THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION. If you are in any doubt as to the action you should take, you are recommended to seek your own personal financial advice as soon as possible from your stockbroker, bank, solicitor, accountant, fund manager or other appropriate independent financial adviser, who is authorised under the Financial Services and Markets Act 2000 (as amended) ("FSMA") if you are in the United Kingdom, or from another appropriately authorised independent financial adviser if you are in a territory outside the United Kingdom.

This document comprises a supplementary prospectus (the "**Supplementary Prospectus**") relating to HLDCO123 PLC ("**HoldCo**" or the "**Company**") prepared in accordance with the Prospectus Rules of the Financial Conduct Authority (the "**FCA**") made under section 73A of FSMA. This Supplementary Prospectus has been approved by the FCA in accordance with section 87G of FSMA, filed with the FCA and made available to the public in accordance with section 3.2 of the Prospectus Rules by the same being made available, free of charge, at www.mergerdocuments-db-lseg.com, at the Company's registered office at 10 Paternoster Square, London, EC4M 7LS, United Kingdom and at Equiniti Limited at Aspect House, Spencer Road, Lancing Business Park, Lancing, West Sussex BN99 6DA, United Kingdom. The Original Prospectus (as supplemented) has been passported under the Prospectus Directive in connection with the FSE Admission (as defined below). The Company will also request that the FCA notify the European Securities and Markets Authority and provide a certificate of approval and a copy of this document to the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) ("**BaFin**") for the purposes of passporting this Supplementary Prospectus under the Prospectus Directive in connection with the FSE Admission (as defined below).

This Supplementary Prospectus is supplementary to, and must be read in conjunction with, the prospectus published by the Company on 1 June 2016 in relation to its applications for admission to the premium listing segment of the Official List of the UK Listing Authority and to trading on the London Stock Exchange's main market for listed securities and which was passported under the Prospectus Directive in connection with its application to a prime standard listing and trading on the regulated market of the Frankfurt Stock Exchange (the "**Original Prospectus**"), as supplemented by the supplementary prospectus dated 28 July 2016, relating to the unaudited interim consolidated condensed financial information of Deutsche Börse AG for the 6 month period ended 30 June 2016 (the "**First Supplementary Prospectus**"), the supplementary prospectus dated 4 August 2016, relating to the half-year results of LSEG plc for the six months ended 30 June 2016 (the "**Second Supplementary Prospectus**"), the supplementary prospectus dated 17 February 2017, relating to the unaudited preliminary results of Deutsche Börse AG for the fourth quarter and full year ended 31 December 2016 (the "**Third Supplementary Prospectus**") and the supplementary prospectus dated 3 March 2017, relating to the preliminary results of LSEG plc for the year ended 31 December 2016 (the "**Fourth Supplementary Prospectus**"). Save as disclosed in this document, since the publication of the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus and the Fourth Supplementary Prospectus, there have been no significant new factors, material mistakes or inaccuracies relating to the information contained in the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus or the Fourth Supplementary Prospectus.

Applications will be made to the UK Listing Authority and to the London Stock Exchange for the HoldCo Shares to be admitted to listing on the premium listing segment of the Official List maintained by the FCA and to trading on the main market for listed securities of the London Stock Exchange, respectively (the "**LSE Admission**"). An application will also be made for a prime standard listing of the HoldCo Shares on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (the "**FSE Admission**" and together with the LSE Admission, the "**Admission**"). It is expected that, subject to the conditions to the proposed combination of Deutsche Börse AG and LSEG plc (the "**Merger**") being satisfied or, where appropriate, waived, Admission will become effective and dealings on the London Stock Exchange and the Frankfurt Stock Exchange in the HoldCo Shares will commence at 8.00 a.m. (London time) on or shortly after the Closing Date.

Capitalised terms contained in this Supplementary Prospectus shall have the meanings given to such terms in the Original Prospectus (as supplemented) unless otherwise defined herein.

The Company, the HoldCo Directors and the Proposed Directors, whose names appear on page 9 of this Supplementary Prospectus, accept responsibility for the information contained in this Supplementary Prospectus. To the best of the knowledge of the Company, the HoldCo Directors and the Proposed Directors (who have taken all reasonable care to ensure that such is the case), the information contained in this Supplementary Prospectus is in accordance with the facts and contains no omission likely to affect the import of such information.

Investors should only rely on the information contained in this Supplementary Prospectus, the Original Prospectus (as supplemented), and any documents (or parts thereof) incorporated therein and herein by reference. No person has been authorised to give any information or make any representations other than those contained therein and herein. The Company will comply with its obligation to publish a supplementary prospectus containing further updated information required by law or any regulatory authority but assumes no further obligation to publish additional information.

Investors should read this Supplementary Prospectus and the Original Prospectus (as supplemented) as a whole (including all information incorporated therein and herein by reference). In particular, investors are advised to examine all the risks that might be relevant in connection with an investment in the HoldCo Shares and your attention is drawn to Part 1: "*Risk Factors*" of the Original Prospectus for a discussion of certain risks and other factors that should be considered prior to any investment in the HoldCo Shares.

DEUTSCHE BÖRSE GROUP

London Stock Exchange Group

HLDCO123 PLC

(incorporated and registered under the laws of England and Wales with registered number 10053870)

Supplementary Prospectus

Application for admission to the premium listing segment of the Official List of the UK Listing Authority and to trading on the London Stock Exchange's main market for listed securities and to a prime standard listing and trading on the regulated market of the Frankfurt Stock Exchange of up to 344,919,586 HoldCo Shares

Joint Sponsor
Deutsche Bank

Joint Sponsor
Barclays

Apart from the responsibilities and liabilities, if any, which may be imposed on any of Deutsche Bank AG, Barclays Bank PLC, Perella Weinberg Partners UK LLP, Robey Warshaw LLP, Merrill Lynch International, HSBC Bank plc, Goldman Sachs International, J.P. Morgan Limited, RBC Europe Limited, Société Générale, UBS Limited or Lazard & Co., Limited (together, the "**Banks**") by the FSMA or the regulatory regime established thereunder, or under the regulatory regime of any jurisdiction where the exclusion of liability under the relevant regulatory regime would be illegal, void or unenforceable, none of the Banks accepts any responsibility whatsoever for, or makes any representation or warranty, express or implied, as to the contents of this document or for any other statement made or purported to be made by it, or on its behalf, in connection with the Company, the HoldCo Shares or the Merger and nothing in this document will be relied upon as a promise or representation in this respect, whether or not to the past or future. Each of the Banks accordingly disclaims all and any responsibility or liability, whether arising in tort, contract or otherwise (save as referred to above), which it might otherwise have in respect of this document or any such statement.

None of the Company, the Joint Sponsors (as defined below), the other Banks or any of their respective representatives, is making any representation to any investor of the HoldCo Shares regarding the legality of an investment in the HoldCo Shares by such investor under the laws applicable to such investor. The contents of this document should not be construed as legal, financial or tax advice. Each investor should consult his, her or its own legal, financial or tax adviser for legal, financial or tax advice.

Deutsche Bank AG is authorised under German Banking Law (competent authority: European Central Bank (the "**ECB**")) and, in the United Kingdom, by the Prudential Regulation Authority (the "**PRA**"). Deutsche Bank AG is subject to supervision by the ECB and by BaFin, Germany's Federal Financial Supervisory Authority, and is subject to limited regulation in the United Kingdom by the PRA and the FCA. Deutsche Bank AG is acting exclusively for the Company and Deutsche Börse AG and no one else in connection with the Merger and will not be responsible to anyone other than the Company and Deutsche Börse AG for providing the protections afforded to clients of Deutsche Bank AG nor for providing advice in relation to the Merger or any other matter referred to in this document.

Barclays Bank PLC, acting through its Investment Bank ("**Barclays**"), which is authorised by the PRA and regulated in the United Kingdom by the FCA and the PRA, is acting exclusively for the Company and LSEG plc and no one else in connection with the Merger and will not be responsible to anyone other than the Company and LSEG plc for providing the protections afforded to clients of Barclays nor for providing advice in relation to the Merger or any other matter referred to in this document. Deutsche Bank AG, London Branch ("**Deutsche Bank**") and Barclays are together the "**Joint Sponsors**".

Perella Weinberg Partners UK LLP ("**Perella Weinberg Partners**"), which is authorised and regulated in the United Kingdom by the FCA, is acting exclusively for Deutsche Börse AG and no one else in connection with the Merger and will not be responsible to anyone other than Deutsche Börse AG for providing the protections afforded to clients of Perella Weinberg Partners nor for providing advice in relation to the Merger or any other matter referred to in this document.

Merrill Lynch International ("**BofA Merrill Lynch**"), which is authorised by the PRA and regulated by the FCA and PRA in the United Kingdom is acting exclusively for Deutsche Börse AG and no one else in connection with the Merger. In relation to such matters, BofA Merrill Lynch, its affiliates and their respective directors, officers, employees and agents will not regard any other person as their client, nor will they be responsible to any other person for providing the protections afforded to clients of BofA Merrill Lynch or for providing advice in relation to the Merger or any other matter referred to in this document.

HSBC Bank plc ("**HSBC**") is authorised by the PRA and regulated by the FCA and the PRA in the United Kingdom. HSBC is acting exclusively for Deutsche Börse AG and no one else in connection with the Merger and shall not be responsible to anyone other than Deutsche Börse AG for providing the protections afforded to clients of HSBC nor for providing advice in connection with the Merger or any matter referred to in this document.

Robey Warshaw LLP ("**Robey Warshaw**"), which is authorised and regulated by the FCA, is acting exclusively for LSEG plc and no one else in connection with the Merger. In relation to such matters, Robey Warshaw will not be responsible to anyone other than LSEG plc for providing the protections afforded to its clients or for providing advice in connection with the contents of this document or any other matter referred herein.

Goldman Sachs International, which is authorised by the PRA and regulated by the FCA and PRA in the UK, is acting exclusively for LSEG plc and no one else in connection with the Merger and will not be responsible to anyone other than LSEG plc for providing the protections afforded to its clients, or for giving advice in connection with the Merger or any matter referred to in this document.

J.P. Morgan Limited, which conducts its UK investment banking business as J.P. Morgan Cazenove ("**J.P. Morgan Cazenove**"), is authorised and regulated in the United Kingdom by the FCA. J.P. Morgan Cazenove is acting exclusively for LSEG plc and no one else in connection with the Merger and will not regard any other person as its client in relation to the matters set out in this document. J.P. Morgan Cazenove will not be responsible to anyone other than LSEG plc for providing the protections afforded to clients of J.P. Morgan Cazenove or its affiliates, or for providing advice in relation to the Merger, the contents of this document or any other matter referred to herein.

RBC Europe Limited, which trades as "RBC Capital Markets" ("**RBC Capital Markets**"), is authorised by the PRA and regulated by the FCA and the PRA in the United Kingdom. RBC Capital Markets is acting exclusively for LSEG plc and no one else in connection with the Merger and will not be responsible to anyone other than LSEG plc for providing the protections afforded to clients of RBC Capital Markets, or for providing advice in connection with the Merger.

Lazard & Co., Limited ("**Lazard**"), which is authorised and regulated by the FCA in the United Kingdom, is acting exclusively for Deutsche Börse AG and for no one else in connection with the Merger and will not be responsible to anyone other than Deutsche Börse AG for providing the protections afforded to its clients or for providing advice in connection with the Merger. Neither Lazard nor any of its affiliates owes or accepts any duty, liability or responsibility whatsoever (whether direct or indirect, whether in contract, in tort, under statute or otherwise) to any person who is not a client of Lazard in connection with this document, any statement contained herein, the Merger or otherwise.

Société Générale ("**SG**") which is a French credit institution (bank) authorised and supervised by the ECB, the Autorité de Contrôle Prudentiel et de Résolution and the PRA and is regulated by the Autorité des marchés financiers and subject to limited regulation by the FCA and the PRA. SG is acting solely for LSEG plc in connection with the Merger and will not be responsible to anyone other than LSEG plc for providing the protections afforded to the clients of SG or for providing advice in relation to the Merger or any other matter referred to in this document.

UBS Limited ("**UBS**"), which is authorised by the PRA and regulated by the FCA and the PRA in the United Kingdom, is acting exclusively for LSEG plc and no one else in connection with the Merger. In relation to such matters, UBS, its affiliates and their respective directors, officers, employees and agents will not regard any other person as their client, nor will they be responsible to any other person for providing the protections afforded to their clients or for providing advice in relation to this Merger, the contents of this document or any other matter referred to in this document.

THIS DOCUMENT DOES NOT CONSTITUTE AN OFFER OF, OR SOLICITATION OF AN OFFER TO SUBSCRIBE FOR OR BUY, ANY SHARES TO ANY PERSON IN ANY JURISDICTION AND IS NOT FOR DISTRIBUTION IN OR INTO ANY RESTRICTED JURISDICTION EXCEPT AS DETERMINED BY THE COMPANY IN ITS SOLE DISCRETION AND PURSUANT TO APPLICABLE LAWS.

This document does not constitute or form a part of any offer or solicitation to purchase or subscribe for securities in the United States or any other jurisdiction where such offer or sale would be unlawful. The HoldCo Shares that may be received in the Merger have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), or with any securities regulatory authority of any state or other jurisdiction in the United States, and may only be offered or sold in the United States in accordance with an applicable exemption from the registration requirements of the Securities Act. There will be no public offering of HoldCo Shares in the United States. HoldCo Shares may not therefore be offered to certain U.S. shareholders of Deutsche Börse AG unless HoldCo believes that there is an exemption from, or if the transaction is not subject to, the registration requirements of the Securities Act. It is anticipated that U.S. shareholders of Deutsche Börse AG who are not able to receive HoldCo Shares as part of the Exchange Offer may, in lieu of HoldCo Shares, receive a cash amount corresponding to proceeds (less transaction costs) from the sale of HoldCo Shares which they would otherwise have been entitled to receive. The HoldCo Shares issued pursuant to the LSEG Acquisition are expected to be issued in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 3(a)(10) thereof based on the Court's sanctioning of the Scheme ("Court" and "Scheme" as defined in the Original Prospectus).

Information distributed in connection with the Merger is subject to disclosure requirements of the United Kingdom and Germany that are different from those of the United States. The financial information contained in this document has been prepared in accordance with EU IFRS that may not be comparable to the financial statements and financial information of United States companies.

It may be difficult for you to enforce your rights and any claim you may have arising under U.S. federal securities laws, since HoldCo is located in the United Kingdom, and some of its officers and directors are residents of countries outside the United States. You may not be able to sue a UK company or its officers or directors in an English court for violations of U.S. securities laws. It may be difficult to compel a UK company and its affiliates to subject themselves to a U.S. court's judgement.

You should be aware that the Company may purchase securities otherwise than under the Merger, such as in open market or privately negotiated purchases.

Deutsche Börse Shareholders and LSEG Shareholders who are affiliates of HoldCo after the Merger will be subject, under Rule 144 under the Securities Act, to timing, manner of sale and volume restrictions on the sale of HoldCo Shares received pursuant to the Merger. For the purposes of the Securities Act, an "affiliate" of a company is any person that directly or indirectly controls, or is controlled by, or is under common control with, the company. Holders of Deutsche Börse Shares and LSEG Shares that constitute "restricted securities" for the purposes of Rule 144 under the Securities Act will receive HoldCo Shares that also constitute restricted securities and will not be permitted to offer or resell in the United States the HoldCo Shares they receive without registering that offer or sale under the Securities Act or conducting that offer or sale in reliance on an exemption from registration thereunder. The Securities Act would not generally restrict a sale of HoldCo Shares that are "restricted securities" on the London Stock Exchange, provided that the sale had not been pre-arranged with a buyer in the United States. Shareholders who believe they may be affiliates for the purposes of the Securities Act should consult their own legal advisers.

THE CONTENTS OF THIS DOCUMENT ARE NOT TO BE CONSTRUED AS LEGAL, BUSINESS OR TAX ADVICE. EACH SHAREHOLDER SHOULD CONSULT HIS, HER OR ITS OWN LEGAL ADVISER, FINANCIAL ADVISER OR TAX ADVISER FOR LEGAL, FINANCIAL OR TAX ADVICE.

Supplementary Prospectus dated 22 March 2017.

TABLE OF CONTENTS

IMPORTANT INFORMATION

General

No person has been authorised to give any information or to make any representations other than those contained in this Supplementary Prospectus, the Original Prospectus (as supplemented), the Exchange Offer Document or the Scheme Document in connection with the Merger and, if given or made, such information or representations must not be relied upon as having been authorised by or on behalf of the Company, the HoldCo Directors, the Proposed Directors, the Joint Sponsors or the other Banks.

Without prejudice to any obligation of the Company to publish a supplementary prospectus pursuant to Section 87G of the FSMA and PR 3.4.1 of the Prospectus Rules, neither the delivery of this Supplementary Prospectus or the Original Prospectus (as supplemented), nor any subscription or sale of HoldCo Shares made under the Original Prospectus (as supplemented) shall, under any circumstances, create any implication that there has been no change in the business or affairs of the Company or of the Deutsche Börse Group taken as a whole or LSEG taken as a whole since the date hereof or that the information contained herein is correct as of any time subsequent to its date.

The contents of this Supplementary Prospectus are not to be construed as legal, business or tax advice. Any HoldCo Shareholder or investor should consult his or her own lawyer, financial adviser or tax adviser for legal, financial or tax advice in relation to any action in respect of the HoldCo Shares.

None of the Company, the HoldCo Directors, the Proposed Directors, the Joint Sponsors and the other Banks is making any representation to any HoldCo Shareholder or purchaser of the HoldCo Shares regarding the legality of an investment by such HoldCo Shareholder or investor.

Apart from the responsibilities and liabilities, if any, which may be imposed on any of the Banks by the FSMA or the regulatory regime established thereunder or under the regulatory regime of any jurisdiction where exclusion of liability under the relevant regulatory regime would be illegal, void or unenforceable, none of the Banks accepts responsibility whatsoever for, or makes any representation or warranty, express or implied, as to, the contents of this Supplementary Prospectus or for any other statement made or purported to be made by them, or on their behalf, in connection with the Company, the Deutsche Börse Group, LSEG, the HoldCo Shares, the Merger and/or Admission and nothing in this Supplementary Prospectus will be relied upon as a promise or representation in this respect, whether or not to the past or future.

Each of the Banks accordingly disclaims all and any responsibility or liability whatsoever, whether arising in tort, contract or otherwise (save as referred to above) which they might otherwise have in respect of this Supplementary Prospectus or any such statement.

The Original Prospectus (as supplemented) should be read in its entirety. In making an investment decision, prospective shareholders and investors must rely upon their own examination of the Company, the Deutsche Börse Group, LSEG and the terms of the Original Prospectus (as supplemented) and the information incorporated by reference therein and herein as a whole, including the risks involved.

No incorporation of website information

Without limitation, the contents of the websites of the Company, Deutsche Börse AG and LSEG plc (or any other websites, including the content of any website accessible from hyperlinks on the websites of the Company, Deutsche Börse AG and/or LSEG plc) do not form part of this Supplementary Prospectus.

Profit forecast

Information in relation to the Deutsche Börse 2017 Profit Forecast is included in Section A of Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of this Supplementary Prospectus. The Deutsche Börse 2017 Profit Forecast was issued by Deutsche Börse AG and no profit forecast has been issued by HoldCo or LSEG plc.

With the exception of (i) the Deutsche Börse Profit Forecast (as defined in the Original Prospectus), which was included in Annex 1: "*Deutsche Börse Profit Forecast*" of the Original Prospectus (and which was repeated in Annex 1: "*Deutsche Börse Profit Forecast*" of the First Supplementary Prospectus and Annex 2: "*Deutsche Börse Profit Forecast*" of the Second Supplementary Prospectus) and which related to the year ended 31 December 2016 and therefore no longer constitutes a profit forecast, and (ii) the Deutsche Börse 2017 Profit Forecast which is repeated in Section A of Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of this Supplementary Prospectus (and which was included in Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of the Third Supplementary Prospectus and Annex 1: "*Deutsche Börse 2017 Profit Forecast*" of the Fourth Supplementary Prospectus), no statement in the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus, the Fourth Supplementary Prospectus or this Supplementary Prospectus is intended, or was intended at the time it was made, as a profit forecast and no other statement should be interpreted to mean that earnings for the current or future financial years would necessarily match or exceed the historical published earnings.

Forward-looking statements

The Original Prospectus (as supplemented) and this Supplementary Prospectus (including information incorporated by reference therein and herein) contain forward-looking statements. A forward-looking statement is any statement that does not relate to historical or current facts and events. Forward-looking statements in the Original Prospectus (as supplemented) and/or this Supplementary Prospectus include, in particular, statements containing information on future earnings capacity, plans and expectations of the Company's business, its growth and profitability, and general economic and regulatory conditions and other factors to which it is or may be exposed. Statements made using terms such as "may", "might", "will", "should", "expect", "plan", "intends", "anticipate", "predict", "potential", "is likely" or "continue", and the negative of these terms and other comparable terminology indicate forward-looking statements. Forward-looking statements in the Original Prospectus (as supplemented) and/or this Supplementary Prospectus are based on estimates and assessments made to the best of the Company's present knowledge. These forward-looking statements are based on assumptions, uncertainties and other factors, the occurrence or non-occurrence of which could cause the actual results of the Company, including its financial condition and/or profitability, to differ materially from or fail to meet the expectations expressed or implied in the forward-looking statements.

Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, the Company can give no assurance that such expectations will prove to be correct. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied by such forward-looking statements. These factors include the satisfaction of the conditions of the Merger, as well as additional factors, such as: future market conditions, currency fluctuations, the behaviour of other market participants, the actions of regulators and other factors such as changes in the political, social and regulatory framework in which the Combined Group will operate or in economic or technological trends or conditions. Other unknown or unpredictable factors could cause actual results to differ materially from those in the forward-looking statements. Such forward-looking statements should therefore be viewed in the light of such factors. Accordingly, investors are strongly advised to read the following sections of the Original Prospectus in particular: Summary; Part 1: "*Risk Factors*"; Part 14: "*Operating and Financial Review of the Deutsche Börse Group*"; Part 16: "*Operating and Financial Review of LSEG*"; Part 6: "*Information on the Combined Group and Background to the Merger*"; Part 9: "*Terms and Conditions of the Merger*"; Part 7: "*Information on the Deutsche Börse Group*"; Part 8: "*Information on LSEG*"; and Part 12: "*Dividends and Dividend Policy*". These sections include more detailed descriptions of factors that might potentially have an impact on the business of the Combined Group and the market in which it operates.

In light of the uncertainties and assumptions, it is also possible that the future events mentioned in this Supplementary Prospectus and the Original Prospectus (as supplemented) might not occur.

The forward-looking statements contained in the Original Prospectus (as supplemented) and this Supplementary Prospectus speak only as of the date on which they are made. Other than in accordance with their legal and regulatory obligations (including under the Listing Rules, the Prospectus Rules, the Market Abuse Regulation and the Disclosure Guidance and Transparency Rules), none of the Company, the Joint Sponsors or the other Banks undertake any obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

The statements above relating to forward-looking statements should not be construed as a qualification on the opinion of the Company as to working capital set out in paragraph 3 of Part 2: "*Additional Information*" of this Supplementary Prospectus.

Presentation of financial information

This document contains certain extracts from the audited consolidated annual financial statements of the Deutsche Börse Group as at and for the years ended 31 December 2016 and 2015, prepared on the basis of EU IFRS.

Unless otherwise stated, financial information for the Deutsche Börse Group has been extracted from the audited consolidated financial statements of the Deutsche Börse Group as at and for the year ended 31 December 2016, together with the unqualified independent audit report thereon, as set out in the financial report of the Deutsche Börse Group for the year ended 31 December 2016 and the Deutsche Börse 2015 Financial Statements, together with the unqualified independent audit report thereon, as set out in the financial report of the Deutsche Börse Group for the year ended 31 December 2015. Where information has been extracted from the audited consolidated financial statements of the Deutsche Börse Group, the information is audited unless otherwise stated. Where information is identified as "unaudited" in this document, this means it has not been subject to an audit or inspection by an auditor (*prüferische Durchsicht*). See Part 19: "*Historical Financial Information of Deutsche Börse AG*" and Annex 5: "*Deutsche Börse AG Historical Financial Information*" of the Original Prospectus for the audited consolidated financial statements of the Deutsche Börse Group for the year ended 31 December 2015 and Annex 1: "*Deutsche Börse 2016 Financial Statements*" of this Supplementary Prospectus for the audited consolidated financial statements of the Deutsche Börse Group for the year ended 31 December 2016.

Any other financial information used in this document derives from the accounting systems of the Deutsche Börse Group. Unless otherwise indicated, financial information for the Deutsche Börse Group in this document is presented in euro and has been prepared in accordance with the EU IFRS.

Definitions

Certain terms used and not otherwise defined in this Supplementary Prospectus, including capitalised terms, are defined in Part 26: "*Definitions*" of the Original Prospectus, paragraph 8 of Part 2: "*Additional Information*" of the First Supplementary Prospectus, paragraph 9 of Part 2: "*Additional Information*" of the Second Supplementary Prospectus, paragraph 10 of Part 2: "*Additional Information*" of the Third Supplementary Prospectus, and in paragraph 9 of Part 2: "*Additional Information*" of the Fourth Supplementary Prospectus.

In this Supplementary Prospectus, references to the "Original Prospectus" or to the "Original Prospectus (as supplemented)" shall be to the Original Prospectus as supplemented by the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus, the Fourth Supplementary Prospectus and this Supplementary Prospectus and from time to time, unless the context otherwise requires.

For the purposes of this Supplementary Prospectus, "**subsidiary**", "**subsidiary undertaking**", "**undertaking**", "**associated undertaking**" have the meanings given by the Companies Act.

All references to statutory provision or law or to any order or regulation shall be construed as a reference to that provision, law, order or regulation as extended, modified, replaced or re-enacted from time to time and all statutory instruments, regulations and orders from time to time made thereunder or deriving validity therefrom.

Unless otherwise stated, all times referred to in connection with the Scheme and Completion are London time and all times referred to in connection with the Exchange Offer are Frankfurt time.

EXPECTED TIMETABLE OF PRINCIPAL EVENTS

All times shown are London times unless otherwise stated. All dates and times are based on the current expectations of HoldCo, Deutsche Börse AG and LSEG plc and are subject to change, which will depend, among other things, on the date on which the Conditions to the Merger are satisfied (or, where applicable, waived), the Court sanctions the Scheme and the Scheme Court Order is delivered to the Registrar of Companies. If any of the dates and/or times in this expected timetable change, the revised dates and/or times will be notified by announcement through the Regulatory Information Service of the London Stock Exchange.

The following dates and times are indicative only and subject to change and will depend on, among other things, the date upon which: (i) the Conditions to the Merger are satisfied (or, where applicable, waived); (ii) the Court sanctions the Scheme; and (iii) the Scheme Court Order is delivered to the Registrar of Companies.

Event	Expected time/date[1]
Scheme Court Hearing (to sanction the Scheme)	A date expected to be in the second quarter of 2017, subject to regulatory and merger control clearances ***(D)***
Last day of dealings in, and for registration of transfers of, and disablement in CREST of, LSEG Shares . .	D+1 Business Day
Scheme Record Time	6:30 p.m. on D+1 Business Day
Effective Date of the Scheme (T)	**D+2 Business Days**[2]
Cancellation of admission of and dealings in LSEG Shares	8:00 a.m. on T
Last day of dealings in Deutsche Börse Shares tendered into the Exchange Offer	T
Commencement of conditional dealings[3] in HoldCo Shares on the London Stock Exchange and potentially on the Frankfurt Stock Exchange[4] . . .	By 8:00 a.m. on T
Expected date of Admission and commencement of unconditional dealings in HoldCo Shares on the London Stock Exchange and on the Frankfurt Stock Exchange	**T+5–9 Business Days**
Despatch of cheques, or CREST accounts credited, in respect of fractional entitlements to HoldCo Shares	Within 14 days after the Effective Date
Long Stop Date, being the latest date by which the Merger must be completed	30 June 2017[5]

Notes:

(1) These times and dates are indicative only and subject to change, which will depend on, among other things, the date upon which (i) the Conditions are satisfied or (where applicable) waived, (ii) the Court sanctions the Scheme, and (iii) the Scheme Court Order sanctioning the Scheme is delivered to the Registrar of Companies. This timetable does not take into account settlement of the vendor placement for certain Deutsche Börse Shares tendered into the Exchange Offer by U.S. persons unable to receive HoldCo Shares.

(2) This date will be the date the Scheme Court Order is delivered to the Registrar of Companies.

(3) It should be noted that if Admission does not occur, all conditional dealings will be of no effect and any such dealings will be at the sole risk of the parties concerned. The period of conditional dealings will commence on the Effective Date and will end on the Business Day immediately prior to Admission which is expected to be 5–9 Business Days after the Effective Date. The conditional dealings will end on the Business Day immediately prior to Admission.

(4) HoldCo seeks to achieve conditional dealings in HoldCo Shares on the Frankfurt Stock Exchange in parallel to the conditional dealings in HoldCo Shares on the London Stock Exchange.

(5) The latest date by which the Merger must be implemented (30 June 2017) is not capable of being extended.

PART 1
SUPPLEMENTARY INFORMATION

This Supplementary Prospectus is supplemental to, and should be read in conjunction with, the Original Prospectus published by the Company on 1 June 2016, the First Supplementary Prospectus published by the Company on 28 July 2016, the Second Supplementary Prospectus published by the Company on 4 August 2016, the Third Supplementary Prospectus published by the Company on 17 February 2017 and the Fourth Supplementary Prospectus published by the Company on 3 March 2017. To the extent that there is any inconsistency between a statement in this Supplementary Prospectus and a statement contained in the Original Prospectus (as supplemented), the statement in this Supplementary Prospectus will prevail. Any decision to invest in the HoldCo Shares should be based on consideration of this Supplementary Prospectus and the Original Prospectus (as supplemented) and the information incorporated by reference therein and herein as a whole.

1 Background

Following the publication of the Original Prospectus dated 1 June 2016, the First Supplementary Prospectus dated 28 July 2016, the Second Supplementary Prospectus dated 4 August 2016, the Third Supplementary Prospectus dated 17 February 2017 and the Fourth Supplementary Prospectus dated 3 March 2017, on 21 March 2017 Deutsche Börse AG released the audited consolidated financial statements of the Deutsche Börse Group as at and for the year ended 31 December 2016 (the "**Deutsche Börse 2016 Financial Statements**"), together with the unqualified independent audit report thereon. The Deutsche Börse 2016 Financial Statements have been prepared on the basis of EU IFRS.

The Company considers the publication of the Deutsche Börse 2016 Financial Statements to be a significant new factor relating to the information contained in the Original Prospectus (as supplemented) and, accordingly, this Supplementary Prospectus has been prepared in accordance with section 87G of FSMA and PR 3.4 of the Prospectus Rules.

Other than as otherwise disclosed in this Supplementary Prospectus, there is no further information that is required to be disclosed in this Supplementary Prospectus pursuant to section 87G of FSMA.

2 Supplementary information in relation to the Deutsche Börse Group

On 21 March 2017, Deutsche Börse AG published the Deutsche Börse 2016 Financial Statements. A copy of the Deutsche Börse 2016 Financial Statements is available for inspection in accordance with paragraph 8 of Part 2: "*Additional Information*" of this Supplementary Prospectus.

The following sections of the Deutsche Börse 2016 Financial Statements contain historical financial information relating to the Deutsche Börse Group for the year ended 31 December 2016 which is relevant for investors and such sections are set out in Section A of Annex 1: "*Deutsche Börse 2016 Financial Statements*" of this Supplementary Prospectus and form part of this Supplementary Prospectus:

Deutsche Börse 2016 Financial Statements	Relevant page number of this document
Consolidated financial statements: consolidated income statement	14 - 15
Consolidated financial statements: consolidated balance sheet	16 - 17
Consolidated financial statements: consolidated cash flow statement	18 - 19
Consolidated financial statements: consolidated statement of changes in equity	20 - 21
Notes to the consolidated financial statements	22 - 148
Responsibility statement by the Executive Board	149
Auditor's report	150

In addition, the following sections of the financial report of Deutsche Börse AG for the year ended 31 December 2016 contain additional supplementary information relating to the Deutsche Börse Group which is relevant for investors and such sections are set out in Section B of Annex 1: "*Deutsche Börse 2016 Financial Statements*" of this Supplementary Prospectus and which form part of this Supplementary Prospectus:

Information from the financial report of Deutsche Börse AG for the year ended 31 December 2016	Relevant page number of this document
Report on economic position: business developments	152
Report on economic position: results of operations	153 - 166
Report on post-balance sheet date events	167

Only information in the parts of the Deutsche Börse 2016 Financial Statements and financial report set out in Annex 1: "*Deutsche Börse 2016 Financial Statements*" forms part of this Supplementary Prospectus. The parts of the Deutsche Börse 2016 Financial Statements or the financial report of Deutsche Börse AG for the year ended 31 December 2016 which are not set out in Annex 1: "*Deutsche Börse 2016 Financial Statements*" of this Supplementary Prospectus are either not relevant for the investor or are covered elsewhere in this Supplementary Prospectus. To the extent that any of the information referred to above itself contains information which is incorporated by reference, such information shall not form part of this Supplementary Prospectus.

