory and agency services with members of the Supervisory Board, or with companies that employ members of the Supervisory Board of Deutsche Börse AG, or in which Supervisory Board members hold an interest.

| Supervisory Board remuneration 1)                                   |                 |                 |          |          |
|---|-----------------|-----------------|----------|----------|
|   | 2016            | 2015            | 20162)   | 2015     |
|   |                 |                 | € thous. | € thous. |
| Joachim Faber (Chairman)  | full year       | full year       | 257.0    | 250.0    |
| Richard Berliand (Deputy Chairman as from 13 May 2015)              | full year       | full year       | 190.0    | 175.8    |
| Ann-Kristin Achleitner <sup>3)</sup>                                | 11 May - 31 Dec | _               | 89.7     | _        |
| Irmtraud Busch <sup>4)</sup>  | -               | 1 Jan - 13 May  | -        | 41.7     |
| Karl-Heinz Flöther  | full year       | full year       | 142.0    | 137.1    |
| Marion Fornoff  | full year       | full year       | 107.0    | 100.0    |
| Hans-Peter Gabe   | full year       | full year       | 106.0    | 100.0    |
| Richard M. Hayden <sup>4)</sup>                                     | -               | 1 Jan - 13 May  | -        | 54.2     |
| Craig Heimark   | full year       | full year       | 103.0    | 116.7    |
| David Krell <sup>4)</sup>   | -               | 1 Jan - 13 May  | -        | 41.7     |
| Monica Mächler  | full year       | full year       | 140.0    | 125.8    |
| Friedrich Merz <sup>4)</sup>  | _               | 1 Jan - 13 May  | -        | 56.3     |
| Thomas Neiße <sup>4)</sup>  | -               | 1 Jan - 13 May  | -        | 41.7     |
| Heinz-Joachim Neubürger†  | -               | 1 Jan - 5 Feb   | -        | 22.5     |
| Gerhard Roggemann (Deputy Chairman until 13 May 2015) <sup>5)</sup> | 1 Jan - 11 May  | full year       | 54.2     | 144.6    |
| Erhard Schipporeit  | full year       | full year       | 166.0    | 166.7    |
| Jutta Stuhlfauth  | full year       | full year       | 135.0    | 120.0    |
| Martin Ulrici <sup>4)</sup>   | _               | 1 Jan - 13 May  | -        | 41.7     |
| Johannes Witt   | full year       | full year       | 143.0    | 137.5    |
| Amy Yip <sup>6)</sup>   | full year       | 13 May - 31 Dec | 132.0    | 86.7     |
| Total   |                 |                 | 1,764.9  | 1,960.7  |

The recipient of the remuneration is determined individually by the members of the Supervisory Board.
 Remuneration including individual attendance fee
 Elected to the Supervisory Board on 11 May 2016
 Left the Supervisory Board on 13 May 2015
 Left the Supervisory Board on 11 May 2016
 Elected to the Supervisory Board on 13 May 2015

# Corporate governance declaration

The corporate governance declaration in accordance with section 289a of the Handelsgesetzbuch (HGB, German Commercial Code) is part of the combined management report. In this declaration, the Executive Board and Supervisory Boards of Deutsche Börse AG report on the following: the declaration of conformity in accordance with section 161 of the Aktiengesetz (AktG, German Stock Corporation Act), relevant information on corporate governance practices, the Executive and Supervisory Boards' working practices and the composition and working practices of their committees, and the quotas for women established in accordance with sections 76 (4) and 111 (5) of the AktG.

#### Declaration of conformity in accordance with section 161 of the AktG

On 8 December 2016, the Executive Board and Supervisory Board of Deutsche Börse AG issued the following declaration of conformity:

# "Declaration of Conformity regarding the German Corporate Governance Code in accordance with section 161 of the German Stock Corporation Act

The following declaration of conformity refers to the version of the German Corporate Governance Code (GCGC) as of 5 May 2015, published in the Federal Gazette on 12 June 2015.