3 Amendments to the Summary Information

This Supplementary Prospectus amends the summary information which forms part of the Original Prospectus (as supplemented) with the addition of the following information to Element B.7 and B.9 as set out below:

<table>
<tr><th>Annex and Element</th><th></th><th>Disclosure requirement</th></tr>
<tr><td>B.7</td><td>Selected historical financial information</td><td>
The Deutsche Börse Group
On 21 March 2017, Deutsche Börse AG released the audited consolidated financial statements of the Deutsche Börse Group as at and for the year ended 31 December 2016 (the "Deutsche Börse 2016 Financial Statements"). The tables below set out the Deutsche Börse Group's summary financial information for the periods indicated, as reported in accordance with EU IFRS. The consolidated financial information for the Deutsche Börse Group for each of the years ended 31 December 2016 and 2015 has been extracted from the audited consolidated financial statements of the Deutsche Börse Group for the financial years ended 31 December 2016 (as set out in the Deutsche Börse 2016 Financial Statements) and 31 December 2015 (as set out in the Deutsche Börse 2015 Financial Statements), respectively.
Consolidated Statement of Income of the Deutsche Börse Group
<table>
<tr><th></th><th colspan="2">Year ended 31 December</th></tr>
<tr><th></th><th>2016</th><th>(restated) 2015[(1)]</th></tr>
<tr><th></th><th colspan="2">(€ million, audited)</th></tr>
<tr><td>Sales revenue</td><td>2,557.3</td><td>2,419.9</td></tr>
<tr><td>Total revenue</td><td>2,673.9</td><td>2,494.1</td></tr>
<tr><td>Net revenue (total revenue less volume-related costs)</td><td>2,388.7</td><td>2,220.3</td></tr>
<tr><td>Operating costs</td><td>(1,317.4)</td><td>(1,283.2)</td></tr>
<tr><td>Earnings before interest and tax (EBIT)</td><td>1,108.2</td><td>935.6</td></tr>
<tr><td>Earnings before tax (EBT)</td><td>1,033.6</td><td>878.1</td></tr>
<tr><td>Net profit for the period</td><td>1,298.2</td><td>701.2</td></tr>
</table>
Notes:
(1) 2015 figures restated to reflect the sale of ISE and the corresponding classification of activities relating to ISE as being discontinued operations. See Note 2 to the Deutsche Börse 2016 Financial Statements.
Consolidated Statement of Financial Position of the Deutsche Börse Group
<table>
<tr><th></th><th colspan="2">As at 31 December</th></tr>
<tr><th></th><th>2016</th><th>2015</th></tr>
<tr><th></th><th colspan="2">(€ million, audited)</th></tr>
<tr><td>Total non-current assets</td><td>11,940.4</td><td>14,386.9</td></tr>
<tr><td>Total current assets</td><td>151,904.4</td><td>165,688.9</td></tr>
<tr><td>Total assets</td><td>163,844.8</td><td>180,075.8</td></tr>
<tr><td>Total equity</td><td>4,624.5</td><td>3,695.1</td></tr>
<tr><td>Total non-current liabilities</td><td>8,669.8</td><td>10,585.4</td></tr>
<tr><td>Total current liabilities</td><td>150,550.5</td><td>165,795.3</td></tr>
<tr><td>Total liabilities</td><td>159,220.3</td><td>176,380.7</td></tr>
<tr><td>Total equity and liabilities</td><td>163,844.8</td><td>180,075.8</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Annex and Element</th><th></th><th>Disclosure requirement</th></tr>
<tr><td></td><td></td><td>
Consolidated Statement of Cashflows of the Deutsche Börse Group
<table>
<tr><th></th><th colspan="2">Year ended 31 December</th></tr>
<tr><th></th><th>2016</th><th>2015</th></tr>
<tr><th></th><th colspan="2">(€ million, audited)</th></tr>
<tr><td>Cash flows from operating activities excluding CCP positions</td><td>856.6</td><td>796.6</td></tr>
<tr><td>Cash flows from operating activities</td><td>1,621.4</td><td>10.1</td></tr>
<tr><td>Cash flows from investing activities</td><td>578.5</td><td>(1,592.3)</td></tr>
<tr><td>Cash flows from financing activities</td><td>(848.8)</td><td>76.1</td></tr>
<tr><td>Net change in cash and cash equivalents</td><td>1,351.1</td><td>(1,506.1)</td></tr>
<tr><td>Cash and cash equivalents at period end</td><td>(146.9)</td><td>(1,579.4)</td></tr>
</table>
There has been no significant change in the financial condition or operating results of the Deutsche Börse Group since 31 December 2016, the date to which the last audited consolidated financial information in relation to the Deutsche Börse Group was prepared.
</td></tr>
<tr><td>B.9</td><td>Profit forecast or estimate</td><td>
Deutsche Börse AG
Deutsche Börse 2017 Profit Forecast
On 15 February 2017, Deutsche Börse AG released its unaudited preliminary results for the fourth quarter and full year ended 31 December 2016.
Included in the announcement released by Deutsche Börse AG on 15 February 2017 relating to its unaudited preliminary results for the fourth quarter and full year ended 31 December 2016 was the following guidance for the financial year ending 31 December 2017 (the “Deutsche Börse 2017 Profit Forecast”):

5 per cent.—10 per cent. net revenue growth.
0 per cent.—5 per cent. operating costs growth (adjusted).
10 per cent.—15 per cent. net income growth (adjusted).

The Deutsche Börse 2017 Profit Forecast set out above is repeated as at the date of this document. The Deutsche Börse 2017 Profit Forecast relates to net revenue growth, operating cost growth and net income growth, in line with the previous guidance given by Deutsche Börse AG and as a means of evaluating the financial and operating performance of the Deutsche Börse Group. Deutsche Börse AG makes a net profit forecast annually.
The Deutsche Börse 2017 Profit Forecast was given under the requirements of the relevant German accounting standard (GAS 20 Group Management Report) with respect to the Deutsche Börse Group on a standalone basis and was based on its continued operation as an independent group. The Deutsche Börse 2017 Profit Forecast does not reflect any synergies, opportunities, reorganisation, restructuring or transaction costs associated with the Merger. Deutsche Börse AG has a fixed tax rate and the market is therefore able to calculate its profit before tax.
Basis of preparation
The Deutsche Börse 2017 Profit Forecast is based on a forecast for the 12 months to 31 December 2017. The profit forecast is required to be presented on a basis consistent with the accounting policies of the Company.
</td></tr>
</table>

Annex and Element		Disclosure requirement
		Assumptions The Deutsche Börse 2017 Profit Forecast is based on the following assumptions for the period to which they relate: *Factors outside the influence or control of the Directors* • There will be continued recovery of the eurozone and world economies. • There will be no material changes to the conditions of the markets in which Deutsche Börse AG operates. • The main exchange rates and inflation and tax rates in Deutsche Börse AG's principal markets will remain materially unchanged from the prevailing rates. • There will be no material changes in legislation or regulatory requirements impacting on Deutsche Börse AG's operations or its accounting policies. • There will be no material changes to Deutsche Börse AG's obligations to customers. • There will be no material change to the competitive environment leading to an adverse impact on consumer preferences or the capacity of the Deutsche Börse AG business to penetrate new markets. *Factors within the influence and control of the Directors* • There will be no material impact on Deutsche Börse AG's ability to negotiate new business. • There will be no material change to Deutsche Börse AG's customer base or the ability or willingness of the customer base to meet its obligations to Deutsche Börse AG from that which is currently anticipated by the Directors and Proposed Directors of HoldCo. **LSEG** Not applicable. There is no profit forecast or estimate for LSEG plc. **HoldCo** Not applicable. There is no profit forecast or estimate for HoldCo.

PART 2
ADDITIONAL INFORMATION

1 Responsibility

1.1 The Company, the HoldCo Directors and the Proposed Directors, whose names are set out below, accept responsibility for the information contained in this Supplementary Prospectus. To the best of the knowledge of the Company, the HoldCo Directors and the Proposed Directors (each of whom has taken all reasonable care to ensure that such is the case), the information contained in this Supplementary Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

HoldCo Directors

Name	Position
Carsten Kengeter	Director
David Warren	Director

Proposed Directors of the Company following Completion

Name	Position
Donald Brydon CBE	Chairman
Joachim Faber	Deputy Chairman and Senior Independent Director
Carsten Kengeter	Chief Executive Officer
David Warren	Chief Financial Officer
Jacques Aigrain	Non-Executive Director
Paul Heiden	Non-Executive Director
Lex Hoogduin	Non-Executive Director
Andrea Sironi*	Non-Executive Director
David Nish	Non-Executive Director
Mary Schapiro	Non-Executive Director
Richard Berliand	Non-Executive Director
Erhard Schipporeit	Non-Executive Director
Karl Heinz Flöther	Non-Executive Director
Amy Yip	Non-Executive Director
Ann Kristin Achleitner	Non-Executive Director
Christopher Cole	Non-Executive Director

*Andrea Sironi was appointed to the Board of Directors of LSEG plc on 1 October 2016 and replaces Andrea Munari as Proposed Director of the Company.

1.2 The Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board, whose names are set out below, accept responsibility for the statements given by them in paragraphs 4.3, 5.2 and 6.2 of this Part 2: "*Additional Information*" of this Supplementary Prospectus. To the best of the knowledge of the Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board (each of whom has taken all reasonable care to ensure that such is the case), the statements given by them in paragraphs 4.3, 5.2 and 6.2 of this Part 2: "*Additional Information*" of this Supplementary Prospectus are in accordance with the facts and do not omit anything likely to affect the import of such statements.

The Deutsche Börse Directors

Name	Current Position and Responsibility
Carsten Kengeter	Chief Executive Officer
Andreas Preuss	Deputy Chief Executive Officer (responsible for IT & Operations, Data & New Asset Classes)
Gregor Pottmeyer	Chief Financial Officer
Hauke Stars	(responsible for Cash Market, Pre-IPO and Growth Financing)
Jeffrey Tessler	(responsible for Clients, Products and Core Markets)

Chairman of the Deutsche Börse Supervisory Board

Joachim Faber	Chairman

1.3 The LSEG Directors, whose names are set out below, accept responsibility for the statements given by them in paragraphs 4.3 and 5.3 of this Part 2: "*Additional Information*" of this Supplementary Prospectus. To the best of the knowledge of the LSEG Directors (each of whom has taken all reasonable care to ensure that such is the case), the statements given by them in paragraphs 4.3 and 5.3 of this Part 2: "*Additional Information*" of this Supplementary Prospectus are in accordance with the facts and do not omit anything likely to affect the import of such statements.

The LSEG Directors

Name	Position
Donald Brydon CBE	Chairman
Xavier Rolet KBE	Group Chief Executive Officer
David Warren	Group Chief Financial Officer
Raffaele Jerusalmi	Executive Director, Chief Executive Officer of Borsa Italiana and Director of Capital Markets
Jacques Aigrain	Independent Non-Executive Director
Paul Heiden	Senior Independent Non-Executive Director
Lex Hoogduin	Non-Executive Director
Andrea Sironi	Independent Non-Executive Director
David Nish	Independent Non-Executive Director
Stephen O'Connor	Independent Non-Executive Director
Mary Schapiro	Independent Non-Executive Director

2 No significant change

2.1 The Company

There has been no significant change in the financial or trading position of the Company since 31 March 2016, the date to which the last audited financial information in relation to the Company was prepared.

2.2 Deutsche Börse Group

There has been no significant change in the financial or trading position of the Deutsche Börse Group since 31 December 2016, the date to which the last audited consolidated financial statements in relation to the Deutsche Börse Group were prepared.

2.3 LSEG

There has been no significant change in the financial or trading position of LSEG since 31 December 2016, the date to which the last published preliminary financial information in relation to LSEG was prepared.

3 Working capital

The Company is of the opinion that, taking into account the cash resources and bank facilities available to the Combined Group, the Combined Group has sufficient working capital for its present requirements, that is, for at least 12 months following the date of publication of this Supplementary Prospectus.

4 Quantified Financial Benefits Statement

4.1 The Quantified Financial Benefits Statement contained in the Original Prospectus (and in the Scheme Document) relates to future actions and circumstances which, by their nature, involve risks, uncertainties and contingencies. As a result, the cost savings and synergies referred to may not be achieved or may be achieved later or sooner than estimated, or those achieved could be materially different from those estimated. For the purposes of Rule 28 of the City Code, the Quantified Financial Benefits Statement contained in the Original Prospectus (and in the Scheme Document) is solely the responsibility of the HoldCo Directors, the Proposed Directors, the LSEG Directors, the Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board, whose names are set out in paragraph 1 above.

4.2 No statement in the Quantified Financial Benefits Statement should be construed as a profit forecast or interpreted to mean that the Combined Group's earnings in the first full year following implementation of the Merger, or in any subsequent period, would necessarily match or be greater than or be less than those of LSEG plc and/or Deutsche Börse AG for the relevant preceding financial period or any other period.

4.3 Each of the Company, the HoldCo Directors, the Proposed Directors, the LSEG Directors, the Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board, whose names are set out in paragraph 1 above, confirm that there have been no material changes to the Quantified Financial Benefits

Statement referred to in paragraph 4.1 above, which was set out in Part 6: "*Information on the Combined Group and Background to the Merger*" and Annex 2: "*Quantifiable Financial Benefits Statement*" of the Original Prospectus and Appendix 2 "*Quantified Financial Benefits Statement*" of the Scheme Document and which remains valid.

4.4 Deloitte LLP, as reporting accountants, Robey Warshaw, Barclays, Goldman Sachs International and J.P. Morgan Cazenove, as financial advisers to LSEG plc and Perella Weinberg Partners and Deutsche Bank, as financial advisers to Deutsche Börse AG, have each confirmed that the reports they produced on the Quantified Financial Benefits Statement, which were included in Part B of Appendix 2 to the Scheme Document, continue to apply.

5 No Material Change

5.1 For the purposes of Rule 27.2(a) of the City Code, each of the Company, the HoldCo Directors and the Proposed Directors, whose names are set out in paragraph 1.1 above, confirms that, other than as disclosed in this Supplementary Prospectus, there have been: (i) no material changes in the information disclosed in the Original Prospectus (as supplemented) which are material in the context of the Original Prospectus (as supplemented); and (ii) no material changes to the matters listed in Rule 27.2(b) of the City Code since the publication of the Scheme Document, the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus and the Fourth Supplementary Prospectus.

5.2 For the purposes of Rule 27.2(a) of the City Code, each of the Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board, whose names are set out in paragraph 1.2 above, confirms that, other than as disclosed in this Supplementary Prospectus, there have been no material changes to the matters listed in Rule 27.2(b) of the City Code in relation to Deutsche Börse AG since the publication of the Scheme Document, the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus and the Fourth Supplementary Prospectus.

5.3 For the purposes of Rule 27.2(a) of the City Code, each of the LSEG Directors, whose names are set out in paragraph 1.3 above, confirms that, other than as disclosed in this Supplementary Prospectus, there have been no material changes to the matters listed in Rule 27.2(c) of the City Code in relation to LSEG plc since the publication of the Scheme Document, the Original Prospectus, the First Supplementary Prospectus, the Second Supplementary Prospectus, the Third Supplementary Prospectus and the Fourth Supplementary Prospectus.

6 Deutsche Börse 2017 Profit Forecast

6.1 Section A of Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of this Supplementary Prospectus contains the Deutsche Börse 2017 Profit Forecast, which for the purposes of Rule 28.1(c) of the City Code constitutes an ordinary course profit forecast pursuant to Note 2 on Rule 28.1 of the City Code. The Deutsche Börse 2017 Profit Forecast is based on a forecast for the 12 months to 31 December 2017.

6.2 In accordance with Rule 28.1(c)(i) of the City Code, the Deutsche Börse Directors and the Chairman of the Deutsche Börse Supervisory Board, whose names are set out in paragraph 1.2 above, confirm that the Deutsche Börse 2017 Profit Forecast remains valid and has been properly compiled on the basis of the assumptions stated in Section A of Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of this Supplementary Prospectus and that the basis of accounting used is consistent with the accounting policies of Deutsche Börse AG.

6.3 The Deutsche Börse 2017 Profit Forecast was issued by Deutsche Börse AG and no profit forecast has been issued by HoldCo or LSEG plc. Other than the Deutsche Börse 2017 Profit Forecast, which is included in Section A of Annex 2: "*Deutsche Börse 2017 Profit Forecast*" of this Supplementary Prospectus, no statement in this Supplementary Prospectus is intended, or was intended at the time it was made, as a profit forecast and no other statement should be interpreted to mean that earnings for the current or future financial years would necessarily match or exceed the historical published earnings.

7 Consents

7.1 Each of Deutsche Bank AG, Barclays Bank PLC, acting through its Investment Bank, Perella Weinberg Partners UK LLP, Robey Warshaw LLP, Merrill Lynch International, HSBC Bank plc, Goldman Sachs International, J.P. Morgan Cazenove, RBC Europe Limited, Société Générale, UBS Limited, and Lazard & Co., Limited has given and has not withdrawn its written consent to the issue of this Supplementary Prospectus with the inclusion herein of the references to its name in the form and context in which they appear.

7.2 KPMG LLP has given and has not withdrawn its written consent to the inclusion herein of its report on the Deutsche Börse 2017 Profit Forecast in the form and context in which it appears and has authorised the contents of the part of this document which comprise its report for the purposes of Rule 5.5.3R(2)(f) of the Prospectus Rules.

8 Documents available for inspection

In addition to those documents set out in paragraph 23 of Part 24: "*Additional Information*" of the Original Prospectus, paragraph 7 of Part 2: "*Additional Information*" of the First Supplementary Prospectus, paragraph 7 of Part 2: "*Additional Information*" of the Second Supplementary Prospectus, paragraph 9 of Part 2: "*Additional Information*" of the Third Supplementary Prospectus and paragraph 8 of Part 2: "*Additional Information*" of the Fourth Supplementary Prospectus copies of:

(i) this Supplementary Prospectus;

(ii) the Deutsche Börse 2016 Financial Statements; and

(iii) the consent letters referred to in paragraph 7 above,

are available for inspection during usual business hours on any Business Day for a period of 12 months following Admission at the registered address of the Company at 10 Paternoster Square, London, EC4M 7LS, United Kingdom.

9 Definitions

Certain terms used and not otherwise defined in this Supplementary Prospectus, including capitalised terms, are defined in Part 26: "Definitions" of the Original Prospectus, paragraph 8 of Part 2: "*Additional Information*" of the First Supplementary Prospectus, paragraph 9 of Part 2: "*Additional Information*" of the Second Supplementary Prospectus, paragraph 10 of Part 2: "*Additional Information*" of the Third Supplementary Prospectus, and in paragraph 9 of Part 2: "*Additional Information*" of the Fourth Supplementary Prospectus.

In this Supplementary Prospectus, the following expressions have the following meaning unless the context otherwise requires:

Deutsche Börse 2016 Financial Statements	the audited consolidated financial statements of the Deutsche Börse Group for the year ended 31 December 2016.

ANNEX 1

DEUTSCHE BÖRSE 2016 FINANCIAL STATEMENTS

Section A: Historical financial information for the years ended 31 December 2016, 2015 and 2014.

This Section A of Annex 1 contains the audited consolidated financial information of the Deutsche Börse Group for the year ended 31 December 2016, together with the unqualified independent auditor report thereon, as set out in the financial report of the Deutsche Börse Group for the year ended 31 December 2016.

Consolidated income statement

for the period 1 January to 31 December 2016

	Note	2016 €m	(restated) 2015[1] €m
Sales revenue	4	2,557.3	2,419.9
Net interest income from banking business	4	84.0	50.6
Other operating income	4	32.6	23.6
Total revenue		**2,673.9**	**2,494.1**
Volume-related costs	4	–285.2	–273.8
Net revenue (total revenue less volume-related costs)		**2,388.7**	**2,220.3**
Staff costs	5	–585.7	–599.7
Depreciation, amortisation and impairment losses	11, 12	–131.0	–119.0
Other operating expenses	6	–600.7	–564.5
Operating costs		**–1,317.4**	**–1,283.2**
Result from equity investments	8	36.9	–1.5
Earnings before interest and tax (EBIT)		**1,108.2**	**935.6**
Financial income	9	4.6	6.1
Financial expense	9	–79.2	–63.6
Earnings before tax (EBT)		**1,033.6**	**878.1**
Other tax		–1.5	–1.6
Income tax expense	10	–284.5	–227.5
Net profit for the period from continuing operations		**747.6**	**649.0**
Net profit for the period from discontinued operations	2	**550.6**	**52.2**
Net profit for the period		**1,298.2**	**701.2**
Net profit for the period attributable to Deutsche Börse AG shareholders		1,272.7	665.5
Net profit for the period attributable to non-controlling interests		25.5	35.7
Earnings per share (basic) (€)	34	**6.81**	**3.60**
from continuing operations		3.87	3.31
from discontinued operations		2.94	0.29
Earnings per share (diluted) (€)	34	**6.81**	**3.60**
from continuing operations		3.87	3.31
from discontinued operations		2.94	0.29

1) See note 2.

Consolidated statement of comprehensive income

for the period 1 January to 31 December 2016

	Note	2016 €m	(restated) 2015[1] €m
Net profit for the period reported in consolidated income statement		**1,298.2**	**701.2**
Items that will not be reclassified to profit or loss:			
Changes from defined benefit obligations		–27.3	3.2
Deferred taxes	10, 20	7.8	–0.1
		–19.5	**3.1**
Items that may be reclassified subsequently to profit or loss:			
Exchange rate differences from continuing operations	20	–3.8	5.2
Other comprehensive income from investments using the equity method		–0.6	0.6
Exchange rate differences from discontinued operations	20	–200.7	124.2
Remeasurement of cash flow hedges		2.7	2.8
Remeasurement of other financial instruments		105.7	8.6
Deferred taxes from continuing operations	10, 20	–40.9	–3.4
Deferred taxes from discontinued operations	10, 20	147.2	–64.9
		9.6	**73.1**
Other comprehensive income after tax		**–9.9**	**76.2**
Total comprehensive income		**1,288.3**	**777.4**
thereof Deutsche Börse AG shareholders		1,263.4	741.3
thereof non-controlling interests		24.9	36.1
Total comprehensive income attributable to the shareholders of Deutsche Börse AG			
thereof continuing operations		766.3	629.8
thereof discontinuing operations		497.1	111.5

1) See note 2

Consolidated balance sheet

as at 31 December 2016

Assets

	Note	31 Dec 2016 €m	31 Dec 2015 €m
NON-CURRENT ASSETS			
Intangible assets	11		
Software		203.8	225.4
Goodwill		2,721.1	2,898.8
Payments on account and assets under development		188.9	152.5
Other intangible assets		859.9	1,356.3
		3,973.7	**4,633.0**
Property, plant and equipment	12		
Fixtures and fittings		35.9	40.3
Computer hardware, operating and office equipment		75.4	68.7
Payments on account and construction in progress		2.2	0.7
		113.5	**109.7**
Financial assets	13		
Investments in associates and joint ventures		34.3	38.5
Other equity investments		255.4	219.4
Receivables and securities from banking business		1,604.8	2,018.6
Other financial instruments		26.0	32.3
Other loans[1]		0.4	0.2
		1,920.9	**2,309.0**
Financial instruments held by central counterparties	15	5,856.6	7,175.2
Other non-current assets		13.2	11.7
Deferred tax assets	10	62.5	148.3
Total non-current assets		**11,940.4**	**14,386.9**
CURRENT ASSETS			
Receivables and other current assets			
Financial instruments held by central counterparties	15	107,909.6	126,289.6
Receivables and securities from banking business	16	13,465.5	10,142.9
Trade receivables	17	669.8	554.1
Receivables from related parties		2.0	4.7
Income tax assets[2]		107.6	94.2
Other current assets	18	514.2	1,022.3
		122,668.7	**138,107.8**
Restricted bank balances	19	27,777.6	26,870.0
Other cash and bank balances		1,458.1	711.1
Total current assets		**151,904.4**	**165,688.9**
Total assets		**163,844.8**	**180,075.8**

Equity and liabilities

	Note	31 Dec 2016 €m	31 Dec 2015 €m
EQUITY	20		
Subscribed capital		193.0	193.0
Share premium		1,327.8	1,326.0
Treasury shares		–311.4	–315.5
Revaluation surplus		41.5	–5.3
Accumulated profit		3,231.4	2,357.9
Shareholders' equity		**4,482.3**	**3,556.1**
Non-controlling interests		142.2	139.0
Total equity		**4,624.5**	**3,695.1**
NON-CURRENT LIABILITIES			
Provisions for pensions and other employee benefits	22	167.9	140.7
Other non-current provisions	23, 24	117.0	131.7
Deferred tax liabilities	10	235.7	581.3
Interest-bearing liabilities	25	2,284.7	2,546.5
Financial instruments held by central counterparties	15	5,856.6	7,175.2
Other non-current liabilities		7.9	10.0
Total non-current liabilities		**8,669.8**	**10,585.4**
CURRENT LIABILITIES			
Tax provisions[3]	26	274.3	316.7
Other current provisions	23, 27	178.3	174.5
Financial instruments held by central counterparties	15	107,479.4	126,006.5
Liabilities from banking business	28	13,840.3	11,681.4
Other bank loans and overdrafts		0.1	42.2
Trade payables		471.2	372.8
Liabilities to related parties		3.6	1.8
Cash deposits by market participants	29	27,777.6	26,869.0
Other current liabilities	30	525.7	330.4
Total current liabilities		**150,550.5**	**165,795.3**
Total liabilities		**159,220.3**	**176,380.7**
Total equity and liabilities		**163,844.8**	**180,075.8**

1) Thereof €0.4 million (31 December 2015: €0.1 million) receivable from related parties
2) Thereof €2.3 million (31 December 2015: €4.6 million) with a remaining maturity of more than one year from corporation tax credits in accordance with section 37 (5) of the Körperschaftsteuergesetz (KStG, the German Corporation Tax Act)
3) Thereof income tax expense: €231.9 million (2015: €290.5 million)

Consolidated cash flow statement

for the period 1 January to 31 December 2016

	Note	2016 €m	2015 €m
Net profit for the period		1,298.2	701.2
Depreciation, amortisation and impairment losses	11, 12	135.3	143.7
(Decrease)/increase in non-current provisions		–14.7	18.2
Deferred tax (income)/expense	10	–2.9	3.2
Other non-cash (income) / expense		–52.3	7.0
Changes in working capital, net of non-cash items:		56.0	–79.9
Increase in receivables and other assets		–223.4	–66.7
Increase / (decrease) in current liabilities		276.9	–7.7
Increase / (decrease) in non-current liabilities		2.5	–5.5
Net (gain) / loss on disposal of non-current assets		–563.0	3.2
Cash flows from operating activities excluding CCP positions		856.6	796.6
Changes in liabilities from CCP positions		**299.5**	**–371.9**
Changes in receivables from CCP positions		465.3	–414.6
Cash flows from operating activities	33	1,621.4	10.1
Payments to acquire intangible assets		–115.1	–112.2
Payments to acquire property, plant and equipment		–49.8	–42.3
Payments to acquire non-current financial instruments		–178.9	–815.5
Payments to acquire investments in associates and joint ventures		–5.0	–14.1
Payments to acquire subsidiaries, net of cash acquired		–3.9	–641.5
Effects of the disposal of (shares in) subsidiaries, net of cash disposed		917.4	–5.3
Proceeds from the disposal of shares in associates and joint ventures		0.3	0
Net increase in current receivables and securities from banking business with an original term greater than three months		–136.5	–169.7
Proceeds from disposals of available-for-sale non-current financial instruments		149.9	208.3
Proceeds from disposals of other non-current assets		0.1	0
Cash flows from investing activities	33	**578.5**	**–1,592.3**
Proceeds from sale of treasury shares		3.8	202.8
Payments to non-controlling interests		–15.9	–717.5
Proceeds from non-controlling interests		0	3.6
Repayment of long-term financing		–321.6	–150.5
Proceeds from long-term financing		0	1,089.5
Repayment of short-term financing		–495.0	–2,065.0
Proceeds from short-term financing		400.0	2,100.0
Dividends paid		–420.1	–386.8
Cash flows from financing activities	33	**–848.8**	**76.1**
Net change in cash and cash equivalents		**1,351.1**	**–1,506.1**

	Note	2016 €m	2015 €m
Net change in cash and cash equivalents (brought forward)		**1,351.1**	**–1,506.1**
Effect of exchange rate differences		81.4	–4.8
Cash and cash equivalents at beginning of period		–1,579.4	–68.5
Cash and cash equivalents at end of period	33	**–146.9**	**–1,579.4**
Additional information on cash inflows and outflows contained in cash flows from operating activities:			
Interest-similar income received		252.0	205.5
Dividends received		7.5	7.3
Interest paid		–257.5	–192.8
Income tax paid		–277.8	–207.7

Consolidated statement of changes in equity

for the period 1 January to 31 December 2016

	Note	2016 €m	2015 €m	thereof included in total comprehensive income 2016 €m	thereof included in total comprehensive income 2015 €m
Subscribed capital					
Balance as at 1 January		193.0	193.0		
Balance as at 31 December		**193.0**	**193.0**		
Share premium					
Balance as at 1 January		1,326.0	1,249.0		
Sale of treasury shares		1.8	77.0		
Balance as at 31 December		**1,327.8**	**1,326.0**		
Treasury shares					
Balance as at 1 January		–315.5	–443.0		
Placement of treasury shares		0	124.4		
Sales under the Group Share Plan		4.1	3.1		
Balance as at 31 December		**–311.4**	**–315.5**		
Revaluation surplus	20				
Balance as at 1 January		–5.3	–15.9		
Changes from defined benefit obligations	22	–27.3	3.2	–27.3	3.2
Remeasurement of other financial instruments		105.7	8.6	105.7	8.6
Remeasurement of cash flow hedges		2.7	2.8	2.7	2.8
Deferred taxes	10	–34.3	–4.0	–34.3	–4.0
Balance as at 31 December		**41.5**	**–5.3**		
Accumulated profit	20				
Balance as at 1 January		2,357.9	2,446.6		
Dividends paid	21	–420.1	–386.8	0	0
Acquisition of the interest of non-controlling shareholders in STOXX Ltd.		0	–428.0	0	0
Net profit for the period attributable to Deutsche Börse AG shareholders		1,272.7	665.5	1,272.7	665.5
Exchange rate differences and other adjustments		–127.5	125.0	–204.5	129.6
Deferred taxes	10	148.4	–64.4	148.4	–64.4
Balance as at 31 December		**3,231.4**	**2,357.9**		
Shareholders' equity as at 31 December		**4,482.3**	**3,556.1**	**1,263.4**	**741.3**

	Note	2016 €m	2015 €m	thereof included in total comprehensive income 2016 €m	thereof included in total comprehensive income 2015 €m
Shareholders' equity (brought forward)		**4,482.3**	**3,556.1**	**1,263.4**	**741.3**
Non-controlling interests					
Balance as at 1 January		139.0	322.4		
Acquisition of the interest of non-controlling shareholders in STOXX Ltd.		0	–225.8	0	0
Changes due to capital increases/decreases		–21.6	6.3	0	0
Non-controlling interests in net income of subsidiaries for the period		25.5	35.7	25.5	35.7
Exchange rate differences and other adjustments		–0.7	0.4	–0.6	0.4
Total non-controlling interests as at 31 December		**142.2**	**139.0**	**24.9**	**36.1**
Total equity as at 31 December		**4,624.5**	**3,695.1**	**1,288.3**	**777.4**

Notes to the consolidated financial statements
Basis of preparation

1. General principles

Company information

Deutsche Börse AG ("the company") is incorporated as a German public limited company ("Kapitalgesellschaft") and is domiciled in Germany. The company's registered office is in Frankfurt/Main. Deutsche Börse AG is the parent company of Deutsche Börse Group. Deutsche Börse AG and its subsidiaries operate cash and derivatives markets. Its business areas range from pre-IPO and growth financing services, the admission of securities to listing, through trading, clearing and settlement, down to custody of securities. Furthermore, IT services are provided and market data distributed. For details regarding internal organisation and reporting see note 35.

Basis of reporting

The 2016 consolidated financial statements have been prepared in compliance with International Financial Reporting Standards (IFRS) and the related interpretations issued by the International Financial Reporting Standards Interpretations Committee (IFRIC), as adopted by the European Union in accordance with Regulation No. 1606/2002 of the European Parliament and of the Council on the application of international accounting standards.

The disclosures required in accordance with Handelsgesetzbuch (HGB, German Commercial Code) section 315a (1) have been presented in the notes to the consolidated financial statements and the remuneration report of the combined management report. The consolidated financial statements are also based on the interpretations issued by the Rechnungslegungs Interpretations Committee (RIC, Accounting Interpretations Committee) of the Deutsches Rechnungslegungs Standards Committee e.V. (Accounting Standards Committee of Germany), to the extent that these do not contradict the standards and interpretations issued by the IFRIC or the IASB.

New accounting standards – implemented in the year under review

The following standards and interpretations issued by the IASB and adopted by the European Commission were applied to Deutsche Börse Group for the first time in the 2016 reporting period:

Amendment to IFRS 11 "Joint Arrangements – Acquisitions of Interests in Joint Operations" (May 2014)
The amendment clarifies that acquisitions of interests or additional interests in a joint operation that constitutes a business within the meaning of IFRS 3 must be accounted for in accordance with the principles of business combinations accounting in IFRS 3 and other applicable IFRS, with the exception of those principles that conflict with the guidance in IFRS 11. The amendment must be applied for financial years beginning on or after 1 January 2016. The amendment has been adopted by the EU on 24 November 2015.

Amendments to IAS 16 "Property, Plant and Equipment" and IAS 38 "Intangible Assets – Clarification of Acceptable Methods of Depreciation and Amortisation" (May 2014)
The amendments clarify which methods are appropriate for depreciating property, plant and equipment and for amortising intangible assets. In particular, they clarify that revenue-based depreciation of property, plant and equipment is not appropriate at all, and that revenue-based amortisation of intangible assets is only permitted in defined exceptional circumstances. The amendments must be applied for financial years beginning on or after 1 January 2016. The amendments have been adopted by the EU on 2 December 2015.

Amendments resulting from the "Annual Improvements Project 2012–2014" (September 2014)
Amendments affecting the standards IFRS 5, IFRS 7, IAS 19 and IAS 34 are planned. The amendments must be applied for financial years beginning on or after 1 January 2016. The amendments have been adopted by the EU on 15 December 2015.

Amendment to IAS 1 "Presentation of Financial Statements – Disclosure Initiative" (December 2014)
The amendment to the standard IAS 1 is aimed at improving financial reporting disclosures in the notes. Among other things, they emphasise more clearly the concept of materiality, define new requirements for the calculation of subtotals, allow for greater flexibility in the order in which disclosures in the notes are presented, introduce clearer presentation guidance for accounting policies and add requirements for presenting an entity's share of other comprehensive income of associates and joint ventures in the statement of comprehensive income. The amendment must be applied for financial years beginning on or after 1 January 2016. The amendment has been adopted by the EU on 18 December 2015.

New accounting standards – not yet implemented

The following standards and interpretations, which are relevant to Deutsche Börse Group and which Deutsche Börse Group did not adopt in 2016 prior to the effective date, have been published by the IASB prior to the publication of this financial report and partially adopted by the European Commission.

Amendments to IFRS 2 "Classification and Measurement of Share-Based Payments" (June 2016)
The amendments affect the accounting for cash-settled share-based payment transactions. The most important amendment to IFRS 2 is the clarification on how to determine the fair value of liabilities for share-based payments. The amendments must be applied for financial years beginning on or after 1 January 2018. The amendments have not yet been adopted by the EU.

Amendments to IAS 7 "Statement of Cash Flows" Disclosure Initiative (January 2016)
The amendments follow the objective that entities shall provide disclosures allowing users of financial statements to evaluate changes in liabilities arising from financing activities. The amendments must be applied for financial years beginning on or after 1 January 2017. The amendments have not yet been adopted by the EU.