The Executive Board and the Supervisory Board of Deutsche Börse AG declare that the recommendations of the GCGC have been met almost completely and will be met with only few deviations. For details, please see below:

# Agreement of severance payment caps when concluding Executive Board contracts (no. 4.2.3 GCGC)

Severance payment caps agreed upon in all current contracts with the members of the Executive Board complied and will continue to comply with the recommendation no. 4.2.3 (4) GCGC. As in the past, however, the Supervisory Board reserves the right to deviate from no. 4.2.3 (4) GCGC in the future under certain circumstances. The Supervisory Board is of the opinion that a deviation may become necessary in extraordinary cases.

# 2. Cap on total amount of compensations (no. 4.2.3 (2) (sentence 6) GCGC) and disclosure in the compensation report (no. 4.2.5 (3) GCGC)

No. 4.2.3 (2) (sentence 6) GCGC recommends that the amount of management compensation shall be capped, both overall and for individual components. Deutsche Börse AG deviated and will deviate from this recommendation.

Effective as of 1 January 2016, a new compensation system was implemented for the Executive Board of Deutsche Börse AG. This was also approved by the Annual General Meeting on 11 May 2016. The long-term variable compensation elements within the framework of this new compensation system are share-based. Even though a cap is provided in relation to the number of shares which are allocated to the members of the Executive Board, no cap is foreseen on the maximum achievable bonus amount as the development of the share price remains uncapped. In our opinion, a cap on the achievable amount would be inconsistent with the rationale of a share-based compensation system which aims to achieve an adequate participation in the economic risks and chances of the company by the members of the Executive Board.

No. 4.2.5 (3) (subitem 1) GCGC recommends, inter alia, to present the maximum achievable compensation for variable compensation components in the remuneration report. As there will be no cap in relation to the share-based variable compensation components, the maximum achievable compensation cannot be presented as recommended in no. 4.2.5 (3) (subitem 1) GCGC. Therefore, the deviation from the Code results from the fact that there is no cap on the maximum achievable compensation."

The annual declaration of conformity in accordance with section 161 of the AktG is also available online at \( \mathbb{N} \) www.deutsche-boerse.com/declconformity. The declarations of conformity for the previous five years can also be found there.

#### Information on corporate governance practices

# **Conduct policies**

Deutsche Börse Group's global orientation means that binding policies and standards of behaviour must apply at all of its locations around the world. The main aims of our principles for cooperation are to ensure responsibility, respect and mutual esteem. We also adhere to these principles when implementing the Group's business model. Communication with customers, investors, employees and the public is based on timely information and transparency. In addition to focusing on generating a profit, Deutsche Börse Group's business is managed in accordance with recognised standards of social responsibility.

#### Group-wide code of ethics

Acting responsibly means having values that are shared by all employees throughout the Group. The code of ethics adopted by the Executive Board, which is applicable throughout the Group, lays the foundations for this by setting minimum ethical and legal standards. It is binding both on members of the Executive Board and on all other executives and employees within the Group. In addition to specifying concrete rules, it provides general guidance as to how employees can contribute to putting the values it sets out into practice in the course of their daily work. The aim of the code of ethics is to provide guidance on working together in the company on a day-to-day basis, to help resolve any conflicts and to resolve ethical and legal challenges. The code of ethics for Deutsche Börse Group employees can be found at \(\mathbb{N}\) www.deutsche-boerse.com > Sustainability > Set an example > Employees > Code of ethics.

# Code of conduct for suppliers and service providers

Deutsche Börse Group demands that high standards are met not only by its management and its employees, but also by its suppliers. The Group's code of conduct for suppliers and service providers requires them to respect human rights and employee rights, and to comply with minimum standards. It was amended in 2016 to implement a resolution of the Executive Board incorporating the requirements of the UK's Modern Slavery Act, which applies to all companies doing business in the United Kingdom. Most suppliers have signed up to these conditions, and all other key suppliers have made voluntary commitments that correspond to or in fact exceed Deutsche Börse Group's standards. Service providers and suppliers must sign up to the code or enter into an equivalent voluntary commitment before they can do business with Deutsche Börse Group. The code is regularly reviewed in the light of current developments and amended as necessary. The code of conduct for suppliers and service providers can be found online at \(\mathbb{N}\) www.deutsche-boerse.com > Sustainability > Set an example > Procurement management.

#### **Values**

Deutsche Börse Group's business activities are based on the legal frameworks and ethical standards of the different countries in which it operates. A key way in which the Group underscores the values which it considers important is by joining initiatives and organisations advocating generally accepted ethical standards. Relevant memberships are as follows:

United Nations Global Compact Newww.unglobalcompact.org: This voluntary business initiative established by the United Nations aims to achieve a more sustainable and more equitable global economy. At the heart of the compact are ten principles covering the areas of human rights, labour, the environment and anti-corruption. Deutsche Börse Group has submitted annual progress reports on its implementation of the UN Global Compact since 2009.

Diversity Charter \( \) www.diversity-charter.com: As a signatory to the Diversity Charter, the company has committed to acknowledging, respecting and promoting the diversity of its workforce, customers and business associates – irrespective of their age, gender, disability, race, religion, nationality, ethnic background, sexual orientation or identity.

International Labour Organisation Nwww.ilo.org: This UN agency is the international organisation responsible for drawing up and overseeing international labour standards; it brings together representatives of governments, employees and employers to jointly shape policies and programmes. Deutsche Börse Group has signed up to the ILO's labour standards and hence agreed to abide by them.

The German Sustainability Code ▶ www.nachhaltigkeitsrat.de/en/home: The German Council for Sustainable Development formally adopts the German Sustainability Code and recommends that the political and business communities make extensive use of this voluntary instrument. Deutsche Börse Group has published an annual declaration of conformity with the German Sustainability Code since 2011.

#### Sector-specific policies

Deutsche Börse Group's pivotal role in the financial sector requires that it handles information, and especially sensitive data and facts, responsibly. A number of rules are in force in the Group to ensure that employees comply with this. These cover both legal requirements and special policies applicable to the relevant industry segments, such as the whistleblowing system and risk and control management policies.

#### Whistleblowing system

Deutsche Börse Group's whistleblowing system gives employees and external service providers an opportunity to report non-compliant behaviour. Deutsche Börse Group has engaged Deloitte & Touche to act as an external ombudsman and to receive any such information submitted by phone or e-mail. Whistleblowers' identities are not revealed to Deutsche Börse Group.

# Risk and control management policies

Functioning control systems are an important part of stable business processes. Deutsche Börse Group's enterprise-wide control systems are embedded in an overarching framework. This comprises the legal requirements, the recommendations of the German Corporate Governance Code, international regulations and recommendations, and other company-specific policies, among other things. The executives responsible for the different elements of the control system are in close contact with each other and with the Executive Board, and report regularly to the Supervisory Board or its committees. Equally, the Group has an enterprise-wide risk management system that covers, and provides mandatory rules for, functions, processes and responsibilities. Details of the internal control system and risk management at Deutsche Börse Group can be found in the  $\square$  "Internal management" and "Risk report" sections.

# **Executive Board and Supervisory Board working practices**

The German Stock Corporation Act enshrines the dual board system – which assigns separate, independent responsibilities to the Executive Board and the Supervisory Board – as a fundamental principle. These responsibilities are set out in detail in the following sections.

Both boards perform their duties in the interests of the company and with the aim of achieving a sustainable increase in value. Their actions are based on the principle of good corporate governance. As a result, Deutsche Börse AG's Executive Board and Supervisory Board work closely together in a spirit of mutual trust, with the Executive Board providing the Supervisory Board with comprehensive information on the course of business in a regular and timely manner. In addition, the Executive Board regularly informs the Supervisory Board of all issues relating to corporate planning, the company's business performance, the risk situation and risk management, compliance, and the company's control systems. The Chief Executive Officer (CEO) reports to the Supervisory Board without undue delay, orally or in writing, on matters that are of special importance to the company. The company's strategic orientation is examined in detail with the Supervisory Board and agreed with it, and implementation of the relevant measures is discussed at regular intervals. In particular, the chairmen of the two boards are in regular contact and discuss the company's strategy, business performance and risk management. The Supervisory Board can also request reports from the Executive Board at any time, especially on matters relating to Deutsche Börse AG and on business transactions at subsidiaries that could have a significant impact on Deutsche Börse AG's position.

## Deutsche Börse AG's Executive Board

The Executive Board manages Deutsche Börse AG and Deutsche Börse Group. The Board had five members in the reporting period. The main duties of the Executive Board include defining the Group's corporate goals and strategic orientation, managing and monitoring the operating units, and establishing and monitoring an efficient risk management system. The Executive Board is responsible for preparing the consolidated and annual financial statements of Deutsche Börse AG as well as for producing financial information during the year. In addition, it must ensure compliance with legal requirements and official regulations.