IFRS 9 "Financial Instruments" (July 2014)
IFRS 9 introduces new requirements for the recognition and measurement of financial instruments. The new standard was adopted by the EU on 22 November 2016, and must be applied for financial years beginning on or after 1 January 2018. The new requirements mainly apply to the classification and measurement of financial instruments, and introduce a new expected loss impairment model for financial assets as well as a new set of rules for hedge accounting. Deutsche Börse Group initiated its IFRS 9 implementation project in 2015. In line with the structure of the new standard, Deutsche Börse Group's

project consists of three phases: Classification and Measurement (phase I), Impairment (phase II), and Hedge Accounting (phase III).

Our phase I analysis came to the conclusion that the majority of debt instruments are held within a business model whose objective is to hold debt instruments in order to collect contractual cash flows. As a consequence, the large majority of debt instruments currently held in the available-for-sale category will be measured at amortised cost going forward. Furthermore, we will no longer recognise debt instruments directly in equity at their fair value. Equity instruments in the available-for-sale category, so far recognised at their fair value directly in equity, will generally be classified as at fair value through profit or loss going forward. However, recognition at fair value directly in equity applied so far remains an option, which may be applied on a one-time basis to individual financial instruments. In the future, equity instruments currently recognised at historical cost will in any case be measured at fair value. Again, Deutsche Börse Group may decide (for individual instruments and on a one-time basis) to recognise fair value developments in other comprehensive income, or through profit or loss. Phase II addresses the revision of current impairment processes. The change from the incurred loss model to the expected loss model requires amendments to the Group-internal risk analysis and the calculation of expected losses. At the time this report was produced, Deutsche Börse Group was carrying out an analysis of the consequences on financial reporting. However, we expect only minor implications from phase III, given that Deutsche Börse Group's reporting on hedging relationships is very limited.

The amendments introduced with IFRS 9 require adjustments to our IT systems. The implementation requirements identified so far result mainly from project phase I, and particularly affect the SAP-CFM subledger.

Amendments to IAS 12 "Recognition of Deferred Tax Assets for Unrealised Losses" (January 2016)

Given the current diversity in accounting practice, the amendments to IAS 12 particularly aim to clarify the recognition of deferred tax assets for unrealised losses on assets measured at fair value. The amendments must be applied for financial years beginning on or after 1 January 2017. The amendments have not yet been adopted by the EU.

Amendments to IFRS 10 and IAS 28 "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture" (September 2014)

The amendments clarify that the extent to which gain or loss is recognised for transactions with an associate or joint venture depends on whether the assets sold or contributed constitute a business operation. The application date has been postponed indefinitely.

IFRS 15 "Revenue from Contracts with Customers" (May 2014)

IFRS 15 specifies the recognition of revenue from contracts with customers. In accordance with IFRS 15, revenue has to be recognised when the customer obtains control over the contractual goods and services, and can obtain benefits from these goods and services. Revenue shall be recognised in an amount that reflects the consideration to which the company expects to be entitled. The new IFRS 15 regulations supersede the currently applicable regulations set forth in IAS 11 and IAS 18. The standard has been adopted by the EU on 22 September 2016 and must be applied for financial years beginning on or after 1 January 2018; earlier application is permitted.

Deutsche Börse Group initiated its IFRS 15 implementation project in 2015. This project comprises three phases: phase I focuses on a detailed analysis of revenue from contracts with customers. Phase II assesses the implications of IFRS 15 regarding potential adjustment requirements to existing accounting methods as well as IT processes and systems. Phase III will be the implementation of the adjustment requirements identified during phase II. Phases I and II are currently work in progress, and will be continued throughout 2017. Phase III is scheduled to start in financial year 2017. Based on the current findings of the IFRS 15 analysis, Deutsche Börse Group expects adjustments as to the time at which revenue shall be recognised. Furthermore, we expect additional line items to be added to the consolidated balance sheet to recognise contract assets and liabilities.

Deutsche Börse Group did not exercise the early application option for IFRS 15, but will use the modified retrospective approach and disclose the cumulative effect from the first-time application of IFRS 15 for the financial year beginning on 1 January 2018.

IFRS 16 "Leases" (January 2016)
IFRS 16 introduced new rules for the recognition of leases. The new standard sets out the principles for the recognition, measurement, presentation and disclosure of all long-term leases on the lessee's statement of financial position, whereby the right of use is recognised as an asset, and the payment obligation in the form of a financial liability. The standard must be applied for financial years beginning on or after 1 January 2019; earlier application is permitted only if that entity is also applying IFRS 15 at the same time. The standard has not yet been adopted by the EU.

Deutsche Börse Group's internal project for the assessment of implications from IFRS 16 was initiated in the fourth quarter of 2016. The project has not yet delivered any detailed findings. However, we expect the right-of-use approach to have a significant effect on the balance sheet structure and the respective key figures.

Amendments to IAS 40 "Transfers of Investment Property" (December 2016)
The amendments clarify the conditions for transfers to, or from, investment property classification. More specifically, the question was whether a property under construction or development that was previously classified as inventory could be transferred to investment property when there was an evident change in use. The amendments must be applied for financial years beginning on or after 1 January 2018; earlier application is permitted. The amendments have not yet been adopted by the EU.

Amendments resulting from the "Annual Improvements Project 2014–2016" (December 2016)
Amendments affecting the standards IFRS 1, IFRS 12 and IAS 28. Amendments to IFRS 1 and IAS 28 must be applied for financial years beginning on or after 1 January 2018; amendments to IFRS 12 must be applied for financial years beginning on or after 1 January 2017. The amendments have not yet been adopted by the EU.

IFRIC 22 "Foreign Currency Transactions and Advance Consideration" (December 2016)
This interpretation aims to clarify the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency. IFRIC 22 must be applied for financial years beginning on or after 1 January 2018; earlier application is permitted. This interpretation has not yet been adopted by the EU.

2. Basis of consolidation

Deutsche Börse AG's equity interests in subsidiaries, associates and joint ventures as at 31 December 2016 included in the consolidated financial statements are presented in the following tables. Unless otherwise stated, the financial information in these tables is presented in accordance with the generally accepted accounting principles in the companies' countries of domicile.

Fully consolidated subsidiaries (part 1)

Company	Domicile	Equity interest as at 31 Dec 2016 direct/(indirect) %
Assam SellerCo, Inc.[2)]	New York, USA	100.00
Assam SellerCo Service, Inc.[3)]	New York, USA	(100.00)
MNI Financial and Economic Information (Beijing) Co. Ltd.	Beijing, China	(100.00)
Need to Know News, LLC	Chicago, USA	(100.00)
Börse Frankfurt Zertifikate AG	Frankfurt/Main, Germany	100.00
Börse Frankfurt Zertifikate Holding S.A. in liquidation	Luxembourg, Luxembourg	100.00
Clearstream Holding AG	Frankfurt/Main, Germany	100.00
Clearstream International S.A.	Luxembourg, Luxembourg	(100.00)
Clearstream Banking S.A.	Luxembourg, Luxembourg	(100.00)
Clearstream Banking Japan, Ltd.	Tokyo, Japan	(100.00)
REGIS-TR S.A.	Luxembourg, Luxembourg	(50.00)
Clearstream Banking AG	Frankfurt/Main, Germany	(100.00)
Clearstream Global Securities Services Limited	Cork, Ireland	(100.00)
Clearstream Operations Prague s.r.o.	Prague, Czech Republic	(100.00)
Clearstream Services S.A.	Luxembourg, Luxembourg	(100.00)
Deutsche Boerse Asia Holding Pte. Ltd.	Singapore, Singapore	100.00
Eurex Clearing Asia Pte. Ltd.	Singapore, Singapore	(100.00)
Eurex Exchange Asia Pte. Ltd.	Singapore, Singapore	(100.00)
DB1 Ventures GmbH	Frankfurt/Main, Germany	100.00
Deutsche Boerse Market Data+Services Singapore Pte. Ltd.	Singapore, Singapore	100.00
Deutsche Boerse Systems Inc.	Chicago, USA	100.00
Deutsche Börse Photography Foundation gGmbH	Frankfurt/Main, Germany	100.00
Deutsche Börse Services s.r.o.	Prague, Czech Republic	100.00
Eurex Frankfurt AG	Frankfurt/Main, Germany	100.00
Eurex Clearing AG	Frankfurt/Main, Germany	(100.00)
Eurex Clearing Security Trustee GmbH	Frankfurt/Main, Germany	(100.00)
Eurex Bonds GmbH	Frankfurt/Main, Germany	(79.44)
Eurex Repo GmbH	Frankfurt/Main, Germany	(100.00)

1) 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
2) Until 27 July 2016: Market News International Inc.
3) Assam SellerCo Service, Inc. is part of the Assam SellerCo, Inc. subgroup.
4) Before profit transfer or loss absorption
5) Preliminary figures

Currency	Ordinary share capital thousand	Equity[1] thousand	Total assets thousand	Sales revenue 2016 thousand	Net profit/loss 2016 thousand	Initially consolidated
US$	9,911	23,049	24,262	13,877	149	2009
US$	n.a.	n.a.	n.a.	n.a.	n.a.	2009
CNY	1,301	1,745	1,626	3,549	162	2011
US$	0	2,098	2,098	0	0	2009
€	140	13,168	17,182	19,004	3,972	2013
€	50	171	265	0	–93	2013
€	101,000	2,285,314	2,454,949	33	167,173[4]	2007
€	25,000	1,103,930	1,180,353	66,915	188,005	2002
€	92,000[5]	1,193,498[5]	14,686,261[5]	496,172[5][6]	172,084[5]	2002
JPY	49,000[5]	169,849[5]	205,909[5]	174,222[5]	20,041[5]	2009
€	3,600[5]	6,129[5]	8,502[5]	8,872[5]	548[5]	2010
€	25,000	346,133	1,513,678	286,195[6]	47,517	2002
€	6,211	9,870	13,490	25,414	1,823	2014
CZK	160,200[5]	195,113[5]	319,559[5]	472,760[5]	11,480[5]	2008
€	30,000	110,557	168,771	232,902	5,910	2002
€	20,000[5]	15,237[5]	16,124[5]	96[5]	–4,553[5]	2013
€	10,000[5]	10,397[5]	10,433[5]	1,105[5]	176[5]	2013
€	5,000[5]	472[5]	1,130[5]	0[5]	–2,060[5]	2013
€	25	12	23	0	–13	16 Mar 2016
S$	606[5]	479[5]	1,319[5]	3,004[5]	–942[5]	1 Jan 2015
US$	400[5]	40,003[5]	236,974[5]	15,613[5]	7,020[5]	2000
€	25	177	201	0	16	16 July 2015
CZK	200[5]	259,326[5]	448,148[5]	1,023,377[5]	61,701[5]	2006
€	6,000	1,635,692	1,876,080	24,805	512,630[7]	1998
€	25,000	364,813	25,714,767	16,987[6]	2,209[4]	1998
€	25	79	90	37	1	2013
€	3,600	10,785	12,888	3,560	344	2001
€	100	7,000	16,063	12,658	4,237[4]	2001

6) Consists of interest and commission results due to business operations

7) Thereof income from profit-pooling agreements with their subsidiaries amounting to €6,446 thousand (including €4,237 thousand for Eurex Repo GmbH and €2,209 thousand for Eurex Clearing AG)

Fully consolidated subsidiaries (part 2)

Company	Domicile	Equity interest as at 31 Dec 2016 direct/(indirect) %
Eurex Global Derivatives AG	Zurich, Switzerland	100.00
Eurex Zürich AG	Zurich, Switzerland	(100.00)[2]
European Energy Exchange AG	Leipzig, Germany	(62.91)[3]
Agricultural Commodity Exchange GmbH	Leipzig, Germany	(62.91)
APX Shipping B.V.	Amsterdam, Netherlands	(62.91)
Cleartrade Exchange Pte. Limited	Singapore, Singapore	(62.91)
EEX Link GmbH	Leipzig, Germany	(62.91)
European Commodity Clearing AG	Leipzig, Germany	(62.91)
European Commodity Clearing Luxembourg S.à r.l.	Luxembourg, Luxembourg	(62.91)
EEX Power Derivatives GmbH	Leipzig, Germany	(62.91)
Global Environmental Exchange GmbH	Leipzig, Germany	(62.91)
Power Exchange Central Europe a.s.	Prague, Czech Republic	(41.94)
Powernext SA	Paris, France	(55.19)
EPEX SPOT SE	Paris, France	(28.97)[6]
APX Commodities Ltd.	London, United Kingdom	(28.97)
EPEX Netherlands B.V.	Amsterdam, Netherlands	(28.97)
EPEX SPOT Belgium S.A.[8]	Brussels, Belgium	(28.97)
EPEX SPOT Schweiz AG	Bern, Switzerland	(28.97)
JV Epex-Soops B.V.	Amsterdam, Netherlands	(17.38)
Gaspoint Nordic A/S	Brøndby, Denmark	(55.19)
PEGAS CEGH Gas Exchange Services GmbH	Vienna, Austria	(28.14)
Eurex Services GmbH (dormant)	Frankfurt/Main, Germany	100.00
Finnovation S.A.	Luxembourg, Luxembourg	100.00
Impendium Systems Ltd	London, United Kingdom	100.00
STOXX Ltd.	Zurich, Switzerland	100.00
STOXX Australia Pty Limited	Sydney, Australia	(100.00)
Tradegate Exchange GmbH	Berlin, Germany	78.72[9]
360 Treasury Systems AG	Frankfurt/Main, Germany	100.00
360T Asia Pacific Pte. Ltd.	Singapore, Singapore	(100.00)
360 Trading Networks Inc.	New York, USA	(100.00)
360 Trading Networks LLC	Dubai, United Arab Emirates (UAE)	(100.00)
Finbird GmbH	Frankfurt/Main, Germany	(100.00)
Finbird Limited	Jerusalem, Israel	(100.00)
ThreeSixty Trading Networks (India) Pte. Ltd.	Mumbai, India	(100.00)

1) 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
2) Thereof 50 per cent directly and 50 per cent indirectly held via Eurex Global Derivatives AG
3) Voting rights
4) Thereof income and expense from profit-pooling agreements with their subsidiaries amounting to a total of €71,474 thousand
5) Before profit transfer or loss absorption
6) Thereof 6.72 per cent indirectly and 22.21 per cent directly held via Powernext SA
7) Preliminary figures
8) Until 1 October 2016: Belpex SA
9) Thereof 3.72 per cent indirectly held via Tradegate AG Wertpapierhandelsbank
10) Numbers based on the divergent financial year from 1 April 2015 to 31 March 2016.

Currency	Ordinary share capital thousand	Equity[1] thousand	Total assets thousand	Sales revenue 2016 thousand	Net profit/loss 2016 thousand	Initially consolidated
€	83	496,809	522,414	127,051	62,898	2012
€	8,313	302,565	343,350	49,568	5,461	1998
€	40,050	129,282	153,941	28,424	66,132[4]	2014
€	100	2,046	2,093	200	–1,697[5]	2014
€	0	0	8	40	32	4 May 2015
US$	19,800	2,795	3,259	1,431	–1,702	2014
€	50	51	99	134	3	1 Jan 2016
€	1,015	73,935	3,078,937	82,407	48,195[5]	2014
€	13	82	334,234	30,434	68	2014
€	125	6,018	18,948	53,204	27,666[5]	2014
€	50	48	1,624	2,140	–2,690[5]	2014
CZK	30,000	34,215	45,389	42,834	3,947	31 May 2016
€	12,584	29,803	36,054	26,651	9,927	1 Jan 2015
€	6,168	65,135	93,635	67,127	22,845	1 Jan 2015
GBP	500	1,837	3,667	4,550	240	4 May 2015
€	0	0	2	0	0	1 Dec 2016
€	3,000	3,782	9,840	4,235	239	4 May 2015
CHF	100	157	178	331	22	1 Jan 2015
€	18	186	189	17	11	1 Jan 2015
DKK	2,000	5,104	6,290	11,914	5,112	1 July 2016
€	35	7,117	7,193	97	–367	2 Sep 2016
€	25	101	101	0	0	2007
€	156,400[7]	197,876[7]	230,728[7]	100,981[7]	45,072[7]	2008
GBP	7,804	495	801	1,895	–597	2014
CHF	673	125,976	147,578	118,869	56,661	2009
AU$	0	57	184	312	28	31 July 2015
€	500	1,537	2,163	2,542	526	2010
€	128	43,434	63,594	69,045	13,633	15 Oct 2015
S$	550	4,241	7,813	11,795	–112	15 Oct 2015
US$	300	6,782	8,074	6,855	122	15 Oct 2015
€	34	336	571	874	41	15 Oct 2015
€	25	1,424	1,583	352	0	15 Oct 2015
ILS	1	–1,273	830	4,408	–198	15 Oct 2015
INR	300[10]	64,340[10]	74,687[10]	34,691[10]	1,904[10]	15 Oct 2015

As at 31 December 2016, Deutsche Börse AG indirectly held 50 per cent of the voting rights in REGIS-TR S.A., Luxembourg. Since Deutsche Börse's subsidiary Clearstream Banking S.A., which holds 50 per cent of the voting rights, has the right to appoint the chairman of the board of directors, who in turn has a casting vote, there is a presumption of control.

Changes to consolidated subsidiaries

	Germany	Foreign	Total
As at 1 January 2016	21	54	75
Additions	2	5	7
Disposals	–3	–17	–20
As at 31 December 2016	**20**	**42**	**62**

360T Beteiligungs GmbH, Frankfurt/Main, Germany, and its wholly owned subsidiary, 360T Verwaltungs GmbH, Frankfurt/Main, Germany, were merged into 360 Treasury Systems AG, Frankfurt/Main, Germany, effective 1 January 2016. With Deutsche Börse AG as the sole shareholder, it is deemed to exercise control as defined in IFRS 10, and the entities are therefore still fully consolidated in Deutsche Börse Group's consolidated financial statements.

Effective 1 January 2016, Indexium AG, Zurich, Switzerland – in which Deutsche Börse AG held a 100 per cent interest – merged with STOXX Ltd., Zurich, Switzerland. Deutsche Börse AG holds an interest of 100 per cent in the latter company. According to the business combination agreement from 3 June 2016, all assets and liabilities of Indexium AG were passed on retroactively to STOXX Ltd. Following registration of the business combination, Indexium AG was deleted from the commercial register as at 24 June 2016.

During the 2016 financial year, EEX Link GmbH (EEX Link) – wholly owned by European Energy Exchange AG – commenced business operations. EEX Link provides services with the aim to bundle liquidity between regulated power/gas exchanges and less regulated markets, on which no Multilateral Trading Facility (MTF) is used. EEX Link has been fully consolidated since 1 January 2016.

Effective 25 February 2016, the Spanish stock exchange operator Bolsas y Mercados Españoles Sociedad Holding de Mercados y Sistemas Financieros, S.A., Madrid, Spain, (BME) acquired Deutsche Börse AG's 50 per cent share of Infobolsa S.A., Madrid, Spain. BME also assumed Deutsche Börse AG's interest in the wholly owned subsidiaries of Infobolsa S.A. as part of the transaction, including Difubolsa, Serviços de Difusão e Informação de Bolsa, S.A., Lisbon, Portugal; Infobolsa Deutschland GmbH, Frankfurt/Main, Germany; and Open Finance, S.L., Madrid, Spain. Until that time, Deutsche Börse AG and BME had each held an interest of 50 per cent in the shares of Infobolsa S.A. BME paid a purchase price of €8.2 million in cash to Deutsche Börse AG.

With the signature of the partnership agreement from 16 March 2016, Deutsche Börse AG founded DB1 Ventures GmbH, Frankfurt/Main, Germany, – which was recorded in the commercial register on 2 May 2016 – and took over 25,000 shares of a price of €1.00 per share. With Deutsche Börse AG as the sole shareholder, there is a presumption of control in accordance with IFRS 10. The subsidiary has been included in full in the consolidated financial statements since the first quarter of 2016.

Effective 31 May 2016, European Energy Exchange, Leipzig, Germany, (EEX) acquired another 47.78 per cent of the voting shares of Cleartrade Exchange Pte. Limited, Singapore, (CLTX) and thereby increased its interest in the company to 100 per cent. Deutsche Börse Group paid a consideration of £1.00 plus an earn-out component. The company continues to be included in full in the consolidated financial statements.

In order to expand the energy derivatives market in Central and Eastern Europe, EEX acquired a stake of 66.67 per cent in Power Exchange Central Europe a.s., Prague, Czech Republic, (PXE) for a purchase price of €4.4 million (effective 31 May 2016). After final approval from the Czech national bank on 16 June 2016, EEX gained control over PXE within the meaning of IFRS 10. Since then, the company has been fully included in the consolidated financial statements. The acquired goodwill of €1.7 million mainly reflects expected revenue synergies to be generated by facilitated cross-border trading.

Goodwill resulting from the business combination with Power Exchange Central Europe a.s.

	Preliminary goodwill calculation 31 May 2016 €m
Consideration transferred	
Purchase price	2.8
Acquired bank balances	–1.2
Total consideration	**1.6**
Acquired assets and liabilities	
Assets (without goodwill)	2.1
Liabilities	–0.6
Non-controlling interests	–1.6
Total assets and liabilities acquired	**–0.1**
Goodwill (not tax-deductible)	**1.7**

The full consolidation of PXE generated an increase of €0.8 million in sales revenue, whereas it did not materially affect earnings after tax following offsetting of non-controlling interests. Full consolidation as at 1 January 2016 would have led to a rise of €1.4 million in sales revenue and an increase of earnings after tax of €0.1 million.

In order to open up the Danish gas-trade market, EEX acquired another 50 per cent of the shares of Gaspoint Nordic A/S, Brøndby, Denmark, for a purchase price of €0.7 million, thereby increasing its interest in the company to 100 per cent, effective 1 July 2016. In July, the shares were transferred to Powernext SA, Paris, France. Since the effective date, Gaspoint Nordic A/S has been no longer recognised as an associate, but has been included in full in the consolidated financial statements as a wholly owned subsidiary of Powernext SA, in which Deutsche Börse AG indirectly holds a stake of 55.19 per cent. This transaction allows to exploit synergies through the concentration of gas trading on the PEGAS platform operated by Powernext SA.

The following assets and liabilities were identified as part of the purchase price allocation:

Goodwill resulting from the business combination with Gaspoint Nordic A/S

	Preliminary goodwill calculation 1 July 2016 €m
Consideration transferred	
Purchase price	0.9
Acquired bank balances	–1.2
Total consideration	**–0.3**
Acquired assets and liabilities	
Assets (without goodwill)	0.4
Liabilities	–0.4
Non-controlling interests	–0.4
Total assets and liabilities acquired	**–0.4**
Goodwill (not tax-deductible)	**0.1**

The full consolidation of Gaspoint Nordic A/S generated a rise of €0.7 million in sales revenue as well as an increase of €0.2 million in earnings after tax and offsetting of non-controlling interests. Full consolidation as at 1 January 2016 would have led to a rise of €1.5 million in sales revenue and an increase of €0.5 million in earnings after tax and offsetting of non-controlling interests.

Deutsche Börse AG transferred the business operations of Market News International, Inc., New York, USA, (MNI) onto Hawking LLC as part of an asset deal. The transaction was closed on 8 July 2016. This transaction also provides for the transfer of 100 per cent of the shares in MNI Financial and Economic Information (Beijing) Co. Ltd., Beijing, China, (MNI Beijing), which is however still subject to approval by the Chinese authorities. This transaction was made within the context of the asset deal, meaning that Deutsche Börse AG directly or indirectly retains its 100 per cent interest in MNI and its subsidiaries, Market News International Services Inc., Need to Know News LLC and – until approval from Chinese authorities – MNI Beijing. Market News International, Inc. changed its company name to Assam SellerCo, Inc. as at 11 July 2016. Market News International Services Inc. changed its company name to Assam SellerCo Service Inc. on the same date.

Cleartrade Exchange (UK) Limited, London, United Kingdom, a wholly owned subsidiary of Cleartrade Exchange Pte. Limited, Singapore (CLTX), which is in turn a wholly owned subsidiary of EEX, was liquidated effective 3 January 2017, as part of CLTX's restructuring.

During the 2016 financial year, Powernext SA, together with Austrian Central European Gas Hub AG (CEGH), established a new subsidiary, PEGAS CEGH Gas Exchange Services GmbH (PCG). Powernext SA holds a 51 per cent stake in the capital of PCG. Since its establishment on 2 September 2016, PCG has been fully consolidated in the consolidated financial statements. In September 2016, PCG acquired the Austrian gas business from CEGH. With this transaction, Powernext profits from synergy effects generated from contract trading for the large European gas markets on the common PEGAS platform. Since the launch of its business operations on 1 December 2016, the new entity contributed €0.2 million to the Group's sales revenue, whereas it did not materially affect earnings, after offsetting non-controlling interests.

Goodwill resulting from the business combination with PEGAS CEGH Gas Exchange Services GmbH

	Preliminary goodwill calculation 30 Sep 2016 €m
Consideration transferred	**2.6**
Acquired assets and liabilities	
Assets (without goodwill)	4.3
Liabilities	–0.6
Non-controlling interests	–2.6
Total assets and liabilities acquired	**1.1**
Goodwill (not tax-deductible)	**1.5**

Effective 31 December 2016, several APX entities were merged into Group-internal EPEX SPOT SE, Paris, France. EPEX Netherlands BV, Amsterdam, the Netherlands, was established during 2016, as part of the ongoing reorganisation. It assumed the former employees of APX Holding BV, including their pension claims. The new entity has been fully consolidated since the launch of its business operations on 1 December 2016. In addition, APX Shipping BV was merged within the Group into European Energy Exchange AG.

Belpex SA, Brussels, Belgium, changed its company name to EPEX SPOT Belgium S.A. as at 31 December 2016.

The following table summarises the main financial information of associates and joint ventures; data comprise the totals of each company according to the respective local GAAP and not proportional values from the view of Deutsche Börse Group.

Associates and joint ventures

Company	Domicile	Segment	Equity interest as at 31 Dec 2016 direct/(indirect) %
Joint ventures			
Bondcube Limited in Administration	London, United Kingdom	Xetra	30.00
Associates			
BrainTrade Gesellschaft für Börsensysteme mbH	Frankfurt/Main, Germany	Xetra	(28.58)[2]
China Europe International Exchange AG	Frankfurt/Main, Germany	Eurex	40.00
Deutsche Börse Commodities GmbH	Frankfurt/Main, Germany	Xetra	16.20
Digital Vega FX Ltd	London, United Kingdom	Eurex	24.03
figo GmbH	Hamburg, Germany	MD+S	18.67
Global Markets Exchange Group International LLP	London, United Kingdom	Eurex	45.13
Index Marketing Solutions Limited	London, United Kingdom	Eurex	31.45
LuxCSD S.A.	Luxembourg, Luxembourg	Clearstream	(50.00)
PHINEO gAG	Berlin, Germany	Xetra	12.00[8]
R5FX Ltd	London, United Kingdom	Eurex	24.37
SEEPEX a.d.	Belgrade, Serbia	Eurex	(7.24)
Switex GmbH	Hamburg, Germany	Xetra	40.00
Tradegate AG Wertpapierhandelsbank[9]	Berlin, Germany	Xetra	14.86
ZDB Cloud Exchange GmbH in Liquidation[10] [11]	Eschborn, Germany	Eurex	49.90
Zimory GmbH in Liquidation	Berlin, Germany	Eurex	30.03[12]

1) Values up to the date of Administration on 21 July 2015
2) Thereof 14.29 per cent held directly and 14.29 per cent indirectly via Börse Frankfurt Zertifikate AG
3) Value of equity
4) The financials refer to the financial year from 1 December 2015 to 30 November 2016.
5) Figures as at 31 December 2014
6) The financials refer to the financial year from 1 February 2016 to 31 January 2017.
7) Figures as at 31 August 2015
8) In addition, Deutsche Börse AG holds an interest in Phineo Pool GbR, Berlin, Germany, which holds a 48 per cent stake in PHINEO gAG.
9) As at the reporting date, the fair value of the stake in the listed company amounted to €31.2 million.
10) Until 5 September 2016: Deutsche Börse Cloud Exchange AG
11) ZDB Cloud Exchange GmbH is part of the Zimory GmbH subgroup.
12) Voting rights

Following the admission of new partners and the reduction of the existing partners' interests in Global Markets Exchange Group International LLP, London, United Kingdom, (GMEX), Deutsche Börse AG's interest in GMEX increased by 13.42 per cent to 45.13 per cent. Since Deutsche Börse AG exercises significant influence within the meaning of IAS 28, GMEX continues to be classified as an associate and is accounted for using the equity method.

Effective 4 November 2016, Deutsche Börse AG acquired a 40 per cent stake in the capital of Switex GmbH, Frankfurt/Main, Germany. Since Deutsche Börse AG exercises significant influence within the meaning of IAS 28, Switex GmbH has been classified as an associate and has been accounted for using the equity method since that date.

Effective 4 November 2016, Deutsche Börse AG acquired 18.67 per cent of the voting shares in figo GmbH, Hamburg, Germany. Since Deutsche Börse AG exercises significant influence within the meaning of IAS 28.6 (a) by representation on the board of directors (Beirat), figo GmbH continues to be classified as an associate and is accounted for using the equity method.

	Currency	Ordinary share capital thousand	Assets thousand	Liabilities thousand	Sales revenue 2016 thousand	Net profit/loss 2016 thousand	Associate since
	GBP	2[1]	2,183[1]	2,548[1]	0[1]	–215[1]	2014
	€	1,400	4,545	2,931	4,554	214	2013
	€	27,000	22,987	1,090	82	–4,373	31 Oct 2015
	€	1,000	4,163,028	4,158,276	7,471	2,126	2007
	GBP	537[3,4]	1,384[4]	603[4]	548[4]	106[4]	2011
	€	75	6,787	105	531	–1,975	11 Nov 2016
	GBP	5,026[6]	801[6]	411[6]	0[6]	–147[6]	2013
	GBP	0[7]	59[7]	60[7]	0[7]	0[7]	2014
	€	6,000	7,139	1,392	2,450	425	30 June 2015
	€	50	4,372	725	1,195	783	2010
	GBP	2	764	625	130	–1,177	2014
	RSD	120,000	226,519	39,166	51,108	–30,056	14 July 2015
	€	25	25	0	0	0	4 Nov 2016
	€	24,403	133,575	90,938	53,486	12,644	2010
	€	50	237	79	38	–902	2013
	€	267	587	174	33	–525	2013

Effective 21 December 2016, Deutsche Börse AG exercised a call option according to the share purchase and acquisition agreement entered into with Berliner Effektengesellschaft AG, Berlin, Germany. Under the transaction, Deutsche Börse AG will acquire an additional 4.96 per cent stake in Tradegate AG Wertpapierhandelsbank, Berlin, Germany (Tradegate AG), which holds 25 per cent of the fully-consolidated Tradegate Exchange GmbH, Berlin, Germany. Hence, Deutsche Börse AG's interest will be 19.82 per cent after the transaction. The acquisition of the additional shares is however still subject to regulatory approval. Since Deutsche Börse AG exercises significant influence within the meaning of IAS 28, Tradegate AG continues to be classified as an associate and is accounted for using the equity method.

EMCC European Market Coupling GmbH i.L., Hamburg, Germany, was wound up by means of a partner resolution dated 15 June 2014. EEX held a stake of 20 per cent in this company, which was liquidated as at 8 December 2016 and is thus no longer included in the scope of consolidation.

Zimory GmbH, Berlin, Germany, and Deutsche Börse Cloud Exchange AG, Frankfurt/Main, Germany (DBCE), were wound up by means of a partner resolution dated 5 September 2016. Based on the partner resolution dated 5 September 2016, DBCE was transformed into ZDB Cloud Exchange GmbH, with registered office in Eschborn, Germany, by way of a change of company form.

Where Deutsche Börse Group's share of the voting rights in a company amounts to less than 20 per cent, Deutsche Börse Group's significant influence is exercised in accordance with IAS 28.6 (a) through the Group's representation on the supervisory board or the board of directors of the following companies as well as through corresponding monitoring systems:

- Deutsche Börse Commodities GmbH, Frankfurt/Main, Germany
- figo GmbH, Hamburg, Germany
- Index Marketing Solutions Limited, London, United Kingdom
- SEEPEX a.d., Belgrade, Serbia
- PHINEO gAG, Berlin, Germany

Discontinued operation

Effective 30 June 2016, Deutsche Börse AG sold International Securities Exchange Holdings, Inc., New York, USA, (ISE) and its parent company, U.S. Exchange Holdings, Inc., Chicago, USA, to Nasdaq, Inc. against a cash payment of US$1.1 billion. As part of the transaction, Nasdaq, Inc. also assumed Deutsche Börse AG's interests in the wholly owned subsidiaries of ISE – International Securities Exchange, LLC, New York, USA; ETC Acquisition Corp., New York, USA; ISE Gemini, LLC, New York, USA; Longitude LLC, New York, USA; and Longitude S.A., Luxembourg. Deutsche Börse AG held an interest of 100 per cent in the entities listed above.

The disposal of ISE as of 30 June 2016 is disclosed as a discontinued operation in accordance with IFRS 5. The following table shows the composition of net profit for the period from discontinued operation amounting to €550.6 million for 2016 (2015: €52.2 million), as well as the composition of total comprehensive income from discontinued operations amounting to €497.1 million (2015: €111.5 million):

Income from discontinued operations

	2016 €m	2015 €m
Sales revenue	149.3	302.9
Other operating income	568.9	0
Volume-related costs	–77.4	–155.8
Net revenue	**640.8**	**147.1**
Operating costs	–58.5	–92.4
Result from equity investments	0.6	2.3
Earnings before interest and tax (EBIT)	**582.9**	**57.0**
Financial income	–26.9	15.1
Earnings before tax (EBT)	**556.0**	**72.1**
Income tax expense	–5.4	–19.9
Net profit for the period from discontinued operations	**550.6**	**52.2**
Deferred taxes	147.2	–64.9
Exchange rate differences	–200.7	124.2
Other comprehensive income after tax from discontinued operations	**–53.5**	**59.3**
Total comprehensive income from discontinued operations	**497.1**	**111.5**

Net change in cash and cash equivalents from discontinued operations are comprised of the following items:

Cash flow statement from discontinued operations

	2016 €m	2015 €m
Cash flows from operating activities	– 45.6	17.8
Cash flows from investing activities	889.2	– 9.7
Cash flows from financing activities	0	0
Net change in cash and cash equivalents	**843.6**	**8.1**

The gain from the disposal was disclosed in net profit for the period from discontinued operations and was based on the following calculation:

Gain from disposal of ISE

	30 June 2016 €m
Proceeds from disposal	**989.6**
Hedging result and further adjustments	– 60.4
Cash disposed	– 13.0
Proceeds from disposal, net of cash disposed	**916.2**
Assets and liabilities disposed	
Goodwill	153.8
Miscellaneous intangible assets	486.0
Property, plant & equipment	7.8
Financial assets	45.4
Other non-current assets	63.5
Receivables and other current assets	148.6
Deferred tax liabilities	– 184.2
Other non-current liabilities	– 6.1
Current liabilities	– 161.5
P&L effects from currency translation	– 206.0
Total assets and liabilities disposed	**347.3**
Gain on disposal	**568.9**

Unless explicitly indicated otherwise, all disclosures made in the notes to the consolidated financial statements exclusively refer to Deutsche Börse Group’s continuing operations. Prior-year figures have been adjusted accordingly.

3. Summary of key accounting policies

Deutsche Börse AG's consolidated financial statements have been prepared in euros, the functional currency of Deutsche Börse AG. Unless stated otherwise, all amounts are shown in millions of euros (€m). Due to rounding, the amounts may differ from unrounded figures.

The annual financial statements of subsidiaries included in the consolidated financial statements have been prepared on the basis of the Group-wide accounting policies based on IFRS that are described in the following. They were applied consistently to the periods shown.

Recognition of revenue and expenses

Trading, clearing and settlement fees are recognised at the trade date and billed on a monthly basis. Custody revenue and revenue for systems development and systems operation are generally recognised rateably and billed on a monthly basis. Sales of price information are billed on a monthly basis. Fees charged to trading participants in connection with expenses for supervision by the US Securities and Exchange Commission (SEC) were recognised at the settlement date.

As a rule, rebates are deducted from sales revenue.

The item "volume-related costs" comprises expenses that depend on the number of certain trade or settlement transactions, or on the custody volume, the Global Securities Financing volume, or the volume of market data acquired, or that result from revenue-sharing agreements or maker-taker pricing models. Volume-related costs are not incurred if the corresponding revenue is no longer generated.

Interest income and expense are recognised using the effective interest method over the respective financial instrument's term to maturity. Interest income is recognised when it is probable that the economic benefits associated with the transaction will flow to the entity and the income can be measured reliably. Interest expense is recognised in the period in which it is incurred. Interest income and expense from banking business are set off in the consolidated income statement and disclosed separately in note 4.

Dividends are recognised in net income from equity investments if the right to receive payment is based on legally assertable claims.

The consolidated income statement is structured using the nature of expense method.

Research and development costs

Research costs are expensed in the period in which they are incurred. The development costs of an asset are only capitalised if they can be reliably estimated, if all the definition criteria for an asset are met and if the future economic benefits resulting from capitalising the development costs can be demonstrated. These development costs include direct labour costs, costs of purchased services and workplace costs, including proportionate overheads that can be directly attributed to the preparation of the respective asset for use, such as costs for the software development environment. Development costs that do not meet the requirements for capitalisation are recognised as expenses in the consolidated income statement. Interest expense that cannot be allocated directly to one of the development projects is recognised in profit or loss in the reporting period and not included in capitalised development costs. If research and development costs cannot be separated, the expenditures are recognised as expenses in the period in which they are incurred.

All development costs (both primary costs and costs incurred subsequently) are allocated to projects. The projects are broken down into the following phases in order to decide which cost components must be capitalised and which cannot be capitalised:

Phases not eligible for capitalisation
1. Design
- Definition of product design
- Specification of the expected economic benefit
- Initial cost and revenue forecast

Phases eligible for capitalisation
2. Detailed specifications
- Compilation and review of precise specifications
- Troubleshooting process

3. Building and testing
- Software programming
- Product testing

Phases not eligible for capitalisation
4. Acceptance
- Planning and implementation of acceptance tests

5. Simulation
- Preparation and implementation of simulation
- Compilation and testing of simulation software packages
- Compilation and review of documents

6. Roll-out
- Planning of product launch
- Compilation and dispatch of production systems
- Compilation and review of documents

In accordance with IAS 38, only expenses attributable to the "detailed specifications" and "building and testing" phases are capitalised. All other phases of software development projects are expensed.

Intangible assets

Capitalised development costs are amortised from the date of first use of the software using the straight-line method over the asset's expected useful life. The useful life of internally developed software is generally assumed to be five years; a useful life of seven years is used as the basis in the case of newly developed trading platforms and clearing or settlement systems, and for certain enhancements of these systems.

Purchased software is carried at cost and reduced by amortisation and, where necessary, impairment losses. Amortisation is charged using the straight-line method over the expected useful life or at most until the right of use has expired.

Useful life of software

Asset	Amortisation period
Standard software	3 to 10 years
Purchased custom software	3 to 6 years
Internally developed custom software	3 to 7 years

Intangible assets are derecognised on disposal or when no further economic benefits are expected to flow from them.

The amortisation period for intangible assets with finite useful lives is reviewed at a minimum at the end of each financial year. If the expected useful life of an asset differs from previous estimates, the amortisation period is adjusted accordingly.

Goodwill is recognised at cost and tested at least once a year for impairment.

The cost of the other intangible assets, which are almost only acquired in the course of business combinations, corresponds to the acquisition date fair value. Assets with a finite useful life are amortised using the straight-line method over their expected useful life. Assets with an indefinite useful life are tested for impairment at least once a year.

Useful life of other intangible assets classified by business combinations

	Exchange licences	Trade names	Member and customer relationships	Miscellaneous intangible assets
ISE[1)]	indefinite	10 years	30 years	2 to 12 years
STOXX	–	indefinite	12 years	3 to 5 years
EEX	indefinite	indefinite	16 years	–
CGSS	–	–	20 years	8 years
360T	–	indefinite	23 years	–
Other	indefinite	5 years, indefinite	8 to 21 years	2 to 20 years

1) Taking effect 1 March 2016, ISE's other intangible assets were reclassified into the category "assets held for sale". Therefore, amortisation in line with the applicable useful life has only been recognised until 29 February 2016.

Since the exchange licences mentioned above have no time limit on their validity and, in addition, there is an intention to maintain the exchange licences disclosed as at 31 December 2016 as part of the general business strategy, an indefinite useful life is assumed. Moreover, it is assumed that the trade name of STOXX, certain trade names of 360T as well as certain registered trade names of EEX group have also an indefinite useful life. These umbrella brands benefit from strong brand awareness and are used in the course of operating activities, so there are no indications that their useful life is limited.

Property, plant and equipment

Depreciable items of property, plant and equipment are carried at cost less cumulative depreciation. The straight-line depreciation method is used. Costs of an item of property, plant and equipment comprise all costs directly attributable to the production process, as well as an appropriate proportion of production overheads. No borrowing costs were recognised in the reporting period as they could not be directly allocated to any particular development project.

Useful life of property, plant and equipment

Asset	Depreciation period
Computer hardware	3 to 5 years
Office equipment	5 to 25 years
Leasehold improvements	based on lease term

Repair and maintenance costs are expensed as incurred.

If it is probable that the future economic benefits associated with an item of property, plant and equipment will flow to the Group and the cost of the asset in question can be reliably determined, expenditure subsequent to acquisition is added to the carrying amount of the asset as incurred. The carrying amounts of any parts of an asset that have been replaced are derecognised.

Impairment losses on property, plant and equipment and intangible assets

Specific non-current non-financial assets are tested for impairment. At each reporting date, the Group assesses whether there are any indications that an asset may be impaired. If this is the case, the carrying amount is compared with the recoverable amount (the higher of value in use and fair value less costs of disposal) to determine the amount of any potential impairment.

Value in use is estimated on the basis of the discounted estimated future cash flows from continuing use of the asset and from its ultimate disposal, before taxes. For this purpose, discount rates are estimated based on the prevailing pre-tax weighted average cost of capital. If no recoverable amount can be determined for an asset, the recoverable amount of the cash-generating unit to which the asset can be allocated is determined.

Irrespective of any indications of impairment, intangible assets with indefinite useful lives and intangible assets not yet available for use must be tested for impairment at least once a year. If the estimated recoverable amount is lower than the carrying amount, an impairment loss is recognised and the net carrying amount of the asset is reduced to its estimated recoverable amount.

Goodwill is allocated to identifiable groups of assets (cash-generating units) or groups of cash-generating units that create synergies from the relevant acquisition. Irrespective of any indications of impairment, these items must be tested for impairment at least annually at the lowest level at which Deutsche Börse Group monitors the respective goodwill. An impairment loss is recognised if the carrying amount of the cash-generating unit to which goodwill is allocated (including the carrying amount of that goodwill) is higher than the recoverable amount of this group of assets. The impairment loss is first allocated to the goodwill, then to the other assets in proportion to their carrying amounts.

A review is conducted at every reporting date to establish whether there are any indications that an impairment loss recognised on non-current assets (excluding goodwill) in prior periods no longer applies. If this is the case, the carrying amount of the asset is increased and the difference is recognised in profit or loss. The maximum amount of this reversal is limited to the carrying amount that would have resulted if no impairment loss had been recognised in prior periods. Impairment losses on goodwill are not reversed.

Fair value measurement

The fair value of a financial instrument is measured using quoted market prices, if available. If no quoted market prices are available, observable market prices, for example for interest rates or exchange rates, are used. This observable market information is then used as inputs for financial valuation techniques, e.g. option pricing models or discounted cash flow models. In isolated instances, fair value is determined exclusively on the basis of internal valuation models.

Investments in associates and joint ventures

Investments in associates and joint ventures are measured at cost on initial recognition and accounted for using the equity method upon subsequent measurement.

Financial assets

For Deutsche Börse Group, financial assets are, in particular, other equity investments, receivables and securities from banking business, other financial instruments and other loans, financial instruments held by central counterparties, receivables and other assets as well as bank balances.

Recognition of financial assets
Financial assets are recognised when a Group company becomes a party to the contractual provisions of the instrument. They are generally recognised at the trade date. Loans and receivables from banking business, available-for-sale financial assets from banking business as well as purchases and sales of equities via the central counterparty (i.e. Eurex Clearing AG) are recognised at the settlement date.

Financial assets are initially measured at fair value; in the case of a financial asset that is not measured at fair value through profit or loss in subsequent periods, this includes transaction costs. If they are settled within one year, they are allocated to current assets. All other financial assets are allocated to non-current assets.

Subsequent measurement of financial assets
Subsequent measurement of financial instruments follows the categories which are described below. As in previous years, Deutsche Börse Group did not take advantage of the option to allocate financial assets to the "held-to-maturity investments" category in the reporting period. In addition, the Group did not exercise the "fair value option" to designate financial assets at fair value through profit and loss. The financial assets are allocated to the respective categories at initial recognition.

Assets held for trading
Derivatives that are not designated as hedging instruments as well as financial instruments held by central counterparties are measured at fair value through profit or loss.

If they result from banking business, realised and unrealised gains and losses are immediately recognised in the consolidated income statement as "other operating income", "other operating expenses" and "net interest income from banking business" or, if incurred outside the banking business, as "financial income" and "financial expenses".

Loans and receivables
Loans and receivables comprise in particular current and non-current receivables from banking business, trade receivables as well as other current receivables. They are recognised at amortised cost, taking into account any impairment losses, if applicable. Premiums and discounts are included in the amortised cost of the instrument concerned and are amortised using the effective interest method; they are contained in "net interest income from banking business" if they relate to banking business, or in "financial income" and "financial expense".

Cash and cash equivalents
Cash and cash equivalents comprise cash on hand and demand deposits as well as financial assets that are readily convertible to cash. They are subject to only minor changes in value. Cash and cash equivalents are measured at amortised cost.

Restricted bank balances mainly include cash deposits by market participants that are invested largely overnight, mainly at central banks or in the form of reverse repurchase agreements with banks.

Available-for-sale financial assets
Non-derivative financial assets are classified as "available-for-sale financial assets" if they cannot be allocated to the "loans and receivables" or "assets held for trading" categories. These assets comprise debt and equity investments recognised as "other equity investments" and "other financial instruments", as well as debt instruments recognised as current and non-current receivables and securities from banking business.

Available-for-sale financial assets are generally measured at the fair value observable in an active market. Unrealised gains and losses are recognised directly in equity in the revaluation surplus. Impairment losses and effects of exchange rates on monetary items are excluded from this general principle and are recognised in profit or loss.

Equity instruments for which no active market exists are measured on the basis of current comparable market transactions, if these are available. If an equity instrument is not traded in an active market and alternative valuation methods cannot be applied to that equity instrument, it is measured at cost, subject to an impairment test.

Realised gains and losses are generally recognised in “financial income” or “financial expense”. Interest income in connection with debt instruments in the banking business is recognised in the consolidated income statement in “net interest income from banking business” using the effective interest rate method. Other realised gains and losses are recognised in the consolidated income statement in “other operating income” and “other operating expenses”.

If debt instruments in the banking business are hedged items in fair value hedges, the changes in fair value resulting from the hedged risk are recognised in profit or loss.

Derecognition of financial assets
Financial assets are derecognised when the contractual rights to the cash flows expire or when substantially all the risks and rewards of ownership of the financial assets are transferred.

Clearstream Banking S.A. acts as a principal in securities borrowing and lending transactions in the context of the ASLplus securities lending system. Legally, it operates between the lender and the borrower without being an economic party to the transaction (transitory items). In these transactions, the securities borrowed and lent match each other. Consequently, these transactions are not recognised in the consolidated balance sheet.

Impairment of financial assets
Financial assets that are not measured at fair value through profit or loss are reviewed at each reporting date to establish whether there are any indications of impairment.

Deutsche Börse Group has laid down criteria for assessing whether there is evidence of impairment. These criteria primarily include significant financial difficulties on the part of the debtor and breaches of contract. In the case of equity instruments, the assessment also takes into account the duration and the amount of the impairment compared with cost. If the decline in value amounts to at least 20 per cent of cost or lasts for at least nine months, or if the decline is at least 15 per cent of cost and lasts for at least six months, Deutsche Börse Group takes this to be evidence of impairment. Impairment is assumed in the case of debt instruments if there is a significant decline in the issuer’s credit quality.

The amount of an impairment loss for a financial asset measured at amortised cost is the difference between the carrying amount and the present value of the estimated future cash flows, discounted at the original effective interest rate. A subsequent reversal is recognised at a maximum at the carrying amount that would have resulted if no impairment loss had been recognised.

The amount of an impairment loss for a financial asset measured at cost (unlisted equity instruments) is the difference between the carrying amount and the present value of the estimated future cash flows, discounted at a current market interest rate. Subsequent reversal is not permitted.

In the case of available-for-sale financial assets, the impairment loss is calculated as the difference between cost and fair value. Any reduction in fair value already recognised in equity is reclassified to profit or loss upon determination of the impairment loss. An impairment loss recognised on debt instruments may only be reversed in a subsequent period if the reason for the original impairment no longer applies.

Financial liabilities

Financial liabilities relate primarily to interest-bearing liabilities, other liabilities, liabilities from banking business, financial instruments held by central counterparties, cash deposits by market participants as well as trade payables. They are recognised when a Group company becomes a party to the instrument.

They are generally recognised at the trade date. Purchases and sales of equities via the central counterparty Eurex Clearing AG are recognised at the settlement date.

Offsetting financial assets and liabilities
Financial assets and liabilities are offset and only the net amount is presented in the consolidated balance sheet when a Group company currently has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Financial liabilities not measured at fair value through profit and loss
Financial liabilities not held for trading are carried at amortised cost. These liabilities comprise issued bonds. The borrowing costs associated with the placement of financial liabilities are included in the carrying amount and accounted for using the effective interest method, if they are directly attributable. Discounts reduce the carrying amount of liabilities and are amortised over the term of the liabilities.

Financial liabilities measured at fair value through profit and loss
A forward transaction with a non-controlling shareholder for the acquisition of non-controlling interests that is settled in cash or by delivering other financial assets is a financial liability recognised at fair value. It is subsequently measured at fair value through profit and loss. The equity interest attributable to a non-controlling shareholder underlying the transaction is accounted for as if it had already been acquired at the time of the transaction.

Derivatives and hedges

Derivatives are used to hedge interest rate risk or currency risk. All derivatives are carried at their fair values.

Hedge accounting is used for derivatives that are part of a hedging relationship determined to be highly effective and for which certain conditions are met. This relates in particular to the documentation of the hedging relationship and the risk strategy and to how reliably effectiveness can be measured.

Cash flow hedges
The portion of the gain or loss on the hedging instrument determined to be highly effective is recognised in other comprehensive income. This gain or loss ultimately adjusts the value of the hedged cash flow, i.e. the gain or loss on the hedging instrument is recognised in profit or loss when the hedged item is recognised in the balance sheet or in profit or loss. The ineffective portion of the gain or loss is recognised immediately in the consolidated income statement.

Fair value hedges
The gain or loss on the hedging instrument, together with the gain or loss on the hedged item (underlying) attributable to the hedged risk, is recognised immediately in the consolidated income statement. Any gain or loss on the hedged item adjusts its carrying amount.

Hedges of a net investment in a foreign operation
The effective portion of the gain or loss from a hedging transaction that is designated as a highly effective hedge is recognised in other comprehensive income. It is recognised in profit or loss when the foreign operation is sold. The ineffective portion of the gain or loss is recognised immediately in the consolidated income statement.

Derivatives that are not part of a hedging relationship
Gains or losses on derivative instruments that are not part of a highly effective hedging relationship are recognised immediately in the consolidated income statement.

Financial instruments held by central counterparties

European Commodity Clearing AG and Eurex Clearing AG act as central counterparties:

- European Commodity Clearing AG guarantees the settlement of spot and derivatives transactions at the trading venues of the EEX-group and the connected partner exchanges.
- Eurex Clearing AG guarantees the settlement of all transactions involving futures and options on the Eurex exchanges (Eurex Deutschland and Eurex Zürich AG). It also guarantees the settlement of all transactions for Eurex Bonds (bond trading platform) and Eurex Repo (repo trading platform), certain exchange transactions in equities on Frankfurter Wertpapierbörse (FWB, the Frankfurt Stock Exchange) and certain cash market transactions on the Irish Stock Exchange. Eurex Clearing AG also guarantees the settlement of off-order book trades entered for clearing in the trading systems of the Eurex exchanges, Eurex Bonds, Eurex Repo, the Frankfurt Stock Exchange and the Irish Stock Exchange. In addition, Eurex Clearing AG clears over-the-counter (OTC) interest rate derivatives and securities lending transactions, where these meet the specified novation criteria.

The transactions of the clearing houses are only executed between the respective clearing house and a clearing member.

In accordance with IAS 39, purchases and sales of equities and bonds via the Eurex Clearing AG central counterparty are recognised and simultaneously derecognised at the settlement date.

For products that are marked to market (futures, options on futures as well as OTC interest-rate derivatives), the clearing houses recognise gains and losses on open positions of clearing members on each exchange day. By means of the variation margin, profits and losses on open positions resulting from market price fluctuations are settled on a daily basis. The difference between this and other margin types is that the variation margin does not comprise collateral, but is a daily offsetting of profits and losses in cash. In accordance with IAS 39, futures and OTC interest rate derivatives are therefore not reported in the consolidated balance sheet. For future-style options, the option premium is not required to be paid in full until the end of the term or upon exercise. Option premiums are carried in the consolidated balance sheet as receivables and liabilities at their fair value on the trade date.

“Traditional” options, for which the buyer must pay the option premium in full upon purchase, are carried in the consolidated balance sheet at fair value. Fixed-income bond forwards are recognised as derivatives and carried at fair value until the settlement date. Receivables and liabilities from repo transactions and from cash-collateralised securities lending transactions are classified as held for trading and carried at fair value. Receivables and liabilities from variation margins and cash collateral that is determined on the reporting date and only paid on the following day are carried at their nominal amount.

“Financial instruments held by central counterparties” are reported as non-current if the remaining maturity of the underlying transactions exceeds twelve months at the reporting date.

The fair values recognised in the consolidated balance sheet are based on daily settlement prices. These are calculated and published by the clearinghouse in accordance with the rules set out in the contract specifications (see also the clearing conditions of the respective clearing house).

Cash or securities collateral held by central counterparties

As the clearing houses of the Deutsche Börse Group guarantee the settlement of all traded contracts, they have established multi-level collateral systems. The central pillar of the collateral systems is the determination of the overall risk per clearing member (margin) to be covered by cash or securities collateral. Losses calculated on the basis of current prices and potential future price risks are covered up to the date of the next collateral payment.

In addition to these daily collateral payments, each clearing member must make contributions to the respective clearing fund (for further details, see the risk report in the combined management report). Cash collateral is reported in the consolidated balance sheet under “cash deposits by market participants” and the corresponding amounts under “restricted bank balances”.

Securities collateral is generally not derecognised by the clearing member providing the collateral, as the opportunities and risks associated with the securities are not transferred to the secure party. Recognition at the secure party is only permissible if the clearing member providing the transfer is in default according to the underlying contract.

Treasury shares

The treasury shares held by Deutsche Börse AG at the reporting date are deducted directly from shareholders' equity. Gains or losses on treasury shares are recognised in other comprehensive income. The transaction costs directly attributable to the acquisition of treasury shares are accounted for as a deduction from shareholders' equity (net of any related income tax benefit).

Other current assets

Receivables and other assets are carried at their nominal amount. Adequate valuation allowances take account of identifiable risks.

Non-current assets held for sale, disposal groups and discontinued operations

Non-current assets that are available for immediate sale in their present condition, and whose sale is highly probable within a reasonable period of time, are classified as "non-current assets held for sale". A transaction is highly probable if measures for the sale have already been initiated and the relevant bodies have adopted the corresponding resolutions. Disposal groups may comprise current and non-current assets, and the corresponding liabilities, which fulfil the criteria provided above and which are to be sold and discontinued. Income and expenses from non-current assets held for sale are recognised within continuing operations, provided such items are not included in net profit from discontinued operations.

Discontinued operations exclusively comprise assets and liabilities which are to be sold, entirely or partly, as part of an individual plan, or are to be abandoned. Furthermore, discontinued operations are assets or liabilities of major lines of business or geographical areas of operations. Every line of business or geographical area of operation must be identifiable for operational and accounting purposes. Net profit from discontinued operations is recognised in the period in which it is incurred, and is disclosed separately in the consolidated income statement and the consolidated statement of comprehensive income. The corresponding cash flows are disclosed separately in the consolidated cash flow statement. Furthermore, the figures disclosed in the previous year's income statement and cash flow statement have been adjusted accordingly.

Pensions and other employee benefits

Pensions and other employee benefits relate to defined contribution and defined benefit pension plans.

Defined contribution plans
There are defined contribution plans as part of the occupational pension system using pension funds and similar pension institutions, as well as on the basis of 401(k) plans. In addition, contributions are paid to the statutory pension insurance scheme. The level of contributions is normally determined in relation to income. As a rule, no provisions are recognised for defined contribution plans. The contributions paid are reported as pension expenses in the year of payment.

There are defined contribution pension plans for employees in several countries. In addition, the employer pays contributions to employees' private pension funds.

Multi-employer plans
Several Deutsche Börse Group companies are, along with other financial institutions, member institutions of BVV Versicherungsverein des Bankgewerbes a.G. (BVV), a pension insurance provider with registered office in Berlin, Germany. Employees and employers make regular contributions, which are used to provide guaranteed pension plans and a potential surplus. The contributions to be made are calculated based on contribution rates applied to active employees' monthly gross salaries, taking into account specific financial thresholds. Member institutions are liable in the second degree regarding the fulfilment of BVV's agreed pension benefits. However, we consider the risk that said liability will actually be utilised as remote. Given that BVV membership is governed by a Works Council Agreement, membership termination is subject to certain conditions. Deutsche Börse Group considers BVV pension obligations as multi-employer defined benefit pension plans (leistungsorientierte Pläne). However, we currently lack information regarding the allocation of BVV assets to individual member institutions and the respective beneficiaries. Moreover, we do not know Deutsche Börse Group's actual share in BVV's total obligations. Hence, Deutsche Börse Group discloses this plan as a defined contribution plan (beitragsorientierter Plan). Based on its latest publications, BVV does not suffer any deficient cover with a potential impact on Deutsche Börse Group's future contributions.

EPEX Netherlands B.V. participates in the ABP pension fund within the EEX sub-group. Participation is mandatory for all employees. Employer contributions are calculated by ABP and adjusted, if necessary. This pension plan was reported as a defined contribution plan, given the limited information regarding the allocation of fund assets to member institutions and beneficiaries.

Defined benefit plans
Provisions for pension obligations are measured, separately for each pension plan, using the projected unit credit method on the basis of actuarial reports. The fair value of plan assets is deducted from the present value of pension obligations, reflecting the asset ceiling rules if there are any excess plan assets. This results in the net defined benefit liability or asset. Net interest expense for the financial year is calculated by applying the discount rate determined at the beginning of the financial year to the net defined benefit liability determined as at that date.

The relevant discount rate is determined by reference to the return on long-term corporate bonds with a rating of at least AA (Moody's Investors Service, Standard & Poor's, Fitch Ratings and Dominion Bond Rating Service) on the basis of the information provided by Bloomberg, and a maturity that corresponds approximately to the maturity of the pension obligations. Moreover, the bonds must be denominated in the same currency as the underlying pension obligation. Measurement of the pension obligations in euros is, on principal, based on a discount rate of 1.75 per cent, which is determined according to the Towers Watson "GlobalRate:Link" methodology updated in line with the current market trend.

Actuarial gains or losses resulting from changes in expectations with regard to life expectancy, pension trends, salary trends and the discount rate as compared with the estimate at the beginning of the period or compared with the actual development during the period are recognised directly in other comprehensive income. Actuarial gains and losses recognised in other comprehensive income may not be reclassified to profit or loss in subsequent periods. Similarly, differences between the (interest) income on plan assets determined at the beginning of the period and the return on plan assets actually recorded at the end of the period are also recognised directly in other comprehensive income. The actuarial gains or losses and the difference between the expected and the actual return or loss on plan assets are recognised in the revaluation surplus.

Other long-term benefits for employees and members of executive boards (total disability pension, transitional payments and surviving dependants' pensions) are also measured using the projected unit credit method. Actuarial gains and losses and past service cost are recognised immediately and in full through profit or loss.

Other provisions

Provisions are recognised if the Group has a present obligation from an event in the past, it is probable that there will be an outflow of resources embodying economic benefits to settle the obligation and the amount of this obligation can be estimated reliably. The amount of the provision corresponds to the best estimate of the expenditure required to settle the obligation at the reporting date.

A restructuring provision is only recognised when an entity has a detailed formal plan for the restructuring and has raised a valid expectation in those affected that the restructuring measures will be implemented, for example by starting to implement that plan or by announcing its main features to those affected by it.

Contingent liabilities are not recognised, but are rather disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

Share-based payment

Deutsche Börse Group operates the Group Share Plan (GSP), the Stock Bonus Plan (SBP), the Co-Performance Investment Plan (CPIP) and the Performance Share Plan (PSP) as well as the Long-term Sustainable Instrument (LSI) and the Restricted Stock Units (RSU), which provide share-based payment components for employees, senior executives and executive board members.

Group Share Plan (GSP)
Under the GSP, shares are generally granted at a discount to the market price to non-executive staff of Deutsche Börse AG and of participating subsidiaries who have been employed on a non-temporary basis since at least 31 March of the previous year. The expense of this discount is recognised in the income statement at the grant date.

Stock Bonus Plan (SBP)
The previous SBP for members of the Executive Board of Deutsche Börse AG was terminated prematurely on 31 December 2015. The SBP for senior executives of Deutsche Börse AG and of participating subsidiaries is being continued. It grants a long-term remuneration component in the form of so-called SBP shares. These are generally accounted for as share-based payments for which Deutsche Börse AG has a choice of settlement in cash or equity instruments for certain tranches. Tranches due in previous years were each settled in cash. Regarding the 2016 tranche, cash settlement has been agreed upon too. Under these circumstances, it is presently presumed in accordance with IFRS 2 that all SBP shares will be settled in cash. Accordingly, Deutsche Börse Group has measured the SBP shares as cash-settled share-based payment transactions. The cost of the options is estimated using an option pricing model (fair value measurement) and recognised in staff costs in the consolidated income statement. Any right to payment of a stock bonus only vests after the expiration of the service or performance period of four years on which the plan is based.

Co-Performance Investment Plan (CPIP)
Within the framework of the CPIP, the CEO of Deutsche Börse AG was offered a one-time participation in 2015. The appropriate number of phantom shares is calculated based on the number of shares granted and the increase of Deutsche Börse AG's consolidated net income, as well as on the relative performance of the total shareholder return (TSR) on Deutsche Börse AG's shares compared with the total shareholder return of the STOXX Europe 600 Financials Index constituents. The shares are subject to a performance period of five years. The subsequent payment of the stock bonus will be settled in cash.

Performance Share Plan (PSP)
The PSP was launched during the year under review; it replaces the previous SBP for members of the Executive Board of Deutsche Börse AG as well as selected senior executives and employees of Deutsche Börse AG and of participating subsidiaries. The number of phantom PSP shares to be allocated is calculated based on the number of shares granted and the increase of net profit for the period attributable to Deutsche Börse AG shareholders, as well as on the relative performance of the total shareholder return (TSR) on Deutsche Börse AG's shares compared with the total shareholder return of the STOXX Europe 600 Financials Index constituents. The shares are subject to a performance period of five years. The subsequent payment of the stock bonus will be settled in cash. For further details on this plan, please see the section "Principles governing the PSP and measurement of target achievement for performance shares" in the Remuneration report.

Long-term Sustainable Instrument (LSI)
In order to meet regulatory requirements, the LSI for risk takers (employees whose professional activities have a material impact on the operations of institutions) was introduced in the financial year 2014 (see note 39). LSI shares are generally settled in cash. Regarding the 2014 tranche, the respective companies have the option to fulfil their obligations by delivering shares of Deutsche Börse AG. Regarding the 2015 and 2016 tranches, cash settlement has been agreed upon as mode of settlement. Deutsche Börse Group thus measures the LSI shares as cash-settled share-based payment transactions. The options are

measured using an option pricing model (fair value measurement). Any right to payment of a stock bonus only vests after the expiration of the one-year service period on which the plan is based, taking certain waiting periods into account.

Restricted Stock Units (RSU)
In the 2016 financial year, a RSU tranche for so-called risk takers was launched in addition to another LSI tranche. The new RSU program fulfils the applicable regulatory requirements (see note 39). RSU shares are settled in cash; Deutsche Börse Group thus measures the RSU shares as cash-settled share-based payment transactions. The options are measured using an option pricing model (fair value measurement). Any right to payment of a stock bonus only vests after the expiration of the one-year service period on which the plan is based, taking a three-year retention period and a one-year waiting period into account.

Deferred tax assets and liabilities

Deferred tax assets and liabilities are computed using the balance sheet liability approach. The deferred tax calculation is based on temporary differences between the carrying amounts of assets and liabilities in the IFRS financial statements and their tax base that will lead to a future tax liability or benefit when assets are used or sold or liabilities are settled.

The deferred tax assets or liabilities are measured using the tax rates that are currently expected to apply when the temporary differences reverse, based on tax rates that have been enacted or substantively enacted by the reporting date. Deferred tax assets are recognised for the unused tax loss carryforwards only to the extent that it is probable that future taxable profit will be available. Deferred tax assets and deferred tax liabilities are offset where a legally enforceable right to set off current tax assets against current tax liabilities exists and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority.

Leases

Leases are classified as operating leases or finance leases. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the asset from the lessor to the lessee. All other leases are classified as operating leases.

Leased assets and the associated liabilities are recognised at the lower of the fair value and present value of the minimum lease payments if the criteria for classification as a finance lease are met. The leased asset is depreciated or amortised using the straight-line method over its useful life or the lease term, if shorter. In subsequent periods, the liability is measured using the effective interest method.

Expenses incurred in connection with operating leases are recognised as an expense on a straight-line basis over the lease term.

Consolidation

Deutsche Börse AG and all subsidiaries directly or indirectly controlled by Deutsche Börse AG are included in the consolidated financial statements. Deutsche Börse Group controls a company if it is exposed to variable returns resulting from its involvement with the company in question or has rights to such returns and is able to influence them by using its power over the company.

Initial consolidation of subsidiaries in the course of business combinations uses the purchase method. The acquiree's identifiable assets, liabilities and contingent liabilities are recognised at their acquisition date fair values. Any excess of cost over the acquirer's interest in the fair value of the subsidiary's net identifiable assets is recognised as goodwill. Goodwill is reported in subsequent periods at cost less accumulated impairment losses.

Intra-Group assets and liabilities are eliminated. Income arising from intragroup transactions is eliminated against the corresponding expenses. Profits or losses arising from deliveries of intragroup goods and services, as well as dividends distributed within the Group, are eliminated. Deferred taxes for consolidation adjustments are recognised where these are expected to reverse in subsequent years.

Interests in equity attributable to non-controlling interest shareholders are carried under "non-controlling interests" within equity. Where these are classified as "puttable instruments", they are reported under "liabilities".

Currency translation

Transactions denominated in a currency other than a company's functional currency are translated into the functional currency at the spot exchange rate applicable at the transaction date. At the reporting date, monetary balance sheet items in foreign currency are measured at the exchange rate at the reporting date, while non-monetary balance sheet items recognised at historical cost are measured at the exchange rate on the transaction date. Non-monetary balance sheet items measured at fair value are translated at the exchange rate prevailing at the valuation date. Exchange rate differences are recorded as other operating income or expense in the period in which they arise unless the underlying transactions are hedged. Gains and losses from a monetary item that forms part of a net investment in a foreign operation are recognised directly in "accumulated profit".

The annual financial statements of companies whose functional currency is not the euro are translated into the reporting currency as follows: assets and liabilities are translated into euros at the closing rate. The items in the consolidated income statement are translated at the average exchange rates for the reporting period. Resulting exchange differences are recognised directly in "accumulated profit". When the relevant subsidiary is sold, these exchange rate differences are recognised in net profit for the period attributable to shareholders of the parent company in which the deconsolidation gain or loss is realised.

The following euro exchange rates of consequence to Deutsche Börse Group were applied:

Exchange rates

		Average rate 2016	Average rate 2015	Closing price as at 31 Dec 2016	Closing price as at 31 Dec 2015
Swiss francs	CHF	1.0904	1.0644	1.0732	1.0818
US dollars	USD (US$)	1.1029	1.1046	1.0522	1.0924
Czech koruna	CZK	27.0426	27.2792	27.0198	27.0250
Singapore dollar	SGD	1.5247	1.5220	1.5222	1.5430
British pound	GBP (£)	0.8223	0.7244	0.8561	0.7366

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising from initial consolidation are reported in the functional currency of the foreign operation and translated at the closing rate.

Key sources of estimation uncertainty and management judgements

The application of accounting policies, the presentation of assets and liabilities, and the recognition of income and expenses requires the Executive Board to make certain judgements and estimates. Adjustments in this context are taken into account in the period the change was made as well as in subsequent periods, where necessary.