The members of the Executive Board are jointly responsible for all aspects of management. Irrespective of this collective responsibility, the individual members manage the areas of the company assigned to them in the Executive Board's schedule of responsibilities independently, and are personally responsible for them. In addition to the business areas, there are two functional areas of responsibility – that of the CEO and that of the Chief Financial Officer (CFO). The business areas cover the operating areas, such as the company's cash market activities and the derivatives business, securities settlement and custody, information technology and the market data business. The responsibilities within the Executive Board were reorganised effective 1 January 2016 so as to bundle areas of responsibility and related issues, and to enhance client orientation. Apart from the existing CEO and CFO functions, the following three divisions were established: (1) Clients, Products & Core Markets, (2) IT & Operations, Data & New Asset Classes, and (3) Cash Market, Pre-IPO & Growth Financing. Details can be found in the  $\boxdot$  "Overview of Deutsche Börse Group – Organisational structure" section.

Further details of the Executive Board's work are set out in the bylaws that the Supervisory Board has resolved for the Executive Board. Among other things, these list issues that are reserved for the full Executive Board, special measures requiring the approval of the Supervisory Board, and other procedural details and the arrangements for passing resolutions. The Executive Board holds regular board meetings; these are convened by the CEO, who coordinates the Executive Board's work. Any Executive Board member can require a meeting to be convened. In accordance with its bylaws, the full Executive Board normally takes decisions on the basis of resolutions passed by a simple majority of the members voting on them in each case. If a vote is tied, the CEO has the casting vote. The CEO also has a right of veto, although he cannot enforce a resolution against a majority vote.

More information on the Executive Board, its composition, and members' individual appointments and biographies can be found at \( \bar{\mathbb{N}} \) www.deutsche-boerse.com/execboard.

### Deutsche Börse AG's Supervisory Board

The Supervisory Board supervises and advises the Executive Board in its management of the company. It supports the Executive Board in significant business decisions and provides assistance on strategically important issues. The Supervisory Board has specified measures requiring its approval in the bylaws for the Executive Board. In addition, the Supervisory Board is responsible for appointing the members of the Executive Board, for deciding on their total remuneration and for examining Deutsche Börse AG's consolidated and annual financial statements. Details of the Supervisory Board's work in financial year 2016 can be found in the resport of the Supervisory Board.

The Supervisory Board consists of twelve members, two-thirds of whom are shareholder representatives and one-third of whom are employee representatives. The term of office for shareholder and employee representatives on the current Supervisory Board is identical. It lasts three years, and ends at the Annual General Meeting in 2018.

The Supervisory Board holds at least six regular meetings every year. In addition, extraordinary meetings are held as required. The committees also hold regular meetings. The Supervisory Board passes its resolutions by a simple majority. If a vote is tied, the Chairman has the casting vote. In addition, the Supervisory Board regularly reviews the efficiency of its work, discusses potential areas for improvement, and resolves suitable measures where necessary.

The Supervisory Board has resolved a list of requirements for its composition along with concrete goals. Detailed information on the profile for the Supervisory Board's composition can be found in the  $\boxdot$  corporate governance report.

#### Supervisory Board committees and their working practices

The Supervisory Board's goal in establishing committees is to improve the efficiency of its work by examining complex matters in smaller groups that prepare them for the full Supervisory Board. Additionally, the Supervisory Board has delegated individual decision-making powers to the committees to the extent that this is legally permissible. The Supervisory Board had six committees during the reporting period. Their individual responsibilities are outlined in the Supervisory Board's bylaws. The committees' rules of procedure correspond to those for the full Supervisory Board. Details of the duties and members of the individual committees can be found online at \( \mathbb{L} \) www.deutsche-boerse.com > Investor Relations > Corporate Governance > Supervisory Board > Committees.

The individual committee chairs report to the plenary meeting about the subjects addressed, and resolutions passed, in the committee meetings. Information on the Supervisory Board's concrete work and meetings in the reporting period can be found in the  $\boxdot$  report of the Supervisory Board.