Impairment
Deutsche Börse Group tests goodwill as well as intangible assets with indefinite useful lives for impairment and intangible assets not yet available for use at least once a year. Certain assumptions have to be made to determine the recoverable amount, which is calculated regularly using discounted cash flow models. This is based on the relevant business plans with a time horizon of normally three to five years. These plans in turn contain projections of the future financial performance of the assets and cash-generating units. If their actual financial performance fails to meet these expectations, corresponding adjustments may be necessary. For further information on the effects of changes in the discount rate and further assumptions, please see note 11.

Pensions and other employee benefits
Pensions and other employee benefits are measured using the projected unit credit method, which calculates the actuarial present value of the accumulated benefit obligation. Calculating the present value requires certain actuarial assumptions (such as the discount rate, staff turnover rate, salary and pension trends) to be made. The current service cost and the net interest expense or income for the subsequent period are calculated on the basis of these assumptions. Any departures from these assumptions, for example because of changes in the macroeconomic environment, are recognised in other comprehensive income in the following financial year. A sensitivity analysis of the key factors is presented in note 22.

Income taxes
Deutsche Börse Group is subject to the tax laws of those countries in which it operates and generates income. Considerable management judgement has to be exercised in determining the tax provisions. For a large number of transactions and calculations, no definitive tax-relevant information is available at the time these figures are determined. Deutsche Börse Group recognises corresponding provisions for risks expected from external tax audits. If the final results of these external audits differ from the estimates, the resulting effects on current and deferred taxes are recognised in the period in which they become known.

Legal risks
The companies of Deutsche Börse Group are subject to litigation. Such litigation may lead to orders to pay against the entities of the Group. If it is more likely than not that an outflow of resources will occur, a provision will be recognised based on an estimate of the most probable amount necessary to settle the obligation if such amount is reasonably estimable. Management judgement includes the determination whether there is a possible obligation from past events, the evaluation of the probability that an outflow will occur and the estimation of the potential amount. As the outcome of litigation is usually uncertain, the judgement is reviewed continuously. For further information on other risks please see note 37.

Group Share Plan, Stock Bonus Plan and Long-term Sustainable Instrument
Note 39 contains disclosures on the valuation model used for the stock options. Where the estimates of the valuation parameters originally applied differ from the actual values available when the options are exercised, adjustments are necessary; such adjustments are recognised in the consolidated income statement for the period if they relate to cash-settled share-based payment transactions.

Provisions
The probability of utilisation applied when recognising provisions for expected losses from rental agreements is estimated (see note 24). When recognising personnel-related restructuring provisions, certain assumptions were made, for example with regard to the fluctuation rate, the discount rate and salary trends. If the actual values were to deviate from these assumptions, adjustments may be necessary.

Consolidated income statement disclosures

4. Net revenue

Composition of net revenue

	Sales revenue		Net interest income from banking business	
	2016 €m	(restated) 2015 €m	2016 €m	2015 €m
Eurex				
Equity index derivatives	473.8	438.3	0	0
Interest rate derivatives	190.8	184.4	0	0
Equity derivatives	41.4	39.7	0	0
Commodities (EEX)	233.9	190.1	–0.1	–1.8
Foreign exchange (360T)[1]	64.1	15.8	0	0
Repo business	21.8	27.7	0	0
Other	23.9	18.7	21.5	18.3
	1,049.7	**914.7**	**21.4**	**16.5**
Xetra				
Trading	125.9	148.0	0	0
Central counterparty for equities	32.5	36.0	0	0
Listing	15.4	13.5	0	0
Other	13.0	13.6	0	0
	186.8	**211.1**	**0**	**0**
Clearstream				
International business (ICSD)	555.7	541.3	62.6	34.1
Domestic business (CSD)	127.9	132.8	0	0
Investment Funds Services	128.6	127.0	0	0
Global Securities Financing	113.0	100.0	0	0
	925.2	**901.1**	**62.6**	**34.1**
Market Data + Services				
Data Services	184.0	186.0	0	0
Index	127.2	114.0	0	0
Infrastructure Services	132.7	139.0	0	0
	443.9	**439.0**	**0**	**0**
Total	**2,605.6**	**2,465.9**	**84.0**	**50.6**
Consolidation of internal net revenue	**–48.3**	**–46.0**	**0**	**0**
Group	**2,557.3**	**2,419.9**	**84.0**	**50.6**

1) Revenue from FX derivatives consists of revenue from 360 Treasury Systems AG which was initially consolidated as at 15 October 2015.

	Other operating income		Volume-related costs		Net revenue	
	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m
	0.1	0	−37.4	−35.6	436.5	402.7
	0	0	−1.1	−1.1	189.7	183.3
	0	0	−3.5	−3.4	37.9	36.3
	2.9	2.7	−21.1	−15.7	215.6	175.3
	0.5	0	−0.4	−0.1	64.2	15.7
	0	0	0	0	21.8	27.7
	23.4	12.2	−2.3	−2.7	66.5	46.5
	26.9	**14.9**	**−65.8**	**−58.6**	**1,032.2**	**887.5**
	0	0.1	−20.1	−23.6	105.8	124.5
	0	0	−5.8	−6.3	26.7	29.7
	0	0.1	0	0	15.4	13.6
	6.6	6.5	−2.9	−3.1	16.7	17.0
	6.6	**6.7**	**−28.8**	**−33.0**	**164.6**	**184.8**
	3.2	7.0	−152.1	−152.1	469.4	430.3
	0	0	−12.7	−8.5	115.2	124.3
	0	0	−4.3	−2.9	124.3	124.1
	0	0.6	−40.0	−32.9	73.0	67.7
	3.2	**7.6**	**−209.1**	**−196.4**	**781.9**	**746.4**
	6.3	2.5	−28.1	−28.0	162.2	160.5
	1.5	1.0	−13.7	−11.9	115.0	103.1
	1.2	4.0	−1.1	−5.0	132.8	138.0
	9.0	**7.5**	**−42.9**	**−44.9**	**410.0**	**401.6**
	45.7	36.7	−346.6	−332.9	2,388.7	2,220.3
	−13.1	−13.1	61.4	59.1	0	0
	32.6	23.6	−285.2	−273.8	2,388.7	2,220.3

Composition of net interest income from banking business

	2016 €m	2015 €m
Interest income from positive interest yields	**75.1**	**33.7**
Loans and receivables	44.5	16.7
Available-for-sale financial assets	4.5	2.7
Financial assets or liabilities measured at fair value through profit or loss	26.1	14.3
Interest expenses from positive interest yields	**–21.4**	**–4.4**
Financial liabilities	–19.7	–6.4
Financial assets or liabilities measured at fair value through profit or loss	–1.7	2.0
Interest income from negative interest yields	**191.9**	**163.0**
Loans and receivables	185.4	163.0
Financial assets or liabilities measured at fair value through profit or loss	6.5	0
Interest expenses from negative interest yields	**– 161.6**	**– 141.7**
Financial liabilities	– 160.2	– 141.7
Financial assets or liabilities measured at fair value through profit or loss	–1.4	0
Total	**84.0**	**50.6**

Composition of other operating income

	2016 €m	(restated) 2015 €m
Income from exchange rate differences	6.4	1.9
Income from impaired receivables	1.3	2.7
Rental income from subleases	0.8	0.8
Income from agency agreements	0.6	0.4
Miscellaneous	23.5	17.8
Total	**32.6**	**23.6**

For details of rental income from subleases see note 38.

Miscellaneous other operating income includes income from cooperation agreements and from training as well as valuation adjustments.

Volume-related costs comprise partial or advance services that Deutsche Börse Group purchases from third parties, and which it markets as part of its own value chain. They indirectly depend on the development of volume trends and sales revenue.

5. Staff costs

Composition of staff costs

	2016 €m	(restated) 2015 €m
Wages and salaries	486.2	481.9
Social security contributions, retirement and other benefits	99.5	117.8
Total	**585.7**	**599.7**

Staff costs include costs of €12.7 million (2015: €59.1 million) recognised in connection with efficiency programmes as well as costs of €25.4 million (2015: €6.5 million) for 360T (which has been consolidated since 1 October 2015). The remaining increase is due to a rise in the number of employees (see also note 43), the remuneration of the Executive Board and higher pay-out of bonuses.

6. Other operating expenses

Composition of other operating expenses

	2016 €m	(restated) 2015 €m
Costs for IT services providers and other consulting services	264.9	250.5
IT costs	102.2	97.5
Premises expenses	70.3	66.6
Non-recoverable input tax	52.2	43.4
Travel, entertainment and corporate hospitality expenses	26.5	25.8
Advertising and marketing costs	15.8	19.9
Non-wage labour costs and voluntary social benefits	14.5	15.6
Insurance premiums, contributions and fees	13.9	17.0
Cost of exchange rate differences	4.1	3.5
Cost of agency agreements	3.4	4.0
Supervisory Board remuneration	2.6	4.8
Miscellaneous	30.3	15.9
Total	**600.7**	**564.5**

Costs for IT service providers and other consulting services relate mainly to expenses in conjunction with software development. An analysis of development costs is presented in note 7. These costs also contain costs of strategic and legal consulting services as well as of audit activities.

Composition of fees paid to the auditor

	2016		2015	
	Total €m	Germany €m	Total €m	Germany €m
Statutory audits	3.0[1)]	2.0	3.2	1.6
Other assurance or valuation services	1.8[2)]	1.8	1.3	0.8
Tax advisory services	0.9	0.3	1.1	0.6
Other services	0.2	0	0.6	0.5
Total	**5.9**	**4.1**	**6.2**	**3.5**

1) Thereof €0.2 million for 2015
2) Thereof €0.2 million for 2015

The “other assurance or valuation services” item includes an expense of €1.4 million arising from services in connection with the proposed business combination with London Stock Exchange Group plc.

7. Research and development costs

Own expenses capitalised relate solely to development costs of internally developed software, involving the following systems and projects in the individual segments:

Research and development costs

	Total expense for software development		thereof capitalised	
	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m
Eurex				
Trading platform T7 for Xetra/Eurex	6.5	5.4	3.6	3.2
Eurex Clearing Prisma	7.2	24.4	2.1	10.3
EEX software	9.6	6.9	5.2	3.6
EurexOTC Clear	16.3	33.6	8.3	15.0
360T	8.8	0.6	2.5	0.6
Other Eurex software	9.9	10.9	5.4	6.8
	58.3	**81.8**	**27.1**	**39.5**
Xetra				
Trading platform T7 for Xetra/Eurex	7.2	0.4	3.9	0.2
CCP releases	1.9	1.0	0	0
Other Xetra software	9.9	9.9	4.0	4.4
	19.0	**11.3**	**7.9**	**4.6**
Clearstream				
Collateral Management and Settlement	34.0	48.3	20.5	20.5
Custody	21.7	27.3	15.1	16.7
Connectivity	15.7	21.2	8.1	10.4
Investment funds	2.8	3.4	2.1	1.6
GSF	1.6	0	1.0	0
	75.8	**100.2**	**46.8**	**49.2**
Market Data + Services	**17.0**	**6.4**	**6.6**	**1.1**
Research expense	**0.9**	**2.5**	**0**	**0**
Total	**171.0**	**202.2**	**88.4**	**94.4**

8. Net income from equity investments

Composition of net income from equity investments

	2016 €m	(restated) 2015 €m
Equity method-accounted result of associates		
Tradegate AG Wertpapierhandelsbank	1.8	1.8
Deutsche Börse Commodities GmbH	0.3	0.3
LuxCSD S.A.	0.2	0.1
Digital Vega FX Ltd	0	0.2
Zimory GmbH in Liquidation	0	–3.2
ZDB Cloud Exchange GmbH in Liquidation	0	–3.1
figo GmbH	–0.1	0
BrainTrade Gesellschaft für Börsensysteme mbH	–0.4	0.3
R5FX Ltd	–1.1	–0.4
China Europe International Exchange AG	–1.3	–0.2
Global Markets Exchange Group International, LLP	–6.0	–0.6
Total income from equity method measurement[1]	**–6.6**	**–4.8**
Equity method-accounted result of joint ventures		
Bondcube Limited	0	–5.4
Total income from equity method measurement[1]	**0**	**–5.4**
Net income from associates and joint ventures	**–6.6**	**–10.2**
Net income due to the change of status of EPEX SPOT SE[2]	**0**	**5.3**
Net income from other equity investments	**43.5**	**3.4**
Net income from equity investments	**36.9**	**–1.5**

1) Including impairment losses
2) Change of status from an associate to a fully consolidated company effective 1 January 2015 (see also note 2 in the 2015 corporate report)

Net income from associates includes €6.7 million in impairment losses (2015: €2.6 million) attributable to the investments in Global Markets Exchange Group International, LLP and R5FX Ltd. The negative development of the Group's investments was due in particular to unsatisfactory economic development in the 2016 financial year and the correspondingly deteriorating economic outlook expected by Group companies. The recoverable amount was determined on the basis of fair value less costs of disposal. It was calculated using net asset values (level 3 inputs). The impairment losses were recognised in the result from associates and are allocated to the Eurex segment.

Net income from other investments includes in particular €38.4 million due to the disposal of the stake in BATS Global Markets, Inc. in the fourth quarter of 2016.

During the year under review, the company received dividends of €1.7 million (2015: €0.9 million) from investments in associates, and €5.1 million (2015: €3.3 million) from other investments.

9. Financial result

Composition of financial income

	2016 €m	(restated) 2015 €m
Other interest and similar income	2.6	1.6
Interest income on bank balances classified as “loans and receivables”	0.6	0.8
Interest income on tax refunds	0.5	0.8
Other interest income on receivables classified as “loans and receivables”	0.4	2.3
Income from available-for-sale securities	0.3	0.6
Income from valuation of derivatives	0.1	0
Interest income on non-current loans classified as “loans and receivables”	0.1	0
Total	**4.6**	**6.1**

Composition of financial expense

	2016 €m	(restated) 2015 €m
Interest expense on non-current loans[1)]	56.3	49.6
Interest expense on taxes	11.9	6.3
Expenses from the unwinding of the discount on pension provisions	2.9	1.3
Interest-equivalent expenses for derivatives held as hedging instrument[1)]	2.8	2.8
Transaction costs of non-current liabilities[1)]	2.8	1.1
Interest expense from negative interests[1)]	1.6	0.3
Interest expense on current liabilities[1)]	0.6	0.3
Other interest expense[1)]	0.3	1.9
Total	**79.2**	**63.6**

1) Measured at amortised cost

10. Income tax expense

Composition of income tax expense (main components)

	2016 €m	(restated) 2015 €m
Current income taxes:		
of the reporting period	293.2	227.6
from prior periods	0.4	–1.4
Deferred tax (income)/expense	–9.1	1.3
Total	**284.5**	**227.5**

The total actual tax expenses in the amount of €293.6 million include domestic tax expenses of €151.9 million and foreign tax expenses of €141.7 million (2015: domestic tax expenses €180.3 million, foreign tax expenses €45.9 million). The total deferred tax income in the amount of €–9.1 million includes domestic tax expenses of €10.4 million and foreign tax income of €–19.5 million (2015: domestic tax income €–8.8 million, foreign tax expenses €10.1 million).

Tax rates of 28 to 32 per cent (2015: 28 to 32 per cent) were used in the reporting period to calculate deferred taxes for the German companies. These reflect trade income tax at multipliers of 330 to 460 per cent (2015: 330 to 460 per cent) on the trade tax base amount of 3.5 per cent (2015: 3.5 per cent), corporation tax of 15 per cent (2015: 15 per cent) and the 5.5 per cent solidarity surcharge (2015: 5.5 per cent) on corporation tax.

A tax rate of 29.2 per cent (2015: 29.2 per cent) was used for the Luxembourg companies, reflecting trade income tax at a rate of 6.7 per cent (2015: 6.7 per cent) and corporation tax at 22.5 per cent (2015: 22.5 per cent).

Tax rates of 12.5 to 40.0 per cent (2015: 12.5 to 45.0 per cent) were applied to the companies in the remaining countries; see note 2.

The following table shows the carrying amounts of deferred tax assets and liabilities as well as the related tax expenses recognised in profit or loss or in other comprehensive income.

Composition of deferred taxes

	Deferred tax assets		Deferred tax liabilities		Exchange rate differences	Deferred tax expense/(income)		Tax expense/(income) recognised in other comprehensive income	
	2016	2015	2016	2015	2016	2016	(restated) 2015	2016	2015
	€m	€m	€m	€m	€m	€m	€m	€m	€m
Provisions for pensions and other employee benefits	60.9	56.8	0	0	0	–1.1	–3.1	–3.0[1]	0.1
Other provisions	5.8	25.7	0	0	0	1.9	–3.9	18.0[2]	0
Interest-bearing liabilities	0	9.1	–1.8	0	0	10.9	–6.2	0	0
Intangible assets	0	0	–34.6	–38.3	0	1.3	7.5	–5.0[2]	0
Intangible assets from purchase price allocation	0	0	–197.8[3]	–396.0	0	–4.7	–4.0	–192.4[2]	0
Non-current assets	9.7	8.8	0	0	0	–2.7	–2.2	1.8[2]	0
Investment securities	0	0	–20.8	–40.7	–1.7	–42.2	1.1	24.0[4]	3.3
Other non-current assets	3.5	1.7	0	0	0	–2.5	0	0.7[5]	0.6
Other liabilities	1.7	1.7	0	0	0	0	–0.2	0	0
Losses carried forward	1.3	87.7	0	0	0.2	30.0	12.3	56.2[6]	0
Exchange- rate differences	0	0	–1.1	–149.5	0	0	0	–148.4[7]	64.4
Gross amounts	**82.9**	**191.5**	**–256.1**	**–624.5**	**–1.5**	**–9.1**	**1.3**	**–248.1**	**68.4**
Deferred taxes set off	–20.4	–43.2	20.4	43.2	0	0	0	0	0
Total	**62.5**	**148.3**	**–235.7**	**–581.3**	**–1.5**	**–9.1**	**1.3**	**–248.1**	**68.4**

1) Thereof, –€7.8 million is disclosed separately in the consolidated statement of changes in equity under “revaluation surplus”, and disposal of €4.8 million relating to the deconsolidation of International Securities Exchange Holdings, Inc. (ISE)
2) Disposal relating to the deconsolidation of ISE
3) Thereof, –€1.1 million due to acquisitions from business combinations relating to the initial consolidation of companies within the EEX group
4) Thereof, €41.4 million is disclosed separately in the consolidated statement of changes in equity under “revaluation surplus”, and disposal of €–17.4 million relating to the deconsolidation of ISE
5) Separate disclosure in the consolidated statement of changes in equity under “revaluation surplus”
6) Disposal relating to the deconsolidation of U.S. Exchange Holdings, Inc.
7) Separate disclosure in the consolidated statement of changes in equity under “accumulated profit”; thereof €–147.2 million (2015: €64.9 million) from discontinued operations

Deferred tax liabilities have not been recognised in respect of the tax on future dividends that may be paid from retained earnings by subsidiaries and associated companies. In accordance with section 8b (5) of the Körperschaftsteuergesetz (KStG, the German Corporation Tax Act), 5 per cent of dividends and similar income received by German companies is treated as non-deductible expenses for tax purposes. There were no unrecognised deferred tax liabilities on future dividends of subsidiaries and associates as well as gains on the disposal of subsidiaries and associates in the reporting period (2015: nil).

Reconciliation from expected to reported tax expense

	2016 €m	(restated) 2015 €m
Expected income taxes derived from earnings before tax	279.1	228.3
Tax losses utilised and loss carryforwards not recognised for tax purposes	–0.7	0.7
Recognition of deferred taxes in respect of unrecognised tax loss carryforwards	–0.7	–0.5
Change in valuation allowance for deferred tax assets	–4.0	0
Tax increases due to other non-tax-deductible expenses	13.6	11.0
Effects of different tax rates	12.9	1.6
Effects from changes in tax rates	0.1	–0.1
Tax decreases due to dividends and income from the disposal of equity investments	–15.9	–13.7
Other	–0.3	1.6
Income tax expense arising from current year	**284.1**	**228.9**
Prior-period income taxes	0.4	–1.4
Income tax expense	**284.5**	**227.5**

To determine the expected tax expense, earnings before tax have been multiplied by the composite tax rate of 27 per cent assumed for 2016 (2015: 26 per cent).

At the end of the financial year, accumulated unused tax losses amounted to €21.3 million (2015: €60.6 million), for which no deferred tax assets were recognised. The unused tax losses are attributable to domestic losses totalling €2.6 million and to foreign tax losses totalling €18.7 million (2015: domestic tax losses €3.8 million, foreign tax losses €56.8 million). Tax losses of €1.1 million were utilised in 2016 (2015: €0.7 million).

The losses can be carried forward in Germany subject to the minimum taxation rules, and in Luxembourg indefinitely according to the current legal situation. Losses in other countries can be carried forward for periods of up to 20 years.

Consolidated balance sheet disclosures

11. Intangible assets

Intangible assets (part 1)

	Purchased software €m	Internally developed software €m	Goodwill €m	Payments on account and construction in progress[1] €m	Other intangible assets €m	Total €m
Historical cost as at 1 Jan 2015	**230.7**	**727.1**	**2,235.7**	**100.2**	**2,174.4**	**5,468.1**
Acquisitions from business combinations[2]	0.3	15.3	554.2	0.8	359.6	930.2
Additions	13.5	7.0	0	91.6	0	112.1
Disposals	–1.0	–1.1	0	0	0	–2.1
Reclassifications	1.0	37.7	0	–38.7	0	0
Exchange rate differences	0.8	4.8	119.6	0.2	181.3	306.7
Historical cost as at 31 Dec 2015	**245.3**	**790.8**	**2,909.5**	**154.1**	**2,715.3**	**6,815.0**
Acquisitions through business combinations[3]	0	0	3.3	0	4.3	7.6
Disposals from change in scope of consolidation[4]	–0.2	–2.5	–16.7	0	–0.2	–19.6
Reclassification into “assets held for sale”[5]	–5.5	–46.7	–153.8	–5.8	–1,741.2	–1,953.0
Additions	14.9	11.7	0	78.2	0.1	104.9
Disposals	0	–3.6	–0.1	–1.7	0	–5.4
Reclassifications	6.2	27.5	0	–33.8	0.1	0
Exchange rate differences	–0.1	–1.3	–21.1	–0.2	–46.9	–69.6
Historical cost as at 31 Dec 2016	**260.6**	**775.9**	**2,721.1**	**190.8**	**931.5**	**4,879.9**

1) Additions to payments on account and construction in progress in the year under review relate exclusively to internally developed software.
2) This relates primarily to additions within the scope of the business combination with 360 Treasury Systems AG and its subsidiaries, as well as within the scope of initial consolidation of Powernext SA, EPEX SPOT group and APX Holding group; see also note 2.
3) This relates primarily to additions within the scope of initial consolidation of Power Exchange Central Europe a.s., Gaspoint Nordic A/S and PEGAS CEGH Gas Exchange Services GmbH; see also note 2.
4) This relates to disposals made within the scope of the sale of shares held in Infobolsa S.A.; see also note 2.
5) This relates exclusively to disposals made within the scope of the sale of shares held in U.S. Exchange Holdings, Inc., as well as an asset deal regarding the disposal of the business operations of Market News International, Inc. and its two subsidiaries; see also note 2.

Intangible assets (part 2)

	Purchased software €m	Internally developed software €m	Goodwill €m	Payments on account and construction in progress[1] €m	Other intangible assets €m	Total €m
Historical cost as at 31 Dec 2016 brought forward	**260.6**	**775.9**	**2,721.1**	**190.8**	**931.5**	**4,879.9**
Amortisation and impairment losses as at 1 Jan 2015	**194.5**	**542.2**	**10.7**	**0**	**1,194.2**	**1,941.6**
Amortisation	16.3	52.7	0	0	33.3	102.3
Impairment losses	1.2	1.5	0	1.6	0	4.3
Disposals	–0.9	–0.8	0	0	0	–1.7
Exchange rate differences	0.4	3.6	0	0	131.5	135.5
Amortisation and impairment losses as at 31 Dec 2015	**211.5**	**599.2**	**10.7**	**1.6**	**1,359.0**	**2,182.0**
Amortisation	17.5	49.3	0	0	27.8	94.6
Impairment losses	0	3.6	0	0.3	0.3	4.2
Disposals from change in scope of consolidation[4]	–0.2	–2.5	–10.7	0	–0.1	–13.5
Reclassification into "assets held for sale"[5]	–5.0	–38.3	0	0	–1,281.0	–1,324.3
Disposals	0	–1.2	0	0	0	–1.2
Reclassifications	1.4	–1.4	0	0	0	0
Exchange rate differences	–0.1	–1.1	0	0	–34.4	–35.6
Amortisation and impairment losses as at 31 Dec 2016	**225.1**	**607.6**	**0**	**1.9**	**71.6**	**906.2**
Carrying amount as at 31 Dec 2015	33.8	191.6	2,898.8	152.5	1,356.3	4,633.0
Carrying amount as at 31 Dec 2016	**35.5**	**168.3**	**2,721.1**	**188.9**	**859.9**	**3,973.7**

Software, payments on account and construction in progress

Additions to and reclassifications of software largely concern the development of a pan-European securities settlement platform (TARGET2-Securities) within the Clearstream and Xetra segments as well as the development of the risk management and clearing system (Eurex Clearing Prisma) and the T7 derivatives trading platform within the Eurex segment.

Carrying amounts of material software and construction in progress as well as remaining amortisation periods of software

	Carrying amount as at		Remaining amortisation period as at	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 years	31 Dec 2015 years
Eurex				
Derivatives trading platform T7	26.8	29.8	2.9–5.9	4.9–7.0
Eurex Clearing Prisma Release 1.0	23.2	29.0	4.0–5.0	2.3–6.5
360T trading platform	14.5	14.1	5.0–7.0	6.0–7.0
C7 Release 3.0	14.3	13.4	6.4	n.a.
Eurex Clearing Prisma Release 2.0	9.9	12.1	5.0–6.0	6.4–6.9
ISE trading platform including applications	7.5	20.7	2.0	2.0–5.0
Clearstream				
TARGET2-Securities	89.0	71.8	n.a.	n.a.
1CAS Custody & Portal	24.7	9.6	n.a.	n.a.
MALMO	17.8	20.8	4.9	5.0
Single Network	10.1	10.1	n.a.	n.a.
One CLS Settlement & Reporting (1 CSR)	11.6	5.1	n.a.	n.a.
Xetra				
TARGET2-Securities	10.0	6.5	n.a.	n.a.

In addition to event-driven impairment tests on all intangible assets, intangible assets not yet available for use are tested for impairment at least annually. Impairment losses of €3.9 million (2015: €4.3 million) needed to be recognised in 2016. It is disclosed in the "depreciation, amortisation and impairment losses" item and relates to the Xetra, Clearstream and Eurex segments. The recoverable amount was determined based on fair value less costs of disposal, using a discounted cash flow model (level 3 inputs).

Goodwill and other intangible assets from business combinations

Changes in goodwill and other intangible assets classified by business combinations

	Clearstream €m	ISE €m	360T €m	EEX €m	STOXX €m	Miscella-neous €m	Total €m
Goodwill							
Balance as at 1 Jan 2016	1,063.8	1,161.3	529.0	33.3	32.6	78.8	2,898.8
Acquisitions through business combinations	0	0	0	0	0	3.3	3.3
Reclassification into "assets held for sale"	0	–153.8	0	0	0	–6.0	–159.8
Exchange rate differences	0	–20.1	0	0	0	–1.1	–21.2
Balance as at 31 Dec 2016	**1,063.8**	**987.4**	**529.0**	**33.3**	**32.6**	**75.0**	**2,721.1**
Other intangible assets							
Balance as at 1 Jan 2016	0	474.5	250.1	67.2	438.5	126.0	1,356.3
Acquisitions through business combinations	0	0	0	0	0	4.3	4.3
Reclassification into "assets held for sale"	0	–459.3	0	0	0	–0.9	–460.2
Additions	0	0	0	0	0	0.1	0.1
Amortisation	0	–2.7	–10.1	–4.7	–3.1	–7.2	–27.8
Impairments	0	0	0	0	0	–0.3	–0.3
Exchange rate differences	0	–12.5	0	0	0	0	–12.5
Balance as at 31 Dec 2016	**0**	**0**	**240.0**	**62.5**	**435.4**	**122.0**	**859.9**

Other intangible assets are divided into the following categories:

Changes in other intangible assets by category

	Exchange licences €m	Trade names €m	Member and customer relationships €m	Miscellaneous intangible assets €m	Total €m
Balance as at 1 Jan 2016	**136.9**	**455.5**	**757.5**	**6.4**	**1,356.3**
Acquisitions through business combinations	0	0.4	3.8	0.1	4.3
Reclassification into "assets held for sale"	–132.7	–1.7	–324.6	–1.2	–460.2
Additions	0	0	0	0.1	0.1
Amortisation	0	–0.3	–26.6	–0.9	–27.8
Impairments	0	0	–0.3	0	–0.3
Exchange rate differences	–3.5	–0.1	–8.9	0	–12.5
Balance as at 31 Dec 2016	**0.7**	**453.8**	**400.9**	**4.5**	**859.9**

Due to the discontinuation of a business operation, a customer relationship amounting to €0.3 million was impaired within the Market Data + Services segment. The recoverable amount was determined based on the fair value less costs of disposal, using a disposal price of a highly probable transaction. Within the business combinations with Power Exchange Central Europe a.s., Gaspoint Nordic A/S and PEGAS CEGH Gas Exchange Services GmbH, Deutsche Börse Group also acquired other intangible assets besides goodwill in 2016. For details concerning their carrying amount at the time of acquisition as well as their useful lives, please refer to the tables in note 2 and note 3.

An impairment test is carried out, at least annually, concerning goodwill and certain other intangible assets with an indefinite useful life. Since these assets do not generate any cash inflows that are largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit (CGU), or group of CGUs, that the respective asset is allocated to. The following table outlines the allocation of assets to the respective CGU:

Allocation of goodwill and other intangible assets with indefinite useful lifes to CGUs

Asset	(Group of) cash generating unit(s)			
	Clearstream Core €m	Eurex Core €m	360T €m	EEX €m
Goodwill				
Clearstream	1,063.8	0	0	0
International Securities Exchange	0	987.4	0	0
360T group	47.3	292.5	189.2	0
European Energy Exchange	0	0	0	33.3
STOXX	0	0	0	0
Powernext/EPEX SPOT group	0	0	0	18.4
Clearstream Global Securities Services	0	0	0	0
Impendium	0	0	0	0
Market News International	0	0	0	0
APX Holding group	0	0	0	6.6
Börse Frankfurt Zertifikate	0	0	0	0
Clearstream Fund Services	0	0	0	0
Need to Know News	0	0	0	0
Power Exchange Central Europe	0	0	0	1.7
PEGAS CEGH Gas Exchange Services	0	0	0	1.5
Kingsbury	0	0	0	0
Indexium	0	0	0	0
Gaspoint Nordic	0	0	0	0.1
Exchange licences				
European Energy Exchange	0	0	0	0.3
Börse Frankfurt Zertifikate	0	0	0	0
Powernext/EPEX SPOT group	0	0	0	0.1
APX Holding group	0	0	0	0.1
Trade names				
STOXX	0	0	0	0
360T group	0	0	19.9	0
Powernext/EPEX SPOT group	0	0	0	7.2
European Energy Exchange	0	0	0	5.8
Power Exchange Central Europe	0	0	0	0.3
PEGAS CEGH Gas Exchange Services	0	0	0	0.1

The recoverable amounts of the CGUs with allocated goodwill are based either on their values in use or on their fair value less costs of disposal, depending on the respective unit. The other value is calculated only in cases in which one of these values (value in use or fair value less costs of disposal) does not exceed the carrying amount. Since there is no active market for the CGUs, the discounted cash flow method is used to calculate both value in use and fair value less costs of disposal. The inputs used are Level 3 inputs in all cases.

	(Group) of cash generating unit(s)				
	MD+S segment €m	Fund Services €m	Börse Frankfurt Zertifikate €m	STOXX €m	Total €m
	0	0	0	0	1,063.8
	0	0	0	0	987.4
	0	0	0	0	529.0
	0	0	0	0	33.3
	32.6	0	0	0	32.6
	0	0	0	0	18.4
	0	15.6	0	0	15.6
	9.2	0	0	0	9.2
	8.9	0	0	0	8.9
	0	0	0	0	6.6
	0	0	4.6	0	4.6
	0	4.0	0	0	4.0
	3.7	0	0	0	3.7
	0	0	0	0	1.7
	0	0	0	0	1.5
	0.5	0	0	0	0.5
	0.2	0	0	0	0.2
	0	0	0	0	0.1
	0	0	0	0	0.3
	0	0	0.2	0	0.2
	0	0	0	0	0.1
	0	0	0	0	0.1
	0	0	0	420.0	420.0
	0	0	0	0	19.9
	0	0	0	0	7.2
	0	0	0	0	5.8
	0	0	0	0	0.3
	0	0	0	0	0.1

Key assumptions used to determine the recoverable amount depend upon the respective CGU, or group of CGUs. Individual costs of capital are determined for each CGU, or group of CGUs, for the purpose of discounting projected cash flows. These capital costs are based on data incorporating beta factors, borrowing costs, as well as the capital structure of the respective peer group. Pricing, trading volumes, assets under custody, market share assumptions or general business development assumptions are based on past experience or market research. Other key assumptions are mainly based on external factors and generally correspond to internal management planning. Significant macroeconomic indicators include equity index levels, volatility of equity indices, as well as interest rates, exchange rates, GDP growth, unemployment levels and government debt. When calculating value in use, the projections are adjusted for the effects of future restructurings and cash outflows to enhance the asset's performance investments, if appropriate.

The following tables indicate material assumptions used for impairment tests for the years 2016 and 2015:

Key assumptions used for impairment tests in 2016

(Group of) cash-generating unit(s)	Recoverable amount	Risk-free interest rate %	Market risk premium %	Discount rate %	Perpetuity growth rate %	CAGR[1] Net revenues %	CAGR[1] Operating costs[2] %
Clearstream Core	value in use	0.7	6.5	10.4[3]	1.0	3.5	3.2
Eurex Core	fair value less costs of disposal	0.7	6.5	8.5[4]	1.0	7.2	6.6
360T	fair value less costs of disposal	0.7	6.5	8.3[4]	2.5	10.3	1.6
EEX	fair value less costs of disposal	0.7	6.5	9.0[4]	1.0	1.3	4.3
MD+S segment	fair value less costs of disposal	0.2	6.5	7.7[4]	2.0	2.9	0.4
Fund Services	fair value less costs of disposal	0.7	6.5	12.3[4]	2.0	6.3	5.7
Börse Frankfurt Zertifikate	fair value less costs of disposal	0.2	6.5	11.5[4]	2.0	3.0	2.2
STOXX	fair value less costs of disposal	0.2	6.5	8.9[4]	2.0	6.8	5.5

1) CAGR = compound annual growth rate
2) Without depreciation, amortisation and impairment losses
3) Before tax
4) After tax

Key assumptions used for impairment tests in 2015

(Group of) cash-generating unit(s)	Recoverable amount	Risk-free interest rate %	Market risk premium %	Discount rate %	Perpetuity growth rate %	CAGR[1)] Net revenues %	CAGR[1)] Operating costs[2)] %
Eurex Core + ISE	fair value less costs of disposal	1.2	6.5	9.3[4)]	1.0	6.7	3.4
Clearstream Core	value in use	1.2	6.5	11.0[3)]	1.5	3.0	4.3
Eurex Core	fair value less costs of disposal	1.2	6.5	9.3[4)]	1.0	7.1	3.7
360T	fair value less costs of disposal	1.2	6.5	8.7[4)]	2.5	18.9	17.5
EEX	fair value less costs of disposal	1.1	6.5	9.3[4)]	1.0	2.8	1.6
MD+S segment	fair value less costs of disposal	1.1	6.5	8.5[4)]	2.0	3.9	2.4
Fund Services	fair value less costs of disposal	1.2	6.5	12.7[4)]	2.0	11.6	8.9
Börse Frankfurt Zertifikate	fair value less costs of disposal	1.1	6.5	12.8[4)]	2.0	1.5	2.2
Infobolsa	fair value less costs of disposal	1.2	6.5	9.6[4)]	2.5	3.1	1.9
ISE	value in use	2.8	6.5	14.1[3)]	2.5	1.4	0.8
STOXX	fair value less costs of disposal	1.1	6.5	9.5[4)]	2.0	10.3	3.7

1) CAGR = compound annual growth rate
2) Without depreciation, amortisation and impairment losses
3) Before tax
4) After tax

Even in case of a reasonably possible change of the parameters, none of the above-mentioned CGUs, or groups of CGUs, would be impaired.

12. Property, plant and equipment

Property, plant and equipment

	Fixtures and fittings €m	Computer hardware, operating and office equipment €m	Payments on account and construction in progress €m	Total €m
Historical costs as at 1 Jan 2015	**79.9**	**322.4**	**1.2**	**403.5**
Acquisitions through business combinations	0.8	2.3	2.0	5.1
Additions	8.1	32.0	2.2	42.3
Disposals	0	–11.3	–2.7	–14.0
Reclassifications	0.2	1.9	–2.1	0
Exchange rate differences	1.6	2.7	0.1	4.4
Historical costs as at 31 Dec 2015	**90.6**	**350.0**	**0.7**	**441.3**
Disposals from change in scope of consolidation	0	–2.0	0	–2.0
Reclassification into "assets held for sale"[1]	–11.5	–25.2	0	–36.7
Additions	4.6	40.9	4.2	49.7
Disposals	–5.0	–5.6	–0.7	–11.3
Reclassifications	1.7	0.4	–2.0	0.1
Exchange rate differences	–0.8	–0.7	0	–1.5
Historical costs as at 31 Dec 2016	**79.6**	**357.8**	**2.2**	**439.6**
Depreciation and impairment losses as at 1 Jan 2015	**42.5**	**260.1**	**0**	**302.6**
Amortisation	6.8	30.4	0	37.2
Disposals	0	–11.2	0	–11.2
Reclassifications	0	0	0	0
Exchange rate differences	1.0	2.0	0	3.0
Depreciation and impairment losses as at 31 Dec 2015	**50.3**	**281.3**	**0**	**331.6**
Amortisation	6.6	29.4	0	36.0
Impairment losses	0.4	0	0	0.4
Disposals from change in scope of consolidation	0	–1.8	0	–1.8
Reclassification into "assets held for sale"[1]	–8.4	–20.6	0	–29.0
Disposals	–4.6	–5.4	0	–10.0
Reclassifications	–0.1	0	0	–0.1
Exchange rate differences	–0.5	–0.5	0	–1.0
Depreciation and impairment losses as at 31 Dec 2016	**43.7**	**282.4**	**0**	**326.1**
Carrying amount as at 31 Dec 2015	40.3	68.7	0.7	109.7
Carrying amount as at 31 Dec 2016	**35.9**	**75.4**	**2.2**	**113.5**

1) This relates exclusively to the disposals in connection with the disposal of the interest in the ISE subgroup and with the asset deal regarding the sale of the business operations of Assam SellerCo, Inc. and its two subsidiaries, see note 2.

13. Financial investments

Financial assets

	Investments in associates and joint ventures €m	Other equity investments €m	Receivables and securities from banking business €m	Other financial instruments and loans €m
Historical cost as at 1 Jan 2015	**111.9**	**147.5**	**1,301.9**	**29.5**
Acquisition through business combinations	–67.7	0	0	–6.4
Additions	14.1	29.8	771.5	14.3
Disposals	–0.1	–17.9	0	–5.2
Addition/(reversal) premium/discount	0	0	–1.7	0
Reclassifications	–3.5	62.5	–62.2[1]	–0.3
Exchange rate differences	0.4	7.5	6.8	2.1
Historical cost as at 31 Dec 2015	**55.1**	**229.4**	**2,016.3**	**34.0**
Acquisitions from business combinations	–0.6	0	0	0
Reclass into “assets held for sale”	0	–32.3	0	–8.1
Additions	5.1	5.4	155.6	12.8
Disposals	–0.4	–40.2	0	–6.1
Addition/(reversal) premium/discount	0	0	–2.2	–0.1
Reclassifications	–1.0	0	–586.8[1]	1.0
Exchange rate differences	–0.2	3.4	14.7	–0.9
Historical cost as at 31 Dec 2016	**58.0**	**165.7**	**1,597.6**	**32.6**
Revaluation as at 1 Jan 2015	**–7.7**	**19.3**	**3.1**	**–3.3**
Acquisition through business combinations	–6.6	0	0	6.4
Disposals/(additions) of impairment losses	0	16.6	0	–3.2
Dividends	–0.9	0	0	0
Net income from equity method measurement	–1.3	0	0	0
Currency translation differences recognised in equity	0.3	4.4	0	0
Currency translation differences recognised in profit or loss	–0.3	0	0	–0.7
Other fair value changes recognised in equity	0	9.2	0	0
Other fair value changes recognised in profit or loss	5.3	–0.6	0	0
Market price changes recognised in other comprehensive income	0	0	–0.8	0.3
Market price changes recognised in profit or loss	–5.8	0	0	–1.0
Reclassifications	0.4	–58.9	0[1]	0
Revaluation as at 31 Dec 2015	**–16.6**	**–10.0**	**2.3**	**–1.5**
Acquisitions from business combinations	0	0	0	0
Reclass into “assets held for sale”	0	–0.8	0	0.2
Disposals/(additions) of impairment losses	0	0	0	–5.0
Dividends	–1.8	0	0	0
Net income from equity method measurement	0.4	0	0	0
Currency translation differences recognised in equity	–0.4	5.3	0	0
Currency translation differences recognised in profit or loss	0.3	0	–0.1	0.5
Other fair value changes recognised in equity	1.1	1.0	0	0
Other fair value changes recognised in profit or loss	0	–40.9	0	0
Market price changes recognised in other comprehensive income	0	135.1	6.2	0
Market price changes recognised in profit or loss	–6.7	0	0	–0.4
Reclassifications	0	0	–1.2	0
Revaluation as at 31 Dec 2016	**–23.7**	**89.7**	**7.2**	**–6.2**
Carrying amount as at 31 Dec 2015	38.5	219.4	2,018.6	32.5
Carrying amount as at 31 Dec 2016	**34.3**	**255.4**	**1,604.8**	**26.4**

1) Reclassified as current receivables and securities from banking business

The investments in associates and joint ventures include interests in associates with a carrying amount of €34.3 million (2015: €38.5 million) and interests in joint ventures with a carrying amount of nil (2015: nil). In financial year 2016, proportionate losses with an amount of nil (2015: nil) were not recognised for associates accounted for using the equity method.

As in the previous year,"other financial instruments and loans" include securities with a fair value of €5.0 million pledged to the Industrie- und Handelskammer (IHK, the Chamber of Commerce) Frankfurt.

For details on revaluations and market price changes recognised in other comprehensive income, see also note 20. Other equity investments include available-for-sale shares.

In the reporting period, impairment losses amounting to €6.7 million (2015: €5.8 million) were recognised for associates and joint ventures in the income statement. These impairment losses related to unlisted equity instruments. See note 8 for further details.

Composition of receivables and securities from banking business

	31 Dec 2016 €m	31 Dec 2015 €m
Fixed-income securities		
issued by regional or local public bodies	523.9	498.0
issued by other public bodies	650.5	955.4
issued by multilateral banks	352.9	487.3
issued by supranational issuers	77.5	77.9
Total	**1,604.8**	**2,018.6**

Securities from banking business include financial instruments listed on a stock exchange amounting to €1,604.8 million (2015: €2,018.6 million).

14. Derivatives and hedges

Deutsche Börse Group generally uses derivative financial instruments to hedge existing or highly probable forecast transactions. The derivatives are included in the items "receivables from banking business", "other non-current assets", "other current assets", "other non-current liabilities", "liabilities from banking business" and "other current liabilities".

Derivatives (fair value)

	Note	Assets		Note	Liabilities	
		31 Dec 2016 €m	31 Dec 2015 €m		31 Dec 2016 €m	31 Dec 2015 €m
Fair value hedges						
long-term		0	0		0	0
short-term		0	0	28	0	0
Cash flow hedges						
long-term		0	0		0	0
short-term	16	0	0	30	–6.0	0
Derivatives held for trading						
long-term		0.1	0		–1.5	0
short-term	16	65.7	23.3	28, 30	–9.1	–18.6
Total		**65.8**	**23.3**		**–16.6**	**–18.6**

Fair value hedges

No financial instruments designated as fair value hedges were outstanding as at 31 December 2016 or 2015.

Cash flow hedges

In 2016, Deutsche Börse AG entered into a cash flow hedge to (partially) eliminate the foreign-exchange risk associated with a US$ loan amounting to a nominal value of US$170 million granted to a subsidiary with the functional currency US dollar. The forward transaction will be settled on 28 March 2017. On 31 December 2016, the fair value of the forward contract amounted to €–6.0 million. The changes in fair value have been recognised in revaluation surplus and released through profit or loss upon recognition of the foreign-exchange gain of the hedged instrument.

In 2015, Deutsche Börse AG entered into a cash flow hedge to eliminate the foreign-exchange risk associated with the purchase amount of CHF 650 million to be paid in order to acquire the outstanding interest in STOXX Ltd. and Indexium AG. The forward transaction was designated to hedge the foreign-exchange fluctuation after having successfully negotiated the main terms of the purchase contract. The forward transaction was settled on 31 July 2015; the purchase of shares in STOXX Ltd. and Indexium AG was also closed on this day.

Changes in cash flow hedges

	2016 €m	2015 €m
Cash flow hedges as at 1 January	0	0
Amount recognised in other comprehensive income during the year	–6.0	–8.9
Amount recognised in profit or loss during the year	6.0	0
Closed-out	0	8.9
Cash flow hedges as at 31 December	**0**	**0**

Hedges of a net investment

In connection with the private placements in the USA, the series A to C bonds were designated as hedges against foreign-exchange risk arising from the translation of the functional currency US dollar into euros in order to hedge the net investment in the ISE subgroup until the disposal of the subgroup on 30 June 2016. The series A bonds had matured in 2015, series B and C were paid back on 29 July 2016.

Until the termination of the hedge, effective exchange rate differences from the private placements were reported in the balance sheet item “accumulated profit”, as are exchange rate differences from the translation of the functional currency of foreign subsidiaries. There was no ineffectiveness in the net investment hedges in 2016. A cumulative amount of €116.3 million (2015: €120.9 million) was recognised in other comprehensive income. In 2016, this amount was reclassified through profit or loss upon the disposal of the net investment in the ISE subgroup.

Derivatives held for trading

Currency swaps as at 31 December 2016 expiring in less than six months had a notional value of €3,073.8 million (2015: €2,621.4 million), as well as a negative fair value of €2.4 million and a positive fair value amounting to €65.4 million (2015: negative fair value of €12.4 million and a positive fair value amounting to €23.3 million). These swaps were entered into to convert foreign currencies resulting from the commercial paper programme into euros, and to economically hedge short-term foreign currency receivables and liabilities in euros. These are reported under “current receivables and securities from banking business” and “liabilities from banking business” in the balance sheet (see also notes 16 and 28).

Derivatives transactions: outstanding positions (currency swaps)

		Currency swaps	
		31 Dec 2016	31 Dec 2015
Quantity		45	60
Notional value	€m	3,073.8	2,621.4
Positive fair value	€m	65.4	23.3
Negative fair value	€m	–2.4	–12.4

Eurex Clearing AG and Eurex Frankfurt AG have made prepayments to some customers. The repayment of these amounts depends on the fulfillment of certain criteria. Eurex Clearing AG and Eurex Frankfurt AG recognise embedded derivatives separately from the host contract as they are not closely related to this contract: they amount to €4.9 million (2015: €6.2 million), are classified as held for trading and are shown under “other non-current liabilities” (€1.5 million) and “other current liabilities” (€3.4 million).

Furthermore, Deutsche Börse AG made prepayments as the relevant criteria were fulfilled. Accordingly, the embedded derivative is also recognised separately under “other current liabilities” (€3.3 million).

15. Financial instruments held by central counterparties

Composition of financial instruments held by central counterparties

	31 Dec 2016 €m	31 Dec 2015 €m
Repo transactions	87,508.7	111,919.0
Options	24,385.1	21,413.7
Others	1,872.4	132.1
Total	**113,766.2**	**133,464.8**
thereof non-current	5,856.6	7,175.2
thereof current	107,909.6	126,289.6

The aggregate financial instruments held by central counterparties are classified into current and non-current in the balance sheet. Receivables and liabilities that may be offset against a clearing member are reported on a net basis. Financial liabilities of €430.2 million (2015: €283.1 million) were eliminated because of intra-Group GC Pooling transactions.

The following table gives an overview of the effects of offsetting the financial instruments held by central counterparties:

Gross presentation of offset financial instruments held by central counterparties[1)]

	Gross amount of financial instruments		Gross amount of offset financial instruments		Net amount of financial instruments	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
Financial assets from repo transactions	103,440.6	135,158.4	–15,931.9	–23,239.4	87,508.7	111,919.0
Financial liabilities from repo transactions	–103,010.4	–134,875.3	15,931.9	23,239.4	–87,078.5	–111,635.9
Financial assets from options	74,873.1	67,288.1	–50,488.0	–45,874.4	24,385.1	21,413.7
Financial liabilities from options	–74,873.1	–67,288.1	50,488.0	45,874.4	–24,385.1	–21,413.7

1) The collateral deposited by clearing members cannot be attributed directly to the individual transactions. For information on the composition of collateral, see note 36.

16. Current receivables and securities from banking business

In addition to non-current receivables and securities from banking business that are classified as non-current financial assets (see note 13), the following receivables and securities from banking business, attributable solely to the Clearstream subgroup, were classified as current assets as at 31 December 2016.

Composition of current receivables and securities from banking business

	31 Dec 2016 €m	31 Dec 2015 €m
Loans to banks and customers		
Reverse repurchase agreements	4,050.4	5,217.4
Balances on nostro accounts	1,128.0	736.8
Money market lendings	7,320.0	3,714.5
Margin calls	0.4	6.8
Overdrafts from settlement business	293.8	378.8
	12,792.6	**10,054.3**
Available-for-sale debt instruments	592.3	64.1
Interest receivables	15.2	1.2
Forward foreign-exchange transactions[1]	65.4	23.3
Total	**13,465.5**	**10,142.9**

1) See note 14.

Overdrafts from settlement business represent short-term loans of up to two days' duration that are usually secured by collateral. Potential concentrations of credit risk are monitored for counterparty credit limits (see note 36).

All of the securities held as at 31 December 2016 and 2015 were listed and issued by sovereign or sovereign-guaranteed issuers.

17. Changes in valuation allowance on trade receivables

As in the previous year, there were no trade receivables due after more than one year as at 31 December 2016.

Allowance account

	€m
Balance as at 1 Jan 2015	**7.6**
Additions	1.5
Acquisitions from business combinations	0.2
Utilisation	0
Reversal	–3.0
Balance as at 31 Dec 2015	**6.3**
Additions	1.6
Acquisitions from business combinations	0
Utilisation	–0.1
Reversal	–1.8
Balance as at 31 Dec 2016	**6.0**

Uncollectible receivables of €0.5 million (2015: €1.4 million) for which no valuation allowances had been recognised in prior periods were written off in the reporting period.

18. Other current assets

Composition of other current assets

	31 Dec 2016 €m	31 Dec 2015 €m
Other receivables from CCP transactions	404.7	889.3
Tax receivables (excluding income taxes)	43.2	64.1
Prepaid expenses	32.9	26.3
Interest receivable	21.7	25.8
Incentive programme	3.5	3.5
Guarantees and deposits	3.4	1.6
Creditors with debit balances	0.7	1.4
Derivatives	0.3	0
Claims against insurance companies	0	2.2
Miscellaneous	3.8	8.1
Total	**514.2**	**1,022.3**

19. Restricted bank balances

Amounts reported separately under liabilities as cash deposits by market participants are restricted. Such amounts are mainly invested via bilateral or triparty reverse repurchase agreements and in the form of overnight deposits at banks (restricted bank balances). Government or government-guaranteed bonds with an external rating of at least AA– are accepted as collateral for the reverse repurchase agreements. Reported restricted bank balances total €27,777.6 million (2015: €26,870.0 million).

20. Equity

Changes in equity are presented in the consolidated statement of changes in equity. As at 31 December 2016, the number of no-par value registered shares of Deutsche Börse AG in issue was 193,000,000 (31 December 2015: 193,000,000).

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

Composition of authorised share capital

	Amount in €	Date of authorisation by the shareholders	Expiry date	Existing shareholders' pre-emptive rights may be disapplied for fractioning and/or may be disapplied if the share issue is:
Authorised share capital I[1]	13,300,000	11 May 2016	10 May 2021	n.a.
Authorised share capital II[1]	19,300,000	13 May 2015	12 May 2020	▪ for cash at an issue price not significantly lower than the stock exchange price, up to a maximum amount of 10 per cent of the nominal capital. ▪ against non-cash contributions for the purpose of acquiring companies, parts of companies, interests in companies, or other assets.
Authorised share capital III[1]	38,600,000	13 May 2015	12 May 2020	n.a.
Authorised share capital 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 15ff. of the Aktiengesetz (AktG, German Stock Corporation Act).

1) Shares may only be issued, excluding shareholders pre-emptive subscription rights, provided that the aggregate amount of new shares issued excluding shareholders' pre-emptive rights during the term of the authorisation (including under other authorisations) does not exceed 20 per cent of the issued share capital.

Contingent capital

In accordance with the resolution by the Annual General Meeting on 15 May 2014, the Executive Board was authorised, subject to the approval of the Supervisory Board, to issue on one or more occasions in the period up to 14 May 2019 convertible bonds and/or bonds with warrants or a combination of such instruments in a total nominal amount of up to €2,500,000,000 with or without maturity restrictions, and to grant the holders or creditors of these bonds conversion or option rights to new no-par value registered shares of Deutsche Börse AG with a proportionate interest in the share capital totalling up to €19,300,000, as specified in more detail in the terms and conditions of the convertible bonds or in the terms and conditions of the warrants attaching to the bonds with warrants.

The Executive Board is authorised, subject to the approval of the Supervisory Board, to disapply shareholders' pre-emptive rights to bonds with conversion or option rights to shares of Deutsche Börse AG in the following cases: (i) to eliminate fractions, (ii) if the issue price of a bond does not fall materially short of the theoretical fair value determined in accordance with recognised financial techniques and the total number of shares attributable to these bonds does not exceed 10 per cent of the share capital, (iii) to grant the holders of conversion or option rights to shares of Deutsche Börse AG options as compensation for dilutive effects to the same extent as they would be entitled to receive after exercising these rights.

The bonds may also be issued by companies based in Germany or abroad that are affiliated with Deutsche Börse AG within the meaning of sections 15ff. of the Aktiengesetz (AktG, German Stock Corporation Act). Accordingly, the share capital was contingently increased by up to €19,300,000 (contingent capital 2014). To date, the authorisation to issue convertible bonds and/or bonds with warrants has not been exercised.

There were no further rights to subscribe for shares as at 31 December 2016 or 31 December 2015.

Revaluation surplus

The revaluation surplus results from the revaluation of securities and other current and non-current financial instruments at their fair value net of deferred taxes. This item also includes reserves from an existing investment in an associated company; these reserves were recognised in connection with the acquisition of further shares, as the company was consolidated at that date. Actuarial gains and losses for defined benefit obligations are also directly recognised in revaluation surplus.

Revaluation surplus

	Recognition of hidden reserves from fair value measurement €m	Other equity investments (financial assets) €m	Securities from banking business (financial assets) €m
Balance as at 1 Jan 2015 (gross)	**103.7**	**1.7**	**3.5**
Changes from defined benefit obligations	0	0	0
Fair value measurement	0	9.1	–1.1
Reclassifications	0	0	0
Reversal to profit or loss	0	0	0
Balance as at 31 Dec 2015 (gross)	**103.7**	**10.8**	**2.4**
Changes from defined benefit obligations	0	0	0
Fair value measurement	0	141.4	6.2
Reclassifications	0	0	–1.2
Reversal to profit or loss	0	–40.8	–0.1
Balance as at 31 Dec 2016 (gross)	**103.7**	**111.4**	**7.3**
Deferred taxes			
Balance as at 1 Jan 2015	**0**	**–0.5**	**–1.3**
Additions	0	0	0.6
Reversals	0	–3.7	0
Balance as at 31 Dec 2015	**0**	**–4.2**	**–0.7**
Additions	0	16.2	0
Reversals	0	–56.2	–1.3
Balance as at 31 Dec 2016	**0**	**– 44.2**	**– 2.0**
Balance as at 1 Jan 2015 (net)	**103.7**	**1.2**	**2.2**
Balance as at 31 Dec 2015 (net)	**103.7**	**6.6**	**1.7**
Balance as at 31 Dec 2016 (net)	**103.7**	**67.2**	**5.3**

Accumulated profit

The “accumulated profit” item includes exchange rate differences amounting to €5.1 million (2015: €209.6 million). €412.3 million was withdrawn due to currency translation for foreign subsidiaries in the reporting period (2015: €–170.6 million) and €207.8 million was added relating to investment hedges that were used to hedge the net investment in ISE against currency risk (2015: €–41.0 million).

Regulatory capital requirements and regulatory capital ratios

As in the past, Clearstream Banking S.A., Clearstream Banking AG and Eurex Clearing AG, in their capacity as credit institutions, are subject to solvency supervision by the German or Luxembourg banking supervisory authorities (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin, and Commission de Surveillance du Secteur Financier, CSSF, respectively). The same applies to the Clearstream Holding group at the level of the supervisory group.

As in the previous year, Eurex Bonds GmbH and Eurex Repo GmbH are subject to specific provisions applicable to certain investment firms under BaFin solvency supervision.

	Other financial instruments (financial assets) €m	Current securities from banking business €m	Cash flow hedges €m	Defined benefit obligations €m	Total €m
	1.1	–0.1	–9.0	–159.7	–58.8
	0	0	0	3.2	3.2
	0.4	0.2	–8.9	0	–0.3
	0	0	8.9	0	8.9
	0	0	2.8	0	2.8
	1.5	0.1	– 6.2	– 156.5	– 44.2
	0	0	0	–27.3	–27.3
	0	–1.1	–6.0	0	140.5
	0	1.2	0	0	0
	0	0.1	8.7	0	–32.1
	1.5	0.3	– 3.5	– 183.8	36.9
	–0.3	0	2.4	42.6	42.9
	0	0	0	0	0.6
	–0.1	0	–0.7	–0.1	–4.6
	–0.4	0	1.7	42.5	38.9
	0	0	0	7.8	24.0
	0	–0.1	–0.7	0	–58.3
	– 0.4	– 0.1	1.0	50.3	4.6
	0.8	–0.1	–6.6	–117.1	–15.9
	1.1	0.1	–4.5	–114.0	–5.3
	1.1	0.2	– 2.5	– 133.5	41.5

With the admission as an “Authorised Clearing House” (ACH) by the Monetary Authority of Singapore (MAS) on 8 July 2015, Eurex Clearing Asia Pte. Ltd. has become subject to own funds requirements according to the Securities and Futures Act (Singapore) and other specific MAS requirements. However, the majority of these requirements will only become materially effective with the commencement of operations, which is currently scheduled for 2017. As a “Recognised Market Operator”, Cleartrade Exchange Pte. Limited is subject to MAS supervision as well, and has to fulfil the respective own funds requirements.

Since the authorisation of both Eurex Clearing AG and European Commodity Clearing AG as central counterparties under the provisions of Regulation (EU) No 648/2012 (European Market Infrastructure Regulation, EMIR) in 2014, these companies have been subject to the capital requirements under Article 16 of EMIR. These requirements apply to Eurex Clearing AG in parallel to the solvency supervision requirements applicable to credit institutions, and the higher requirement has to be met in each case. Irrespective of its status as a specialist credit institution according to German law, European Commodity Clearing AG is only subject to EMIR capital requirements.

REGIS-TR S.A., as trade repository according to Regulation (EU) No 648/2012/EU (EMIR), is subject to supervision exercised by the European Securities and Markets Authority (ESMA) pursuant to Article 21 (b) of Delegated Regulation (EU) No 150/2013.

Powernext SA is a regulated market in France, and is hence subject to supervision exercised by the Autorité des marchés financiers (AMF); furthermore, Powernext SA is obliged to fulfil the regulatory capital requirements set forth in the "Arrêté du 2 juillet 2007 relatif au capital minimum, aux fonds propres et au contrôle interne des entreprises de marché".

The EMIR capital requirements for central counterparties are in large part based on the EU own funds requirements for credit institutions (see below), but the detail differs both in relation to the capital components as well as the capital requirement components and capital deduction items. Moreover, EMIR does not specify any capital buffers such as those introduced by the EU Capital Requirements Directive 2013/36/EU (CRD IV) and the Regulation (EU) No 575/2013 (Capital Requirements Regulation, CRR) for banks.

Since 1 January 2014, the own funds requirements for credit institutions have been primarily subject to the EU-wide requirements of the CRR as well as the supplementary national regulations implementing CRD IV, which transposed the "Basel III" rules into European law.

All companies that are directly or indirectly (i.e. by means of EMIR requirements) subject to the CRR own funds requirements, are exempted from compliance with trading book requirements. Market risk exposures consist only of relatively small open foreign currency positions. The companies concerned uniformly apply the standardised approach for credit risk. As a result of the specific business of the credit institutions and central counterparties belonging to Deutsche Börse Group, their recognised assets are subject to sharp fluctuations. This leads to correspondingly volatile total capital ratios at the Clearstream companies. The volatility of the ratio is subject to major fluctuations on a day-to-day basis in the course of the year. Due to a high degree of collateralised or zero-weighted cash investments, the own funds requirements for credit and market risk exposures of Eurex Clearing AG and European Commodity Clearing AG are relatively stable despite volatile total assets in the course of the year.

To calculate operational risk, Eurex Clearing AG and European Commodity Clearing AG use the basic indicator approach, while the Clearstream companies apply the advanced measurement approach (AMA).

Due to the specific arrangements for the two investment firms, Eurex Repo GmbH and Eurex Bonds GmbH, no explicit own funds requirements for operational risk are determined in accordance with Article 95 of the CRR. Instead, the total own funds requirement is determined either as the own funds requirement amount for credit and market risk or as 25 per cent of fixed overhead costs, depending on which is higher. Since the credit and market risks are low, the relevant criterion for both companies is the own funds requirement on the basis of overhead costs.

None of the Group companies subject to solvency supervision has Tier 2 regulatory capital.

A minimum total capital ratio of 8 per cent generally applies to credit institutions subject to the CRR. None of the credit institutions or groups currently subject to CRR regulations (Clearstream Banking S.A., Clearstream Banking AG, Clearstream Holding group and Eurex Clearing AG) is currently designated as systemically important. CRD IV introduced various capital buffers, which the supervised (credit) institutions generally have to meet over and above the minimum total capital ratio of 8 per cent, although they may temporarily fall below these levels. The capital buffers are introduced in stages, depending on the economic environment and systemic risk components: since 2014, CSSF has imposed a standard capital conservation buffer of 2.5 per cent of Tier 1 capital on all Luxembourg credit institutions; this arrangement represents a departure from the general transitional provisions of CRD IV. This means that the minimum total capital ratio is 10.5 per cent. Besides the capital buffers imposed by CSSF for all Luxembourg credit institutions, an additional capital conservation buffer of 0.625 per cent was applied in 2016 to all other regulated Group companies subject to CRR regulations. Taking these effects into account, the minimum total capital ratio was 8.625 per cent.

The individual companies' capital resources sufficiently reflect the fluctuation in risk-weighted assets. Stress considerations are used to determine the capital required for expected peaks and additional reserves for unexpected events are added. In addition, buffers are taken into account that cover the recovery indicators specified in the recovery plans and thus prevent recovery scenarios from being triggered even for peak own funds and capital requirements. The own funds and capital requirements determined in this way will be met on the basis of medium-term capital planning. As the actual own funds and capital requirements are below the expected peaks – significantly so under normal circumstances – this may lead to a very high total capital ratio or EMIR capital cover, especially at the closing date.

The own funds requirements of the Clearstream companies remained almost stable in the reporting period. However, changes occurred regarding own funds requirements for operational risks as well as credit and market risks, both at single entity and Group level. As of September 2016, the Clearstream Holding group has applied a different method, the AMA, for the calculation of operational risk own funds requirements. Since then, the calculation has been made in agreement with the supervisory authorities, using the so-called DirectVaR. However, formal approval of the new calculation method is still pending. Due to these changes, and given additional risk scenarios for new products and processes (i.e. TARGET2-Securities), and for compliance and legal risks, as well as other model adjustments, own funds requirements at the level of the Clearstream Holding group and at Clearstream Banking S.A. declined slightly, while they increased for Clearstream Banking AG. The operational risk capital requirements take into account a temporary banking supervision premium for 2015 and 2016, which will no longer apply following the conclusion of supervisory reviews and the formal approval of the DirectVaR, expected during the first half of 2017. Regarding Clearstream Holding group, technical closing-date items related to open foreign currency positions incurred own funds requirements for market risk of about €20 million in 2016 (the corresponding open foreign currency positions were below the threshold value in 2015). These effects, combined with the usual fluctuations of own funds requirements for credit risk, resulted in a slight increase of own funds requirements for credit and market risk at the Clearstream Holding group. At Clearstream Banking S.A., requirements have increased due to closing-date items related to receivables as well as to higher own funds requirements in the securities lending business (matched principal broking principle). The non-recurrent nature of considerable technical closing-date items related to a settlement loan previously recognised at Clearstream Banking AG led to a marked decline in the entity's own funds requirements for credit and market risk.

The Clearstream Holding group already responded to the (expected) increased own funds requirements in the past by launching a programme to strengthen its capital base; this programme continued in 2016. Further measures are planned for the coming years in the context of medium-term capital planning. In the year under review, the Clearstream Holding group's capital base was boosted by retaining profits at different companies, as well as through contributions to capital reserves at Clearstream Banking S.A. and Clearstream Banking AG.

In the medium to long term, the Clearstream Holding group expects a moderate increase in own funds requirements to arise at supervisory group level for the following reasons:

- CRD IV capital buffers, which are being increased in stages
- the future applicability of own funds requirements based on the Central Securities Depositories Regulation (CSDR)
- establishment of own funds requirements resulting from the introduction of minimum requirements for equity and eligible liabilities (MREL) as a result of Directive 2014/59/EU
- implementation of the so-called CRR II package and other amendments under Basel III (presumably applicable not before 2019)

Eurex Clearing AG's own funds requirements declined compared with the previous year. Given the increase in revenue, own funds requirements for operational risk rose slightly according to our model, while own funds requirements for credit and market risk declined due to the non-recurrent nature of considerable technical closing-date items related to outstanding receivables recognised in 2015. For simplicity reasons, Eurex Clearing AG generally does not recognise existing collateralisation for outstanding settlement receivables in the calculation of own funds requirements. However, regarding the outstanding receivables recognised at year-end 2015, collateralisation was applied retroactively. The previous year's figures were adjusted accordingly.

The own funds requirements calculated with Eurex Clearing AG's internal risk model are higher than the own funds requirements derived from the basic indicator approach, which follows regulatory stipulations and is based on the balance sheet. Hence, Eurex Clearing AG always applies additional capital buffers for such risks, surpassing regulatory minimum requirements. Against this background, banking supervisors requested in 2011 that Eurex Clearing AG increased the basis for the calculation of regulatory own funds requirements by considering an appropriate share of clearing-related fees received for the account of operating entities. The own funds requirements for operational risk are calculated once a year on the basis of three-year average historical income, including the assumed clearing fees, and are therefore not subject to daily fluctuations. Compliance with the minimum supervisory ratio is maintained at all times due to the sufficient capital buffer for uncollateralised cash investments.

Eurex Clearing AG's capital requirements according to EMIR are currently significantly above CRD IV capital buffer requirements. For this reason, Eurex Clearing AG does not currently expect the CRD IV capital buffers to have any material impact on its capital requirements. Independently of this, the capital resources of Eurex Clearing AG are reviewed on an ongoing basis and monitored as part of medium-term capital planning. In 2016, Eurex Clearing AG received a €50.0 million contribution to its capital reserve from parent company Eurex Frankfurt AG. An additional contribution of €100.0 million was made in January 2017. Further contributions are scheduled for the coming years, in order to continuously strengthen Eurex Clearing AG's capital base.

Composition of own funds requirements

	Own funds requirements for operational risk		Own funds requirements for credit and market risk		Total capital requirements	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
Clearstream Holding group	387.1	396.1	76.4	64.3	463.5	460.4
Clearstream Banking S.A.	283.3	302.2	88.1	51.3	371.4	353.5
Clearstream Banking AG	103.8	93.9	7.2	19.7	111.0	113.6
Eurex Clearing AG	66.7	65.8	14.5	19.5	81.2	85.3
European Commodity Clearing AG	6.0	4.5	1.3	3.0	7.3	7.5

Regulatory capital ratios

	Own funds requirements		Regulatory equity		Total capital ratio	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 %	31 Dec 2015 %
Clearstream Holding group	463.5	460.4	1,260.3	1,197.3	21.8	20.8
Clearstream Banking S.A.	371.4	353.5	1,042.4	998.1	22.5	22.6
Clearstream Banking AG	111.0	113.6	297.9	278.7	21.5	19.6
Eurex Clearing AG	81.2	85.3	364.8	314.8	36.0	29.5

The capital requirements under Article 16 of EMIR do not stipulate a specific ratio. Instead, the total amount of share capital, retained earnings and reserves, less certain items (including the central counterparty's own contribution to the default fund), is compared with the capital requirements. This total has to be at least equal to these requirements. In other words, EMIR requires a capital cover of at least 100 per cent. A reporting requirement to the competent authority – in this case BaFin – is triggered when this ratio falls below 110 per cent. The €50.0 million contribution made to the capital reserve of Eurex Clearing AG was entirely added to Eurex Clearing AG's own contribution to the default fund in 2016. Another increase in Eurex Clearing AG's contribution to the default fund, in the amount of €50.0 million, is scheduled for 2017.