# Target figures for women in management positions

In accordance with the Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (FührposGleichberG, German Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors), Deutsche Börse AG's Supervisory Board and Executive Board have defined target quotas for women on these boards and for the two management levels directly beneath the Executive Board; these quotas apply in all cases to Deutsche Börse AG.

At the time when the targets for Deutsche Börse AG's Supervisory Board and Executive Board were set, 33.33 per cent of Supervisory Board members were women, while the figure for the Executive Board was 20 per cent. In view of this, the Supervisory Board resolved on 16 June 2015 that the current proportion of female members of the Supervisory Board (33.33 per cent) and the Executive Board (20 per cent) should be maintained as a minimum requirement until the end of the implementation period (30 June 2017). Following the end of the 2016 Annual General Meeting, the proportion of women members on the Supervisory Board exceeded this minimum requirement and amounted to 41.67 per cent. The proportion of female Executive Board members remained unchanged, at 20 per cent.

# Supervisory Board committees in 2016 Composition and responsibilities

# **Audit Committee**

#### Members

#### Erhard Schipporeit (Chairman)

- Karl-Heinz Flöther
- Monica Mächler
- Johannes Witt

#### Composition

- at least four members, who are elected by the Supervisory Board
- prerequisites for the chair of the committee: the person concerned must be independent and must have specialist knowledge and experience of applying accounting principles and internal control processes (financial expert)
- persons who cannot chair the committee: the Chairman of the Supervisory Board; former members
  of the company's Executive Board whose appointment ended less than two years ago

#### Responsibilities

- handles issues relating to the preparation of the annual budget and financial topics, particularly capital management
- handles issues relating to the adequacy and effectiveness of the company's control systems,
   and in particular to risk management, compliance and internal auditing
- audit reports
- handles accounting issues, including the oversight of the accounting and reporting process
- half-yearly financial report and any quarterly financial reports, if applicable
- examines the annual financial statements, the consolidated financial statements and the combined
  management report, discusses the audit report with the auditor and prepares the Supervisory Board's
  resolutions adopting the annual financial statements and approving the consolidated financial
  statements, as well as the resolution on the Executive Board's proposal on the appropriation of the
  unappropriated surplus
- prepares the Supervisory Board's recommendation to the Annual General Meeting on the election
  of the auditor of the annual financial statements, the consolidated financial statements and the
  half-yearly financial report, to the extent that the latter is audited or reviewed by an auditor, and
  makes corresponding recommendations to the Supervisory Board
- ensures the obligatory independence of the external auditors
- non-audit services provided by the auditor
- issues the engagement letter to the auditor, including in particular the review or audit of half-yearly financial reports, and determines the areas of emphasis for the audit and the audit fee
- prepares the Supervisory Board's resolution approving the declaration of conformity in accordance with section 161 of the AktG, and the corporate governance declaration in accordance with section 289a of the HGB

#### Nomination Committee

#### Members

#### Composition

- Joachim Faber
- (Chairman)
- Ann-Kristin Achleitner (since 11 May 2016) Gerhard Roggemann
- Amy Yip
- (until 11 May 2016)

#### Responsibilities

Committee)

• proposes suitable candidates to the Supervisory Board for inclusion in the Supervisory Board's election proposal to the Annual General Meeting

• at least two other members (solely shareholder representatives who are also members of the Personnel

• the Chairman of the Personnel Committee also chairs the Nomination Committee

### Personnel Committee

#### Members

### Joachim Faber (Chairman)

- Ann-Kristin Achleitner (since 11 May 2016)
- Marion Fornoff
- Gerhard Roggemann (until 11 May 2016)
- Amy Yip

#### Composition

- chairman of the Supervisory Board as committee chairman
- at least three other members, who are elected by the Supervisory Board and one of whom must be an employee representative

#### Responsibilities

- handles issues relating to the contracts of service for Executive Board members, and in particular to the structure and amount of their remuneration
- addresses succession planning for the Executive Board
- approves appointments of members of Deutsche Börse AG's Executive Board to other executive boards, supervisory boards, advisory boards and similar boards, as well as honorary appointments and sideline activities, and approves any exemptions from the requirement to obtain approval
- approves the grant or revocation of general powers of attorney
- approves cases in which the Executive Board grants employees retirement pensions or other individually negotiated retirement benefits, or proposes to enter into works agreements establishing pension plans