The capital resources of European Commodity Clearing AG are currently well above the regulatory requirements. As at the reporting date, total equity as disclosed in the consolidated statement of financial position was not fully available to cover the risks according to Article 16 of EMIR, given that parts of this equity do not fulfil the required liquidity standards. The capital base of other entities is consistently monitored. Against this background, equity was increased in 2016 by means of a contribution to the capital reserve in the amount of €25.0 million. Given the increase in the regulatory minimum requirements for contributions to the clearing fund, European Commodity Clearing AG's default fund contribution was increased by €1.5 million. Considering the increase, European Commodity Clearing AG's total default fund contribution amounted to €7.1 million, and thus exceeded regulatory minimum requirements. Similar to the other companies, its capital resources are reviewed on an ongoing basis. Depending on future business performance, and in particular on changes in the regulatory framework, the capital resources will be adjusted as needed; however, this is not expected at present.

Capital adequacy requirements under EMIR

	Eurex Clearing AG		European Commodity Clearing AG	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
Own funds requirement for operational, credit and market risk	81.2	89.0	7.3	7.5
Other EMIR capital requirements	74.6	71.1	19.6	15.0
Total EMIR capital requirements under Article 16 of EMIR	**155.8**	**160.1**	**26.9**	**22.5**
Equity	364.8	314.8	73.9	48.5
EMIR deductions	0	0	–13.0	0
Own contribution to default fund	–100.0	–50.0	–7.5	–6.0
EMIR capital adequacy ratio	**264.8**	**264.8**	**53.4**	**42.5**

The capitalisation of Eurex Bonds GmbH significantly exceeded the CRR requirements. Due to the profits expected to be retained in future, the capital resources of Eurex Bonds GmbH will increase gradually in the coming years. However, if costs remain more or less stable and the own funds requirements for credit and market risk are low, the capital requirements are expected to remain virtually unchanged.

Eurex Repo GmbH transfers its earnings to Eurex Frankfurt AG based on a profit and loss transfer agreement. Eurex Repo GmbH increased its capital base as part of the CRR first-time application and the requirements set forth in a delegated regulation of the EU, which defines profit transfers as overheads and thus requires their inclusion in the basis for own funds requirement calculations. Due to the company's decelerating business activities – resulting from current market conditions (low interest rates, ECB policies) – Eurex Repo GmbH's earnings declined, with negative effects on the profits to be transferred. Hence, the own funds requirements declined compared with the previous year. Depending on the future business performance as well as changes to the regulatory requirements, further contributions to capital may be necessary to a limited extent; however, they are currently not expected for the medium term.

Composition of own funds/capital requirements

	Own funds requirements for credit and market risk		Own funds requirements on the basis of fixed overheads		Own funds requirements to be met	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
Eurex Bonds GmbH	0.2	0.2	0.8	0.8	0.8	0.8
Eurex Repo GmbH	0.4	0.4	4.6	5.6	4.6	5.6

Compliance with own funds requirements

	Own funds requirements		Regulatory equity		Equity ratio	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 %	31 Dec 2015 %
Eurex Bonds GmbH	0.8	0.8	10.4	9.5	1,300.0	1,264.7
Eurex Repo GmbH	4.6	5.6	7.0	7.0	152.2	124.0

According to Delegated Regulation (EU) No 150/2013, REGIS-TR S.A. is required to maintain equity in the amount of at least 50 per cent of annual operating costs.

According to the MAS, Eurex Clearing Asia Pte. Ltd. is required to provide own funds to fulfil “operational risk requirements”, “investment risk requirements” as well as “general counterparty risk requirements”. Given the current business activities, own funds requirements are based exclusively on “operational risk requirements”. Furthermore, Eurex Clearing Asia Pte. Ltd. is required to notify MAS without undue delay if the capital cover falls below 120 per cent of own funds requirements.

According to the MAS, Cleartrade Exchange Pte. Limited is required to maintain own funds at the rate of either 18 per cent of annual operating revenue or 50 per cent of annual operating costs, depending on which is higher. Powernext SA is obliged to maintain own funds in the amount of operating costs for the next six months. Regarding the anticipated upswing in the business development of Powernext SA and Cleartrade Exchange Pte. Limited, we expect slightly increasing own funds requirements for both entities going forward. While the capital base of Powernext SA is considered appropriate for the anticipated upswing, Cleartrade Exchange Pte. Limited’s capital base will be adjusted, if required.

Compliance with own funds requirements

	Own funds requirements		Regulatory equity	
	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
REGIS-TR S.A.	3.9	3.4	6.4	6.4
Eurex Clearing Asia Pte. Ltd.	0.6	0.6	10.2	10.1
Cleartrade Exchange Pte. Limited	1.4	2.2	2.1	3.7
Powernext SA	10.8	12.3	39.9	26.4

The regulatory minimum requirements were complied with at all times by all companies during the reporting period and in the period up to the preparation of the consolidated financial statements.

21. Shareholders' equity and appropriation of net profit of Deutsche Börse AG

The annual financial statements of the parent company Deutsche Börse AG, prepared as at 31 December 2016 in accordance with the provisions of the Handelsgesetzbuch (HGB, the German Commercial Code), report net profit for the period of €553.2 million (2015: €315.9 million) and shareholders' equity of €2,643.0 million (2015: €2,504.0 million). In 2016, Deutsche Börse AG distributed €420.1 million (€2.25 per eligible share) from the unappropriated surplus of the previous year.

Net profit for the period 2016 is higher than last year.

Proposal on the appropriation of the unappropriated surplus

	31 Dec 2016 €m
Net profit for the period	553.2
Appropriation to other retained earnings in the annual financial statements	–108.2
Unappropriated surplus	**445.0**
Proposal by the Executive Board:	
Distribution of a regular dividend to the shareholders of €2.35 per share for 186,805,015 no-par value shares carrying dividend rights	439.0
Appropriation to retained earnings	6.0

No-par value shares carrying dividend rights

	Number
Number of shares issued as at 31 December 2016	**193,000,000**
Number of treasury shares	–6,194,985
Number of shares outstanding as at 31 December 2016	**186,805,015**

The proposal on the appropriation of the unappropriated surplus reflects treasury shares held directly or indirectly by the company that do not carry dividend rights under section 71b of the Aktiengesetz (AktG, the German Stock Corporation Act). The number of shares carrying dividend rights can change until the Annual General Meeting through the repurchase or sale of further treasury shares. In this case, with a dividend of €2.35 per eligible share, an amended resolution for the appropriation of the unappropriated surplus will be proposed to the Annual General Meeting.

22. Provisions for pensions and other employee benefits

Defined benefit pension plans

The defined benefit obligations of the companies of Deutsche Börse Group relate primarily to final salary arrangements and pension plans based on capital components, which guarantee employees a choice of either lifelong pensions or capital payments on the basis of the final salary paid. In Switzerland, there are guaranteed defined contribution plans. Deutsche Börse Group uses external trust solutions to cover some of its pension obligations.

Net liability of defined benefit obligations

	Germany €m	Luxembourg €m	Other €m	Total 31 Dec 2016 €m	Total 31 Dec 2015 €m
Present value of defined benefit obligations that are at least partially funded	405.1	62.6	21.0	488.7	439.5
Fair value of plan assets	–262.5	–45.5	–16.7	–324.7	–302.0
Funded status	**142.6**	**17.1**	**4.3**	**164.0**	**137.5**
Present value of unfunded defined benefit obligations	3.1	0.7	0.1	3.9	3.2
Net liability of defined benefit obligations	**145.7**	**17.8**	**4.4**	**167.9**	**140.7**
Impact of minimum funding requirement/asset ceiling	0	0	0	0	0
Amount recognised in the balance sheet	**145.7**	**17.8**	**4.4**	**167.9**	**140.7**

The defined benefit plans comprise a total of 2,713 (2015: 2,686, adjusted for changes to the basis of consolidation 2015: 2,646) beneficiaries. The present value of defined benefit obligations can be allocated to the beneficiaries as follows:

Breakdown of beneficiaries

	Germany €m	Luxembourg €m	Other €m	Total 31 Dec 2016 €m	Total 31 Dec 2015 €m
Eligible current employees	179.7	62.0	20.8	262.5	237.0
Former employees with vested entitlements	130.7	0.6	0.3	131.6	124.6
Pensioners or surviving dependants	97.8	0.7	0	98.5	81.1
	408.2	**63.3**	**21.1**	**492.6**	**442.7**

Essentially, the retirement benefits encompass the following retirement benefit plans:

Executive boards of Group companies (Germany and Luxembourg)

Individual commitment plans exist for executive board members of certain Group companies; they are based on the plan for executives described in the next but one paragraph, i.e. in each calendar year the company provides an annual contribution to a capital component calculated in accordance with actuarial principles. The benefit assets equal the total of the acquired capital components of the individual years and are converted into a lifelong pension once the benefits fall due. In addition, retirement benefit agreements are in place with members of the executive boards of Group companies, under which they are entitled to pension benefits on reaching the age of 63 and following reappointment. When the term of office began, the replacement rate was 30 per cent of individual pensionable income. It rose by five percentage points with each reappointment, up to a maximum of 50 per cent of pensionable income. Details of the pension commitments for members of Deutsche Börse AG's Executive Board can be found in the remuneration report.

Germany

There has been an employee-funded deferred compensation plan for employees of certain Deutsche Börse Group companies in Germany since 1 July 1999. This plan gives employees the opportunity to convert parts of their future remuneration entitlements into benefit assets of equal value. The benefits consist of a capital payment on reaching the age of 65 or earlier, if applicable, in the case of disability or death; when due, the payment is made in equal annual payments over a period of three years. The benefit assets earn interest at a rate of 6 per cent p.a. As a rule, new commitments are entered into on the basis of this deferred compensation plan; employees with pension commitments under retirement benefit arrangements in force before 1 July 1999 were given an option to participate in the deferred compensation plan by converting their existing pension rights.

In the period from 1 January 2004 to 30 June 2006, executives in Germany were offered the opportunity to participate in the following pension system based on capital components: the benefit is based on annual income received, composed of fixed annual salary and the variable remuneration. Every year, participating Group companies provide for an amount that corresponds to a certain percentage of the pensionable income. This amount is multiplied by a capitalisation factor depending on age, resulting in the "annual capital component". The benefit assets equal the total of the acquired capital components of the individual years and are converted into a lifelong pension once the benefits fall due. This benefit plan was closed to new staff on 30 June 2006; the executives who were employed in the above period can continue to earn capital components.

As part of adjustments to the remuneration systems to bring them into line with supervisory requirements (see note 39 for detailed information) contracts were adjusted in 2016 and 2015 for some executives. For senior executives affected, whose contracts only provided for the inclusion of income received and variable remuneration over and above the upper limit of the contribution assessment (Beitragsbemessungsgrenze) of the statutory pension insurance provisions as pensionable income to date, pensionable income has now been fixed on the basis of annual income received in 2013 and will henceforth be adjusted annually, to reflect the increase in the cost of living, based on the consumer price index for Germany published by the German Federal Statistical Office. For executives affected, whose capital components were calculated on the basis of income received, without observing the upper limit of the contribution assessment, an amount has been fixed which will be reviewed annually, and adjusted if necessary, by the Supervisory Board, taking changed circumstances in terms of income and purchasing power in account.

Luxembourg

The Clearstream subgroup and Finnovation S.A., both based in Luxembourg, still operate separate defined benefit plans. The only defined benefit pension plan still in operation in favour of Luxembourg employees of Clearstream International S.A., Clearstream Banking S.A. and Clearstream Services S.A. is funded by means of cash contributions to an “association d’épargne pension” (ASSEP) organised in accordance with Luxembourg law. The benefits consist of a one-off capital payment, which is generally paid on reaching the age of 65. The benefit plan does not cover disability or death in service. Contributions to the ASSEP are funded in full by the participating companies. The contributions are determined annually on the basis of actuarial reports and the amount of the obligation is calculated in accordance with Luxembourg law.

For employees of Finnovation S.A. and REGIS-TR S.A. a group plan has been entered into with Swiss Life (Luxembourg) S.A.; it covers pensions as well as disability and death. The contributions are paid annually by the employer. Benefits depend on the length of employment at the Group company and consist of quarterly payments starting upon the employee reaching the age of 65. In the case of disability or death, differing provisions apply. The contributions are determined annually on the basis of actuarial reports.

Switzerland

There have been a separate pension plan (basic pension plan) and a supplementary benefits plan (bonus plan) for employees of STOXX Ltd. (since 2015), of Eurex Zürich AG (since 2012) and of Eurex Global Derivatives AG (since 2012); both plans are based on insurance policies and, in addition to retirement benefits, comprise disability benefits and dependants’ pensions. The contributions to the basic pension plan are paid by the employee and the employer, based on progressive percentages of the insured wage (annual wage less coordination deduction). For the bonus plan, the contributions are determined as a percentage of the bonus; it is also funded by contributions from employees and the employer. The retirement age is 65. The beneficiaries can choose between pension payments and a one-off payment.

The present value of defined benefit obligations can be reconciled as follows with the provisions reported in the consolidated balance sheet:

Changes in net defined benefit obligations

	Present value of obligations €m	Fair value of plan assets €m	Total €m
Balance as at 1 Jan 2015	**430.0**	**−284.4**	**145.6**
Acquisitions from business combinations	3.0	−1.4	1.6
Current service cost	21.7	–	21.7
Interest expense/(income)	8.9	−6.1	2.8
Past service cost and gains and losses on settlements	−0.6	–	−0.6
	30.0	**−6.1**	**23.9**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	–	7.7	7.7
Acquisitions from business combinations	–	1.9	1.9
Losses from changes in financial assumptions	−7.0	–	−7.0
Experience gains	−6.1	–	−6.1
	−13.1	**9.6**	**−3.5**[1]
Effect of exchange rate differences	2.3	−1.8	0.5
Contributions:			
Employers	–	−32.0	−32.0
Plan participants	1.0	−1.0	0
Benefit payments	−9.7	9.6	−0.1
Withdrawal of plan assets	–	4.7	4.7
Tax and administration costs	−0.8	0.8	0
Balance as at 31 Dec 2015	**442.7**	**−302.0**	**140.7**
Acquisitions from business combinations	−0.3	0.3	0
Current service cost	24.0	–	24.0
Interest expense/(income)	9.3	−6.4	2.9
	33.3	**−6.4**	**26.9**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	–	−2.9	−2.9
Losses from changes in demographic assumptions	−0.8	–	−0.8
Losses from changes in financial assumptions	31.5	–	31.5
Experience gains	−0.4	–	−0.4
	30.3	**−2.9**	**27.4**[1]
Effect of exchange rate differences	0.2	−0.2	0
Contributions:			
Employers	–	−29.2	−29.2
Plan participants	0.9	−0.9	0
Benefit payments	−13.7	13.7	0
Tax and administration costs	−0.8	2.9	2.1
Balance as at 31 Dec 2016	**492.6**	**−324.7**	**167.9**

1) Thereof €0.1 million (2015: €0.3 million) in the offsetting item for non-controlling interests

In financial year 2016, employees converted a total of €5.3 million (2015: €2.6 million) of their variable remuneration into deferred compensation benefits.

Assumptions

Provisions for pension plans and other employee benefits are measured annually at the reporting date using actuarial techniques. The assumptions for determining the actuarial obligations for the pension plans differ according to the individual conditions in the countries concerned and shown in the following table:

Actuarial assumptions

	31 Dec 2016			31 Dec 2015		
	Germany %	Luxembourg %	Switzerland %	Germany %	Luxembourg %	Switzerland %
Discount rate	1.75	1.75	0.60	2.20	2.20	0.80
Salary growth	3.50	3.00	1.00	3.50	3.50	1.00
Pension growth	2.00	1.50	0	2.00	1.80–2.00	0
Staff turnover rate	2.00[1]	2.00[1]	n.a.[2]	2.00[1]	2.00[1]	n.a.[2]

1) Up to the age of 50, afterwards 0 per cent
2) Staff turnover rate in accordance with the Bundesgesetz über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge (BVG, Swiss Federal Occupational Retirement, Survivors' and Disability Pension Plans Act)

In Germany, the "2005 G" mortality tables (generation tables) developed by Prof Klaus Heubeck are used in a modified version. For Luxembourg, generation tables of the Institut national de la statistique et des études économiques du Grand-Duché du Luxembourg are used. For Switzerland, the BVG 2010 generation tables are used.

Sensitivity analysis

The sensitivity analysis presented in the following considers the change in one assumption at a time, leaving the other assumptions unchanged from the original calculation, i.e. possible correlation effects between the individual assumptions are not taken into account.

Sensitivity analysis of defined benefit obligation

	Change in actuarial assumption	Effect on defined benefit obligation		Effect on defined benefit obligation	
		2016 defined benefit obligation €m	Change %	2015 defined benefit obligation €m	Change %
Present value of the obligation[1]		492.6	–	442.7	–
Discount rate	Increase by 1.0 percentage point	418.8	–15.0	377.4	–14.8
	Reduction by 1.0 percentage point	587.5	19.3	525.9	18.8
Salary growth	Increase by 0.5 percentage points	505.0	2.5	455.4	2.9
	Reduction by 0.5 percentage points	482.6	–2.0	432.6	–2.3
Pension growth	Increase by 0.5 percentage points	504.9	2.5	461.6	4.3
	Reduction by 0.5 percentage points	481.4	–2.3	432.3	–2.3
Life expectancy	Increase by one year	505.4	2.6	453.4	2.4
	Reduction by one year	479.7	–2.6	431.7	–2.5

1) Present value of the obligations using assumptions in accordance with the table "actuarial assumptions"

Composition of plan assets

Germany

In Germany, the plan assets are held by a trustee in safekeeping for individual companies of Deutsche Börse Group and for the beneficiaries: at the company's instruction, the trustee uses the funds transferred to acquire securities, without any consulting on the part of the trustee. The contributions are invested in accordance with an investment policy, which may be amended by the companies represented in the investment committee in agreement with the other members. The trustee may refuse to carry out instructions if they are in conflict with the fund's allocation rules or the payment provisions. In accordance with the investment policy, a value preservation mechanism is applied; investments can be made in different asset classes.

Luxembourg

In Luxembourg, the Board of Directors of the Clearstream Pension Fund is responsible for determining the investment strategy, with the aim of maximising returns in relation to a benchmark. Up to 75 per cent of this benchmark is derived from the return on five-year German federal government bonds and up to 25 per cent from the return on the EURO STOXX 50 Index. According to the investment policy, the fund may only invest in fixed-income and variable-rate securities, as well as listed investment fund units, and it may hold cash, including in the form of money market funds.

Switzerland

The assets of the pension funds of STOXX Ltd. (since 2015), of Eurex Zürich AG (since 2012) and Eurex Global Derivatives AG (since 2012) have been invested with AXA Stiftung Berufliche Vorsorge and are therefore reported under "qualifying insurance policies".

Composition of plan assets

	31 Dec 2016		31 Dec 2015	
	€m	%	€m	%
Bonds	**270.7**	**83.4**	**253.8**	**84.0**
Government bonds	229.8		248.2	
Multilateral development banks	2.6		2.6	
Corporate bonds	38.3		3.0	
Derivatives	**0.8**	**0.2**	**1.1**	**0.4**
Equity index futures	0.6		1.0	
Interest rate futures	0.2		0.1	
Investment funds	**13.9**	**4.3**	**9.8**	**3.2**
Total listed	**285.4**	**87.9**	**264.7**	**87.6**
Qualifying insurance policies	16.7	5.1	18.0	6.0
Cash	22.6	7.0	19.3	6.4
Total not listed	**39.3**	**12.1**	**37.3**	**12.4**
Total plan assets	**324.7**	**100.0**	**302.0**	**100.0**

As at 31 December 2016, plan assets did not include any financial instruments held by the Group (2015: nil), nor did they include any property occupied or other assets used by the Group.

Risks

In addition to the general actuarial risks, the risks associated with the defined benefit obligations relate especially to financial risks in connection with the plan assets, including in particular counterparty credit and market risks.

Market risk

The return on plan assets is assumed to be the discount rate determined on the basis of corporate bonds with an AA rating. If the actual rate of return on plan assets is lower than the discount rate used, the net defined benefit liability increases accordingly. If volatility is lower, the actual return is further expected to exceed the return on corporate bonds with a good rating in the medium to long term.

Deutsche Börse Group considers the price risk resulting from the proportion of listed securities in the plan assets to be appropriate. The company bases its assessment on the expectation that the overall volume of payments from the pension plans will be manageable in the next few years, that the total amount of the obligations will also be manageable and that it will be able to meet these payments in full from operating cash flows. Any amendments to the investment policy take into account the duration of the pension obligation as well as the expected payments over a period of ten years.

Moreover, the level of the net liability is influenced by the discount rates in particular, whereby the current low interest rates contribute to a relatively high net liability. A continued decline in returns on corporate bonds will lead to a further increase in defined benefit obligations, which can be only partially offset by the positive development of the fair values of the assets included in the plan assets.

Inflation risk

Possible inflation risks that could lead to an increase in defined benefit obligations exist because some pension plans are final salary plans or the annual capital components are directly related to salaries, i.e. a significant increase in salaries would lead to an increase in the benefit obligation from these plans. In Germany, however, there are no contractual arrangements with regard to inflation risk for these pension plans. An interest rate of 6 per cent p.a. has been agreed for the employee-financed deferred compensation plan; the plan does not include any arrangements for inflation, so that it has to be assumed that there will be little incentive for employees to contribute to the deferred compensation plan in times of rising inflation.

In Luxembourg, salaries are adjusted for the effects of inflation on the basis of a consumer price index no more than once a year; this adjustment leads to a corresponding increase in the benefit obligation from the pension plan. Since the obligation will be met in the form of a capital payment, there will be no inflation-linked effects once the beneficiary reaches retirement age.

In Switzerland, the benefit plan at AXA Stiftung Berufliche Vorsorge includes the provision that the board of this foundation decides annually whether the retirement pensions will be adjusted to reflect price trends. The decision takes into account in particular the financial capability of the foundation. There are no arrangements for automatic adjustments to price increases over and above the legal requirements that apply to certain surviving dependants' and disability pensions.

Duration and expected maturities of the pension obligations

The weighted duration of the pension obligations was 17.3 years as at 31 December 2016.

Expected maturities of undiscounted pension payments

	Expected pension payments[1)] 31 Dec 2016 €m	Expected pension payments[1)] 31 Dec 2015 €m
Less than 1 year	12.4	11.4
Between 1 and 2 years	12.6	13.3
Between 2 and 5 years	39.4	43.1
More than 5 years up to 10 years	83.7	85.7
Total	**148.1**	**153.5**

1) The expected payments in CHF were translated into euros at the relevant closing rate on 31 December.

The expected costs of defined benefit plans amount to approximately €17.1 million for the 2017 financial year, including net interest expense.

Defined contribution pension plans and multi-employer plans

During the reporting period, the costs associated with defined contribution plans, and designated multi-employer plans, amounted to €35.3 million (2015: €34.2 million).

In 2017, Deutsche Börse Group expects to make contributions to multi-employer plans amounting to around €9.5 million.

23. Changes in other provisions

Changes in other provisions

	Recourse and litigation risks €m	Restructuring and efficiency measures €m	Interest on taxes €m	Stock bonus plans €m
Balance as at 1 Jan 2016	**5.0**	**111.9**	**35.4**	**31.0**
Changes to the basis of consolidation	0	0	–0.1	0
Reclassification[2]	0.4	0	0.1	–0.4
Utilisation	–2.8	–32.1	0	–18.9
Reversal	–0.1	–14.2	0	–1.0
Additions	1.0	10.0	12.1	14.8
Currency translation	0	–0.1	0	0
Interest	0	2.8	0	0
Balance as at 31 Dec 2016	**3.5**	**78.3**	**47.5**	**25.5**

1) IHK = Industrie- und Handelskammer Frankfurt am Main (the Frankfurt/Main Chamber of Industry and Commerce)
2) Relates primarily to reclassifications to the employee-funded deferred compensation plan (see note 22) as well as to reclassifications from liabilities.

The "other personnel provisions" item as at 31 December 2016 includes personnel-related provisions of €5.7 million (2015: €5.8 million) for jubilees, €2.5 million (2015: €1.2 million) for other personnel costs and €0.5 million (2015: €0.6 million) for early retirement benefits. The "miscellaneous" item includes provisions for anticipated losses of €7.0 million (2015: €6.5 million) and provisions for rent and service costs of €1.3 million (2015: €2.1 million).

	Bonuses €m	Operational claims €m	Pension obligations to IHK[1)] €m	Other personnel provisions €m	Miscellaneous €m	Total €m
	85.4	**6.5**	**9.6**	**7.6**	**13.8**	**306.2**
	–8.0	0	0	0	0	–8.1
	–9.4	0.2	0	1.0	1.9	–6.2
	–62.3	–2.5	0	–0.6	–1.8	–121.0
	–6.7	–1.3	–0.1	–0.8	–1.4	–25.6
	102.7	0.2	0.1	1.2	5.1	147.2
	–0.1	0	0	0	0	–0.2
	0.1	0	–0.2	0.3	0	3.0
	101.7	**3.1**	**9.4**	**8.7**	**17.6**	**295.3**

24. Other non-current provisions

Other non-current provisions have more than one year to maturity.

Composition of other non-current provisions

	31 Dec 2016 €m	31 Dec 2015 €m
Restructuring and efficiency measures	68.1	87.2
Stock bonus plans	18.2	11.7
Pension obligations to IHK[1]	9.4	9.6
Anticipated losses	6.5	5.9
Jubilees	5.7	5.8
Bonuses	5.4	9.1
Early retirement	0.5	0.6
Other	3.2	1.8
Total	**117.0**	**131.7**
thereof with remaining maturity of between 1 and 5 years	95.0	103.2
thereof with remaining maturity of more than 5 years	22.0	28.5

1) IHK = Industrie- und Handelskammer Frankfurt am Main (the Frankfurt/Main Chamber of Industry and Commerce)

Provisions for restructuring and efficiency measures include provisions amounting to €1.7 million (2015: €3.3 million) for the restructuring and efficiency programme resolved in September 2007, €14.7 million (2015: €18.7 million) for the programme resolved in 2010 to increase operational performance and €31.5 million (2015: €37.7 million) for the programme resolved in 2013 to improve the cost structures and operational processes in order to adapt to a permanently changed business environment as well as €20.2 million (2015: €27.5 million) for the growth programme resolved in 2015. For more details on the restructuring and efficiency programmes see “Internal management – management systems” section in the combined management report.

For details on the Stock Bonus Plans, see note 39.

25. Liabilities

The bonds issued by Deutsche Börse Group have a carrying amount of €2,284.7 million (2015: €2,546.5 million) and a fair value of €2,457.7 million (2015: €2,679.9 million).

The decrease in interest-bearing liabilities is largely attributable to the repayment of all US dollar bonds during 2016. For details, see the “Capital management” section of the combined management report.

The financial liabilities recognised in the balance sheet were not secured by liens or similar rights, either as at 31 December 2016 or as at 31 December 2015.

26. Tax provisions

Composition of tax provisions

	Income taxes: reporting period €m	Income taxes: prior periods €m	Other taxes €m	Total €m
Balance as at 1 Jan 2016	0	290.5	26.2	316.7
Changes in the basis of consolidation	0	–66.3	0	–66.3
Reclassification	0.3	0	–2.9	–2.6
Utilisation	–19.8	–23.8	–0.4	–44.0
Reversal	–0.1	–47.6	0	–47.7
Additions	56.3	42.3	19.2	117.8
Currency translation	0.1	0	0.3	0.4
Interest	0	0	0	0
Balance as at 31 Dec 2016	**36.8**	**195.1**	**42.4**	**274.3**

Tax provisions of €173.4 million (2015: €166.3 million) have an estimated remaining maturity of more than one year.

27. Other current provisions

Composition of other current provisions

	31 Dec 2016 €m	31 Dec 2015 €m
Bonuses	96.3	76.3
Interest on taxes	47.5	35.4
Restructuring and efficiency measures	10.2	24.7
Stock bonus plans	7.3	19.3
Recourse and litigation risks	3.5	5.0
Operational claims	3.1	6.5
Personnel costs	2.5	1.2
Rent and incidental rental costs	1.3	2.1
Anticipated losses	0.5	0.6
Miscellaneous	6.1	3.4
Total	**178.3**	**174.5**

Restructuring and efficiency measures include provisions amounting to €0.1 million (2015: €0.1 million) for the restructuring and efficiency programme resolved in 2007, and €0.3 million (2015: €0.5 million) for the programme resolved in 2013 to improve the cost structures and operational processes in order to adapt to a permanently changed business environment, as well as €9.3 million (2015: €23.7 million) for the growth programme resolved in 2015. For details see the "Internal management" section of the combined management report.

For details on share-based payments, see note 39.

28. Liabilities from banking business

The liabilities from banking business are attributable solely to the Clearstream subgroup.

Composition of liabilities from banking business

	31 Dec 2016 €m	31 Dec 2015 €m
Customer deposits from securities settlement business	13,024.8	10,867.3
Issued commercial paper	349.5	286.5
Overdrafts on nostro accounts	321.9	498.1
Margin deposits	125.7	17.1
Money market lending	15.5	0
Forward foreign-exchange transactions – held for trading	2.4	12.4
Interest liabilities	0.5	0
Total	**13,840.3**	**11,681.4**

29. Cash deposits by market participants

Composition of cash deposits by market participants

	31 Dec 2016 €m	31 Dec 2015 €m
Liabilities from margin payments to Eurex Clearing AG by clearing members	24,798.2	25,540.2
Liabilities from margin payments to European Commodity Clearing AG by clearing members	2,973.8	1,321.1
Liabilities from cash deposits by market participants in equity trading	5.6	7.7
Total	**27,777.6**	**26,869.0**

30. Other current liabilities

Composition of other current liabilities

	31 Dec 2016 €m	31 Dec 2015 €m
Liabilities from CCP positions	386.4	89.3
Tax liabilities (excluding income taxes)	30.5	22.7
Interest payable	28.7	29.3
Vacation entitlements, flexitime and overtime credits	20.5	22.3
Deferred income	18.1	3.2
Derivatives	12.7	6.2
Social security liabilities	7.8	6.2
Special payments and bonuses	4.9	13.5
Liabilities to supervisory bodies	2.9	2.6
Debtors with credit balances	2.7	1.9
Issued commercial paper	0	95.0
Miscellaneous	10.5	38.2
Total	**525.7**	**330.4**

31. Maturity analysis of financial instruments

Underlying contractual maturities of the financial instruments at the reporting date

	Contractual maturity					
	Sight		Not more than 3 months		More than 3 months but not more than 1 year	
	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m
Non-derivative financial liabilities						
Interest-bearing liabilities	0	0	23.3	15.0	22.4	38.0
Other non-current financial liabilities	0	0	0	0	0	0
Non-derivative liabilities from banking business	13,487.9	11,387.8	98.7	214.9	251.9	82.4
Trade payables, payables to related parties and other current liabilities	380.1	80.6	513.9	515.1	0	4.5
Cash deposits by market participants	24,803.9	26,869.0	2,973.7	0	0	0
Other bank loans and overdrafts	0.1	42.2	0	0	0	0
Total non-derivative financial liabilities (gross)	**38,672.0**	**38,379.6**	**3,609.6**	**745.0**	**274.3**	**124.9**
Derivatives and financial instruments held by central counterparties						
Financial liabilities and derivatives held by central counterparties	20,717.7	36,495.9	68,646.2	69,521.2	18,146.9	19,989.3
less financial assets and derivatives held by central counterparties	–20,717.7	–36,495.9	–69,076.4	–69,804.3	–18,146.9	–19,989.3
Cash inflow – derivatives and hedges						
Cash flow hedges	0	0	154.3	0	0	0
Fair value hedges	0	0	0	0	0	0
Derivatives held for trading	1,331.8	1,009.9	409.3	1,633.7	1,407.3	0
Cash outflow – derivatives and hedges						
Cash flow hedges	0	0	–160.2	0	0	0
Fair value hedges	0	0	0	0	0	0
Derivatives held for trading	–1,332.3	–1,008.9	–400.4	–1,620.5	–1,341.7	0
Total derivatives and hedges	**–0.5**	**1.0**	**–427.2**	**–269.9**	**65.6**	**0**
Financial guarantee contracts	0	0	0	977.9	0	0

	Contractual maturity				Reconciliation to carrying amount		Carrying amount	
	More than 1 year but not more than 5 years		Over 5 years					
	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m
	1,362.3	1,051.6	1,146.8	1,785.6	– 270.1	– 343.7	2,284.7	2,546.5
	0.2	4.3	0	0	7.7	5.7	7.9	10.0
	0	0	0	0	– 0.6	– 16.0	13,837.9	11,669.1
	0	0	0	0	100.4	104.8	994.4	705.0
	0	0	0	0	0	0	27,777.6	26,869.0
	0	0	0	0	0	0	0.1	42.2
	1,362.5	**1,055.9**	**1,146.8**	**1,785.6**	**– 162.6**	**– 249.2**	**44,902.6**	**41,841.8**
	4,384.6	5,633.1	1,440.6	1,542.2	0	0	113,336.0	133,181.7
	– 4,384.6	– 5,633.1	– 1,440.6	– 1,542.2	0	0	– 113,766.2	– 133,464.8
	0	0	0	0				
	0	0	0	0				
	0	0	0	0				
	0	0	0	0				
	0	0	0	0				
	0	0	0	0				
	0	**0**	**0**	**0**				
	0	0	0	0				

32. Classification of financial instruments under IAS 39

The following table shows an analysis of the financial instruments in the balance sheet in accordance with their classification under IAS 39 as well as the corresponding carrying amounts:

Classification of financial instruments (part 1)

Consolidated balance sheet item (classification)	Note	Category	Measured at	Carrying amount 31 Dec 2016 €m	Carrying amount 31 Dec 2015 €m
Other equity investments	13	AFS[1]	Historical cost	58.0	85.3
		AFS[1]	Fair value	197.4	134.1
Non-current receivables and securities from banking business	13	AFS[1]	Fair value	1,604.8	2,018.6
Other financial instruments	13	AFS[1]	Historical cost	0	0.9
		AFS[1]	Fair value	26.0	31.4
Other loans	13	Loans and receivables	Amortised cost	0.4	0.2
Non-current financial instruments held by central counterparties	15	Held for trading	Fair value	5,856.6	7,175.2
Other non-current assets		Held for trading	Fair value	0.1	0
		Loans and receivables	Amortised cost	8.3	7.4
Current financial instruments held by central counterparties	15	Held for trading	Fair value	107,679.7	126,241.3
		Loans and receivables	Amortised cost	229.9	48.3
Current receivables and securities from banking business	14, 16	AFS[1]	Fair value	592.3	64.1
		Loans and receivables	Amortised cost	12,807.8	10,054.3
		Held for trading	Fair value	65.4	23.3
Trade receivables	17	Loans and receivables	Amortised cost	669.8	554.1
Receivables from related parties		Loans and receivables	Amortised cost	2.0	4.7
Other current assets	18	Loans and receivables	Amortised cost	441.8	924.9
		Held for trading	Fair value	0.3	0
Restricted bank balances	19	Loans and receivables	Amortised cost	27,777.6	26,870.0
Other cash and bank balances	33	Loans and receivables	Amortised cost	1,458.1	711.1

1) Available-for-sale (AFS) financial assets
2) This relates to the private placements which were designated as hedging instruments of a net investment hedge (see note 14).