#### Risk Committee

#### Members

# Composition

- Richard Berliand (Chairman)
- Monica Mächler
- Erhard Schipporeit
- Jutta Stuhlfauth
- at least four members, who are elected by the Supervisory Board

# Responsibilities

- reviews the risk management framework, including the overall risk strategy and risk appetite, and the risk roadmap
- takes note of and reviews the periodic risk management and compliance reports
- oversees monitoring of the Group's operational, financial and business risks
- discusses the annual reports on significant risks and on the risk management systems at regulated Group entities, to the extent legally permissible

# Strategy Committee

### Members

### Composition

- Joachim Faber (Chairman)
- Ann-Kristin Achleitner (since 11 May 2016)
- Richard Berliand
- Hans-Peter Gabe
- Gerhard Roggemann (until 11 May 2016)
- Jutta Stuhlfauth
- Amy Yip

- chairman of the Supervisory Board as committee chairman
- at least five other members, who are elected by the Supervisory Board

#### Responsibilities

- advises the Executive Board on matters of strategic importance to the company and its affiliates
- addresses fundamental strategic and business issues, as well as important projects for Deutsche Börse Group

### **Technology Committee**

#### Members

#### Composition

- Richard Berliand (Chairman)
- $\mbox{\color{red} \bullet}$  at least three members, who are elected by the Supervisory Board
- Karl-Heinz Flöther

#### Responsibilities

- Craig Heimark
- Johannes Witt
- supports the Supervisory Board in meeting its supervisory duties with respect to the information technology used to execute the Group's business strategy, and with respect to information security
- advises on IT strategy and architecture
- oversees monitoring of technological innovations, the provision of IT services, the technical performance and stability of the IT systems, operational IT risks, and information security services and risks

Frankfurt/Main, 7 March 2017 Deutsche Börse AG The Executive Board

Carsten Kengeter

Haule Stas

Andreas Preuss

Jeffy Tesser

Gregor Pottmeyer

Hauke Stars

Jeffrey Tessler

# Responsibility Statement by the Executive Board

To the best of our knowledge, and in accordance with the applicable reporting principles, the financial statements of Deutsche Börse Aktiengesellschaft give a true and fair view of the assets, liabilities, financial position and profit and loss of the company, and the management report includes a fair review of the development and performance of the business and the position of the company, together with a description of the principal opportunities and risks associated with the expected development of the company.

Frankfurt/Main, 10 March 2017

Deutsche Börse Aktiengesellschaft

The Executive Board

Carsten Kengeter

Naule Stas

Andreas Preuß

Gregor Pottmeyer

Hauke Stars

Jeffrey Tessler

Jepy Tesse

# Auditor's Report

We have audited the annual financial statements, comprising the balance sheet, the profit and loss account and the notes to the financial statements, together with the bookkeeping system, and the combined management report of Deutsche Börse AG, Frankfurt/Main for the financial year from January 1 to December 31, 2016. The maintenance of the books and records and the preparation of the annual financial statements and combined management report in accordance with German commercial law and supplementary provisions of the shareholder agreement/articles of incorporation are the responsibility of the Company's executive board. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, and the combined management report based on our audit.

We conducted our audit of the annual financial statements in accordance with Section 317 of the German Commercial Code [HGB] and German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors [IDW]. Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with German principles of proper accounting and in the combined management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Company and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records, the annual financial statements and the combined management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by the executive board, as well as evaluating the overall presentation of the annual financial statements and combined management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.



In our opinion, based on the findings of our audit, the annual financial statements comply with the legal requirements and give a true and fair view of the net assets, financial position and results of operations of the Company in accordance with German principles of proper accounting. The combined management report is consistent with the annual financial statements, complies with the German statutory requirements, and as a whole provides a suitable view of the Company's position and suitably presents the opportunities and risks of future development.

Frankfurt/Main, March 10, 2017 KPMG AG Wirtschaftsprüfungsgesellschaft [Original German version signed by:]

Braun Dielehner
Wirtschaftsprüfer Wirtschaft
[German Public Auditor] [German F

Wirtschaftsprüfer [German Public Auditor]