Classification of financial instruments (part 2)

Consolidated balance sheet item (classification)	Note	Category	Measured at	Carrying amount 31 Dec 2016 €m	Carrying amount 31 Dec 2015 €m
Interest-bearing liabilities (excluding finance leases)	14, 25	Liabilities at amortised cost	Amortised cost	2,284.7	2,281.0
		Net investment hedge[2)]	Amortised cost	0	265.5
Non-current financial instruments held by central counterparties	15	Held for trading	Fair value	5,856.6	7,175.2
Other non-current liabilities	14	Held for trading	Fair value	1.7	4.3
Current financial instruments held by central counterparties	15	Held for trading	Fair value	107,249.5	125,958.2
		Liabilities at amortised cost	Amortised cost	229.9	48.3
Liabilities from banking business	14, 28	Liabilities at amortised cost	Amortised cost	13,837.9	11,669.0
		Held for trading	Fair value	2.4	12.4
Other bank loans and overdrafts	33	Liabilities at amortised cost	Amortised cost	0.1	42.2
Trade payables		Liabilities at amortised cost	Amortised cost	471.2	372.8
Liabilities to related parties		Liabilities at amortised cost	Amortised cost	3.6	1.8
Cash deposits by market participants	29	Liabilities at amortised cost	Amortised cost	27,777.6	26,869.0
Other current liabilities	14, 30	Liabilities at amortised cost	Amortised cost	419.1	223.7
		Cash flow hedge	Fair value	6.0	0
		Derivatives held for trading	Fair value	6.7	6.2

The financial assets and liabilities that are measured at fair value are required to be allocated to the following three hierarchy levels: financial assets and liabilities are allocated to level 1 if there is a quoted price for identical assets and liabilities in an active market that can be accessed by the entity. They are allocated to level 2 if the inputs on which fair value measurement is based are observable either directly or indirectly; these inputs must be based on market expectations. Financial assets and liabilities are allocated to level 3 if fair value is determined on the basis of unobservable inputs.

As at 31 December 2016, the financial assets and liabilities measured at fair value were allocated to the following levels of the fair value hierarchy:

Fair value hierarchy

	Fair value as at 31 Dec 2016	thereof attributable to:		
		Level 1	Level 2	Level 3
	€m	€m	€m	€m
Recurring fair value measurements				
ASSETS				
Financial assets held for trading				
Derivatives				
Non-current financial instruments held by central counterparties	5,856.6	0	5,856.6	0
Current financial instruments held by central counterparties	107,679.7	0	107,679.7	0
Current receivables and securities from banking business	65.4	0	65.4	0
Other non-current assets	0.1	0	0	0.1
Other current assets	0.3	0	0	0.3
Total	**113,602.1**	**0**	**113,601.7**	**0.4**
Available-for-sale financial assets				
Equity instruments				
Other equity investments	197.4	190.9	0	6.5
Total	**197.4**	**190.9**	**0**	**6.5**
Debt instruments				
Other financial instruments	26.0	26.0	0	0
Non-current receivables and securities from banking business	1,604.8	1,604.8	0	0
Current receivables and securities from banking business	592.3	592.3	0	0
Total	**2,223.1**	**2,223.1**	**0**	**0**
Total assets	**116,022.6**	**2,414.0**	**113,601.7**	**6.9**
LIABILITIES				
Financial liabilities held for trading				
Derivatives				
Non-current financial instruments held by central counterparties	–5,856.6	0	–5,856.6	0
Current financial instruments held by central counterparties	–107,249.5	0	–107,249.5	0
Liabilities from banking business	–2.4	0	–2.4	0
Other non-current liabilities	–1.5	0	0	–1.5
Other current liabilities	–12.7	0	–6.0	–6.7
Contingent purchase price components				
Other non-current liabilities	–0.2	0	0	–0.2
Total liabilities	**–113,122.9**	**0**	**–113,114.5**	**–8.4**

By comparison, the financial assets and liabilities measured at fair value as at 31 December 2015 were allocated as follows to the hierarchy levels:

Fair value hierarchy

	Fair value as at 31 Dec 2015	thereof attributable to:		
		Level 1	Level 2	Level 3
	€m	€m	€m	€m
Recurring fair value measurements				
ASSETS				
Financial assets held for trading				
Derivatives				
Non-current financial instruments held by central counterparties	7,175.2	0	7,175.2	0
Current financial instruments held by central counterparties	126,241.3	0	126,241.3	0
Current receivables and securities from banking business	23.3	0	23.3	0
Other non-current assets	0	0	0	0
Other current assets	0	0	0	0
Total	**133,439.8**	**0**	**133,439.8**	**0**
Available-for-sale financial assets				
Equity instruments				
Other equity investments	134.1	0	128.0	6.1
Total	**134.1**	**0**	**128.0**	**6.1**
Debt instruments				
Other financial instruments	31.4	31.4	0	0
Non-current receivables and securities from banking business	2,018.6	2,018.6	0	0
Current receivables and securities from banking business	62.3	62.3	0	0
Other current assets	0	0	0	0
Total	**2,112.3**	**2,112.3**	**0**	**0**
Total assets	**135,686.2**	**2,112.3**	**133,567.8**	**6.1**
LIABILITIES				
Financial liabilities held for trading				
Derivatives				
Non-current financial instruments held by central counterparties	7,175.2	0	7,175.2	0
Current financial instruments held by central counterparties	125,958.2	0	125,958.2	0
Liabilities from banking business	0	0	0	0
Other current liabilities	6.2	0	0	6.2
Contingent purchase price components				
Other non-current liabilities	4.3	0	0	4.3
Total liabilities	**133,143.9**	**0**	**133,133.4**	**10.5**

During the reporting period, the investments in Bats Global Markets, Inc., were reallocated from level 2 to level 1. Given the entity's IPO in the second quarter of 2016, quoted prices in an active market have been available since that date.

Financial assets and financial liabilities listed in levels 2 and 3 as at 31 December 2016 are measured as follows:

- The derivatives listed in level 2 comprise forward forgein exchange transactions. The fair value of the forward foreign-exchange transactions is determined on the basis of the forward exchange rates for the remaining period to maturity as at the reporting date. They are based on observable market prices.
- The equity investments allocated to level 2 were measured on the basis of current, comparable market transactions as at 31 December 2015. No investments have been allocated to level 2 as at 31 December 2016.
- The fair value of the financial instruments held by central counterparties allocated to level 2 is determined by market transactions for identical or similar asstes in markets that are not active and by option pricing models based on observable market prices.

At the reporting date, the items allocated to level 3 and their measurements were as follows:

Changes in level 3 financial instruments

	Assets			Liabilities		Total
	Other equity investments €m	Other non-current €m	Other current €m	Other non-current liabilities €m	Other current €m	€m
Balance as at 1 Jan 2015	**5.6**	**0**	**0**	**–9.1**	**–5.9**	**–9.4**
Additions	1.7	0	0	0	0	1.7
Disposals	–1.3	0	0	0	0	–1.3
Realised capital gains/(losses)	0	0	0	1.8	0	1.8
Financial result	0	0	0	–0.2	0	–0.2
Other operating income	0	0	0	2.0	0	2.0
Unrealised capital gains/(losses) recognised in income	0	0	0	3.0	–0.3	2.7
Other operating expenses	0	0	0	0	–0.5	–0.5
Other operating income	0	0	0	3.0	0.2	3.2
Changes recognised in the revaluation surplus	0.1	0	0	0	0	0.1
Balance as at 1 Jan 2016	**6.1**	**0**	**0**	**–4.3**	**–6.2**	**–4.4**
Additions	0	0.1	0.3	–2.5	–3.3	–5.4
Disposals	–0.7	0	0	0	0	–0.7
Reclassification	0	0	0	4.3	–4.3	0
Realised capital gains/(losses)	0	0	0	0	4.3	4.3
Other operating income	0	0	0	0	4.3	4.3
Unrealised capital gains/(losses) recognised in profit or loss	0	0	0	0.8	2.8	3.6
Other operating expenses	0	0	0	0	–0.3	–0.3
Other operating income	0	0	0	0.8	3.1	3.9
Changes recognised in the revaluation surplus	1.1	0	0	0	0	1.1
Balance as at 31 Dec 2016	**6.5**	**0.1**	**0.3**	**–1.7**	**–6.7**	**–1.5**

The value of an equity investment listed in level 3 is reviewed annually by the issuer, who may initiate transactions. During the period under review, fair value measurement resulted in positive effects of €1.0 million recognised directly in equity.

Furthermore, this item includes an equity fund, the fair value of which is calculated on the basis of the net asset value determined by the issuer. Deutsche Börse Group decreased its investment in the equity fund in 2016, resulting in a disposal of €0.7 million. The fair value measurement of this item resulted in positive effects of €0.1 million recognised directly in equity.

The “other non-current assets” item increased by €0.1 million due to a call option. The option’s fair value was derived from a Black Scholes model based on unobservable market data.

The “other current assets” item increased by €0.3 million due to a forward purchase of additional shares in an associated entity. The measurement of the forward transaction was based on a discounted cash flow method, using unobservable market data.

“Other non-current liabilities” increased by €1.0 million in connection with contingent purchase price components. During the period under review, the reassessment of the probability that such components would be utilised resulted in other operating income of €0.8 million. Another contingent purchase price component expired as at year-end 2016. The reversal of the obligations resulted in other operating income of €4.3 million. These two purchase price components are measured on the basis of internal discounted cash flow models, which discount the expected future payment obligations to the measurement date using interest rates that are appropriate to the risk.

Derivative financial instruments from an incentive programme of Eurex Frankfurt AG with a carrying amount of €1.5 million were allocated to “other non-current liabilities” during the reporting period. The item “other current liabilities” also includes derivative financial instruments from an incentive programme of Eurex Clearing AG, with a carrying amount of €6.2 million. At the end of the financial year, the total carrying amount of the derivative financial instruments was €3.4 million. In the course of the reporting period, the subsequent measurement of these financial instruments led to gains of €3.1 million and expenses of €0.4 million; these amounts are reported under “other operating income” and “other operating expenses”. The financial instruments are regularly measured at fair value through profit and loss using an internal model at the quarterly reporting dates. The model takes into account the criteria underlying the conditional repayment of the grant made by Eurex Clearing AG, and Eurex Frankfurt AG. The criteria include, in particular, non-financial indicators such as the expected number of customers in a specific market segment as well as expected trading volumes. They are continuously monitored, while taking into account possible adjustments. In order to do this, customer information is also used. Since this is an internal model, the parameters can differ from those of the settlement date. However, the derivative financial instrument will not exceed an amount of €1.5 million, and €7.0 million, respectively. This amount arises if the beneficiaries of the incentive programme fulfil the conditions and a repayment of the contribution is not taken into consideration.

The “other current liabilities” item comprises another derivative financial instrument related to contingent repayment claims in connection with advance payments made in the amount of €3.3 million. The measurement of the derivative is based on an internal model, taking into account the contingent repayment criteria for the payments made by Deutsche Börse AG. Since this is an internal model, the parameters can differ from those of the settlement date.

The fair value of other financial assets and liabilities not measured at fair value is determined as follows:

Debt instruments issued by Deutsche Börse Group have a fair value of €2,457.7 million (31 December 2015: €2,679.9 million) and are reported under interest-bearing liabilities. The fair value of such instruments is based on the debt instruments' quoted prices. Hence, debt instruments were allocated to level 2.

The carrying amounts of the following items represent a reasonable approximation of their fair value:

- unlisted equity instruments whose fair value generally cannot be reliably determined on a continuous basis and that are reported under the "financial assets" item; these are carried at cost less any impairment losses
- other loans, which are reported under "financial assets"
- other receivables and other assets as well as current receivables from banking business, to the extent that these are measured at amortised cost
- restricted bank balances
- other cash and bank balances
- cash deposits by market participants
- other current liabilities

Other disclosures

33. Consolidated cash flow statement disclosures

Cash flows from operating activities

After adjustments to net profit for the period for non-cash items, cash flows from operating activities excluding CCP positions amounted to €856.6 million (2015: €796.6 million). After adjustment for the change in CCP positions cash flow from operating activities amounted to €1,621.4 million (2015: €10.1 million). For details on the adjustments see the "Financial position" section of the combined management report.

The other non-cash income (or expenses in the previous year) consists (consisted) of the following items:

Composition of other non-cash income/(expenses)

	2016 €m	2015 €m
Impairment of financial instruments	5.0	12.1
Equity method measurement	8.9	–3.2
Reversal of discount and transaction costs from long-term financing	3.7	2.2
Subsequent measurement of derivatives	4.7	0.3
Reversal of the revaluation surplus for cash flow hedges	2.7	2.7
Subsequent measurement of non-derivative financial instruments	–17.6	–5.1
Gains on the disposal of subsidiaries and equity investments	–59.6	0
Miscellaneous	–0.1	–2.0
Total	**–52.3**	**7.0**

Cash flows from investing activities

In the 2016 financial year, cash flows from investing activities amounting to €578.5 million reflected the disposal of shares in ISE group in particular. This transaction involved a cash inflow of €916.3 million (adjusted for €13.0 million in cash disposed). Furthermore, the disposal of the shares in Infobolsa S.A. resulted in a cash inflow of €1.1 million (adjusted for €7.1 million in cash disposed).

In the previous financial year net cash used for investing activities of €1,592.3 million reflected acquisitions in particular: The full acquisition of 360T group involved a cash outflow of €676.6 million (adjusted for €27.7 million in cash acquired). Full consolidation of Powernext SA and EPEX SPOT SE as at 1 January 2015 increased cash by €40.1 million.

Investments in intangible assets and property, plant and equipment amounted to €164.9 million (2015: €154.5 million), thereof €12.3 million (2015: €6.7 million) attributable to the discontinued operation. Among the investments in intangible assets and property, plant and equipment, the measures undertaken under the strategic growth initiatives and infrastructure projects are classified as expansion investments, while all remaining investments are reported as replacement investments. The investments in intangible assets and property, plant and equipment are broken down by segment as follows:

Payment to acquire intangible assets and property, plant and equipment[1)]

	31 Dec 2016 €m	31 Dec 2015 €m
Expansion investments		
Eurex	14.4	29.3
Xetra	3.4	4.9
Clearstream	45.3	43.4
Market Data + Services	5.1	0
	68.2	**77.6**
Replacement investments		
Eurex	39.0	30.6
Xetra	10.2	2.1
Clearstream	18.3	30.0
Market Data + Services	16.9	7.5
	84.4	**70.2**
Total investments according to segment reporting	**152.6**	**147.8**

1) Not taking into account discontinued operations

Investments in long-term financial instruments totalling €178.9 million (2015: €815.5 million) included €155.6 million (2015: €771.5 million) for the purchase of floating-rate notes in the banking business. In addition, equity investments were acquired or increased in a total amount of €5.4 million (2015: €29.8 million).

Securities and other non-current receivables in the amount of €149.9 million (2015: €208.3 million) matured or were sold in the financial year 2016. The disposal of shares in BATS Global Markets Inc. resulted in a cash inflow of €80.3 million.

Cash flows from financing activities

Cash outflows from financing activities totalled €848.8 million (2015: cash inflows of €76.1 million).

In the 2016 financial year, Series B and C of the private placements (US$290.0 million) were repaid early; Series A (US$ 170.0 million) had already matured in the previous year.

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 issued.

As part of financing the acquisition of shares in 360T Beteiligungs GmbH, the company placed €200.0 million in treasury shares in the 2015 financial year, and also placed debt securities with a nominal amount of €500.0 million.

The acquisition of the remaining 49.9 per cent stake in STOXX Ltd. led to a cash outflow totalling €653.8 million. Moreover, €63.7 million was paid to non-controlling shareholders, through dividend payments and/or purchases of shares in subsidiaries which were already fully consolidated. The acquisition of the shares in STOXX Ltd. was financed by issuing debt securities with a nominal amount of €600.0 million.

Deutsche Börse AG paid dividends totalling €420.1 million for the 2015 financial year (dividend for the 2014 financial year: €386.8 million).

Reconciliation to cash and cash equivalents

Reconciliation to cash and cash equivalents

	31 Dec 2016 €m	31 Dec 2015 €m
Restricted bank balances	27,777.6	26,870.0
Other cash and bank balances	1,458.1	711.1
Net position of financial instruments held by central counterparties	430.2	–42.2
less bank loans and overdrafts	–0.1	283.1
	29,665.8	**27,822.0**
Reconciliation to cash and cash equivalents		
Current receivables and securities from banking business	13,465.5	10,142.9
less loans to banks and customers with an original maturity of more than 3 months	–1,068.1	–931.6
less available-for-sale debt instruments	–592.2	–62.3
Current liabilities from banking business	–13,840.3	–11,681.4
Current liabilities from cash deposits by market participants	–27,777.6	–26,869.0
	–29,812.7	**–29,401.4**
Cash and cash equivalents	**–146.9**	**–1,579.4**

34. Earnings per share

Under IAS 33, earnings per share are calculated by dividing the net profit for the period attributable to Deutsche Börse AG shareholders (net income) by the weighted average number of shares outstanding.

In order to determine diluted earnings per share, potentially dilutive ordinary shares that may be acquired under the share-based payment programme (see also note 39) were added to the average number of shares. In order to calculate the number of potentially dilutive ordinary shares, the exercise prices were adjusted by the fair value of the services still to be provided.

In order to determine diluted earnings per share, all SBP and Long-term Sustainable Instrument (LSI) tranches for which cash settlement has not been resolved are assumed to be settled with equity instruments – regardless of actual accounting in accordance with IFRS 2.

The following potentially dilutive rights to purchase shares were outstanding as at 31 December 2016:

Calculation of the number of potentially dilutive ordinary shares

Tranche	Exercise price €	Adjustment of the exercise price according to IAS 33[1] €	Average number of outstanding options 31 Dec 2016	Average price for the period[2] €	Number of potentially dilutive ordinary shares 31 Dec 2016
2014[3]	0	7.95	51,636	74.89	46,157
Total					**46,157**

1) According to IAS 33.47 (a), the issue price and the exercise price for stock options and other share-based payment arrangements must include the fair value of any goods or services to be supplied to the entity in the future under the stock option or other share-based payment arrangement.
2) Volume-weighted average price of Deutsche Börse AG shares on Xetra for the period 1 January to 31 December 2016
3) This relates to share subscription rights within the scope of the long-term sustainability plan for senior executives. The quantity of subscription rights under the 2014 tranche may still change from the quantity reported as at the reporting date, since subscription rights will only be granted in future financial years.

As the volume-weighted average share price was higher than the adjusted exercise price for the 2014 tranche, these stock options are considered to be dilutive under IAS 33 as at 31 December 2016.

Calculation of earnings per share (basic and diluted)

	2016	(restated) 2015
Number of shares outstanding as at beginning of period	186,723,986	184,186,855
Number of shares outstanding as at end of period	186,805,015	186,723,986
Weighted average number of shares outstanding	186,764,058	184,997,923
Number of potentially dilutive ordinary shares	46,157	25,043
Weighted average number of shares used to compute diluted earnings per share	186,810,215	185,022,966
Net income for the period (€m)	1,272.7	665.5
from continued operations (€m)	722.1	613.3
from non-continued operations (€m)	550.6	52.2
Earnings per share (basic) (€)	6.81	3.60
from continued operations (€)	3.87	3.31
from discontinued operations (€)	2.94	0.29
Earnings per share (diluted) (€)	6.81	3.60
from continued operations (€)	3.87	3.31
from discontinued operations (€)	2.94	0.29

As at 31 December 2016, 66,909 subscription rights were excluded from the calculation of the weighted average of potentially dilutive shares as these shares do not have a dilutive effect during the financial year ending on the reporting date.

35. Segment reporting

Segment reporting is governed by the internal organisational and reporting structure, which is broken down by markets into the following four segments:

Internal organisational and reporting structure

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

In accordance with IFRS 8, information on the segments is presented on the basis of internal reporting (management approach).

Sales revenue is presented separately by external sales revenue and internal (inter-segment) sales revenue. Inter-segment services are charged on the basis of measured quantities or at fixed prices (e.g. the provision of data by Eurex to Market Data + Services).

Due to their insignificance to segment reporting, the “financial income” and “financial expense” items have been combined to produce the “financial result”.

Segment reporting

	Eurex		Xetra		Clearstream	
	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m
External sales revenue	**1,049.7**	**914.7**	**186.8**	**211.1**	**917.0**	**893.2**
Internal sales revenue	0	0	0	0	8.2	7.9
Total sales revenue	1,049.7	914.7	186.8	211.1	925.2	901.1
Net interest income from banking business	21.4	16.5	0	0	62.6	34.1
Other operating income	26.9	14.9	6.6	6.8	3.2	7.6
Total revenue	**1,098.0**	**946.1**	**193.4**	**217.9**	**991.0**	**942.8**
Volume-related costs	–65.8	–58.6	–28.8	–33.1	–209.1	–196.4
Net revenue (total revenue less volume-related costs)	**1,032.2**	**887.5**	**164.6**	**184.8**	**781.9**	**746.4**
Staff costs	–221.7	–214.9	–50.0	–42.1	–229.2	–243.6
Depreciation, amortisation and impairment losses	–73.5	–56.7	–5.4	–4.9	–40.3	–44.4
Other operating expenses	–254.5	–235.8	–47.0	–37.9	–177.2	–169.7
Operating costs	**–549.7**	**–507.4**	**–102.4**	**–84.9**	**–446.7**	**–457.7**
Net income from equity investments	35.1	1.6[2)]	1.6	–3.2	0.2	0.1
Earnings before interest and tax (EBIT)	**517.6**	**381.7**	**63.8**	**96.7**	**335.4**	**288.8**
Financial result	–56.4	–48.4	–0.7	–0.6	–4.2	–2.1
Earnings before tax (EBT)	**461.2**	**333.3**	**63.1**	**96.1**	**331.2**	**286.7**
Investments in intangible assets and property, plant and equipment[3)]	53.4	59.9	13.6	7.0	63.6	73.4
Employees (as at 31 December)	1,851	1,651	323	326	2,443	2,397
EBIT margin (%)[4)]	**50**	**43**	**39**	**52**	**43**	**39**

1) The consolidation of internal net revenue column shows the elimination of intra-Group sales revenue and profits.
2) Including revenue in connection with the partial disposal of Direct Edge Holdings, LLC amounting to €38.4 million
3) Excluding goodwill
4) The EBIT margin is calculated as EBIT divided by net revenue.

	Market Data + Services		Total of all segments		Consolidation of internal net revenue[1]		Group	
	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m	2016 €m	(restated) 2015 €m
	403.8	**400.9**	**2,557.3**	**2,419.9**	**0**	**0**	**2,557.3**	**2,419.9**
	40.1	38.1	48.3	46.0	−48.3	−46.0	0	0
	443.9	439.0	2,605.6	2,465.9	−48.3	−46.0	2,557.3	2,419.9
	0	0	84.0	50.6	0	0	84.0	50.6
	9.0	7.5	45.7	36.7	−13.1	−13.1	32.6	23.6
	452.9	**446.5**	**2,735.3**	**2,553.2**	**−61.4**	**−59.1**	**2,673.9**	**2,494.1**
	−42.9	−44.9	−346.6	−332.9	61.4	59.1	−285.2	−273.8
	410.0	**401.6**	**2,388.7**	**2,220.3**	**0**	**0**	**2,388.7**	**2,220.3**
	−84.8	−99.1	−585.7	−599.7	0	0	−585.7	−599.7
	−11.8	−13.0	−131.0	−119.0	0	0	−131.0	−119.0
	−122.0	−121.1	−600.7	−564.5	0	0	−600.7	−564.5
	−218.6	**−233.2**	**−1,317.4**	**−1,283.2**	**0**	**0**	**−1,317.4**	**−1,283.2**
	0	0	36.9	−1.5	0	0	36.9	−1.5
	191.4	**168.4**	**1,108.2**	**935.6**	**0**	**0**	**1,108.2**	**935.6**
	−13.3	−6.4	−74.6	−57.5	0	0	−74.6	−57.5
	178.1	**162.0**	**1,033.6**	**878.1**	**0**	**0**	**1,033.6**	**878.1**
	22.0	7.4	152.6	147.7	0	0	152.6	147.7
	559	726	5,176	5,100	0	0	5,176	5,100
	47	**42**	**46**	**42**	**n.a.**	**n.a.**	**46**	**42**

In the year under review there was an extraordinary impairment loss of €5.8 million (2014: €3.9 million, see note 8).

Non-cash valuation allowances and bad debt losses resulted from the following segments:

Breakdown of non-cash valuation allowances and bad debt losses

	2016 €m	2015 €m
Eurex	0.2	0
Xetra	0.4	0.3
Clearstream	0.1	–0.1
Market Data + Services	0.3	–0.1
Total	**1.0**	**0.1**

Deutsche Börse Group's business model – and that of its segments – is focused on an internationally operating participant base and pricing does not differ depending on the customer's location. From a price, margin and risk perspective, this means that it is not decisive whether sales revenue is generated from German or non-German participants.

The risks and returns from the activities of the subsidiaries operating within the economic environment of the European Monetary Union (EMU) do not differ significantly from each other on the basis of the factors to be considered in identifying information on geographical regions under IFRS 8. As a result, Deutsche Börse Group has identified the following information on geographical regions: the euro zone, the rest of Europe, America and Asia-Pacific.

Sales revenue is allocated to the individual regions according to the customer's domicile, while investments and non-current assets are allocated according to the company's domicile and employees according to their location.

As described above, the analysis of sales is based on the direct customer's billing address. This means e.g. that sales to an American investor trading a product with an Asian underlying via a European clearing member are classified as European sales. Thus, in addition to sales to customers based in the Asia Pacific region, Deutsche Börse Group also reports sales of products based on Asia Pacific underlyings. These include, for example, trading of the South Korean KOSPI index on Eurex, settlement and custody services for securities issued by Asian entities, global securities financing from and with Asian customers, and index products such as the STOXX China Total Market indices. Furthermore, the Group earns net interest income on Asian customer balances. In total, this Asia-Pacific-driven business amounted to an additional €49.1 million in 2016 (2015: €50.1 million).

Information on geographical regions

	Sales revenue[1]		Investments[2]		Non-current assets[3]		Number of employees	
	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m	2016	2015
Eurozone	1,328.1	1,305.3	145.7	146.2	3,617.4	2,618.9	3,843	3,828
Rest of Europe	992.3	907.1	6.4	0	488.4	488.3	1,035	919
America	144.9	132.5	0.5	0.5	11.9	1,670.1	99	146
Asia-Pacific	140.3	121.0	0	1.0	3.9	3.8	199	207
Total of all regions	**2,605.6**	**2,465.9**	**152.6**	**147.7**	**4,121.6**	**4,781.1**	**5,176**	**5,100**
Consolidation of internal net revenue	–48.3	–46.0						
Group	**2,557.3**	**2,419.9**	**152.6**	**147.7**	**4,121.6**	**4,781.1**	**5,176**	**5,100**

1) Including countries in which more than 10 per cent of sales revenue was generated: UK (2016: €759.0 million; 2015: €695.7 million) and Germany (2016: €640.9 million; 2015: €649.9 million).
2) Excluding goodwill
3) Including countries in which more than 10 per cent of non-current assets are held: Germany (2016: €3,327.7 million; 2015: €2,317.0 million) and Switzerland (2016: €471.1 million; 2015: €471.9 million). The non-current assets for 2015 have not been adjusted for non-current assets attributable to ISE.

36. Financial risk management

Deutsche Börse Group presents the qualitative disclosures required by IFRS 7 in detail in the combined management report (see explanations in the risk report, which is part of the combined management report), such as the nature and extent of risks arising from financial instruments, as well as the objectives, strategies and methods used to manage risk.

Financial risks arise at Deutsche Börse Group mainly in the form of credit risk. To a smaller extent, the Group is exposed to market risk. Financial risks are quantified using the economic capital concept (please refer to the risk report for detailed disclosures). Economic capital is assessed on a 99.98 per cent confidence level for a one-year holding period. The economic capital is compared with the Group's liable equity capital adjusted by intangible assets so as to test the Group's ability to absorb extreme and unexpected losses. The economic capital for financial risk is calculated at the end of each month and amounted to €474.0 million as at 31 December 2016, whereby €407.0 million stem from credit risk and €67.0 million stem from market risk.

The Group evaluates its financial risk situation on an ongoing basis. In the view of the Executive Board, no threat to the continued existence of the Group can be identified at this time.

Credit risk

Credit risk arises in Deutsche Börse Group from the following items:

Credit risk of financial instruments

	Segment	Note	Carrying amounts – maximum risk exposure: Amount at 31 Dec 2016 €m	Carrying amounts – maximum risk exposure: Amount at 31 Dec 2015 €m	Collateral: Amount at 31 Dec 2016 €m	Collateral: Amount at 31 Dec 2015 €m
Collateralised cash investments						
Reverse repurchase agreements	Eurex[1]		289.5	0	291.4[2]	0
	Clearstream	16	4,050.4	5,217.4	4,079.8[3] [4]	5,231.0[3] [4]
	Group[1]		660.0	0	662.5	0
			4,999.9	**5,217.4**	**5,033.7**	**5,231.0**
Uncollateralised cash investments						
Money market lendings – central banks	Eurex[1]		24,910.6	25,972.1	0	0
Money market lendings – other counterparties	Eurex[1]		0	2.2	0	0
	Clearstream	16	7,320.0	3,714.5	0	0
Balances on nostro accounts	Clearstream	16	1,128.0	736.8	0	0
	Group[1]		3,375.6	1,606.8	0	0
Other fixed-income securities	Clearstream	13, 16	302.3[5]	281.0[5]	0	0
Floating rate notes	Eurex	13	9.6	5.0	0	0
	Clearstream	13, 16	1,894.8[5]	1,801.7	0	0
	Group	13	5.0[6]	5.1[6]	0	0
Fund assets	Eurex	13	0	11.9	0	0
	Group	13	11.4	9.5	0	0
			38,957.3	**34,146.6**	**0**	**0**
Loans for settling securities transactions						
Technical overdraft facilities	Clearstream	16	293.8	378.8	n.a.[7]	n.a.[7]
Automated Securities Fails Financing[8]	Clearstream		1,403.2[9]	927.1[9]	1,858.3	868.5
ASLplus securities lending[8]	Clearstream		44,777.8	48,602.8	47,068.1	50,409.4
			46,474.8	**49,908.7**	**48,926.4**	**51,277.9**
Total			**90,432.0**	**89,272.7**	**53,960.1**	**56,508.9**

	Segment	Note	Carrying amounts – maximum risk exposure		Collateral	
			Amount at 31 Dec 2016 €m	Amount at 31 Dec 2015 €m	Amount at 31 Dec 2016 €m	Amount at 31 Dec 2015 €m
Balance brought forward			**90,432.0**	**89,272.7**	**53,960.1**	**56,508.9**
Other receivables						
Other loans	Group		0.4	0.2	0	0
Other assets	Group	32	450.2	932.3	0	0
Trade receivables	Group		669.8	554.1	0	0
Receivables from related parties	Group		2.0	4.7	0	0
Interest receivables	Clearstream	16	15.2	1.2	0	0
Margin requirements	Clearstream	16	0.4	6.8	0	0
			1,138.0	**1,499.3**	**0**	**0**
Financial instruments held by central counterparties			**44,228.2**[10]	**49,538.6**[10]	**57,172.8**[11]	**63,273.7**[11]
Derivatives		14	**65.8**	**23.3**	**0**	**0**
Financial guarantee contracts[8]			**0**	**50.8**	**0**	**0**
Total			**135,864.0**	**140,384.7**	**111,132.9**	**119,782.6**

1) Presented in the items "restricted bank balances" and "other cash and bank balances"
2) Thereof none repledged to central banks (2015: nil)
3) Thereof none transferred via transfer of title to central banks (2015: €3,114.5 million)
4) Total of fair value of cash (€41.0 million; 2015: €4.3 million) and securities collateral (€4,038.8 million; 2015: €5.266.7 million) received under reverse repurchase agreements
5) Thereof €1,818.5 million transferred to central banks (2015: €1,863.4 million)
6) The amount includes collateral totalling €5.0 million (2015: €5.1 million).
7) The portfolio of deposited collateral is not directly attributed to any utilisation, but is determined by the scope of the entire business relationship and the limits granted.
8) Off-balance-sheet items
9) Meets the IAS 39 criteria for a financial guarantee contract
10) Net value of all margin requirements resulting from executed trades at the reporting date as well as clearing fund requirements: This figure represents the risk-oriented view of Eurex Clearing AG and European Commodity Clearing AG, while the carrying amount of the "financial instruments held by central counterparties" item in the balance sheet shows the gross amount of the open trades according to IAS 32.
11) Collateral value of cash and securities collateral deposited for margins, covering the net value of all margin and clearing fund requirements

Cash investments
Deutsche Börse Group is exposed to credit risk in connection with the investment of cash funds. The Group mitigates such risks by investing short-term funds either – to the extent possible – on a collateralised basis, e.g. via reverse repurchase agreements or by deposits with central banks.

According to the treasury policy, mainly highly liquid financial instruments with a minimum rating of AA– (Standard & Poor's/Fitch) resp. Aa3 (Moody's) issued or guaranteed by governments or supranational institutions are eligible as collateral.

Uncollateralised cash investments are permitted only for counterparties with sound creditworthiness within the framework of defined counterparty credit limits. Counterparty credit risk is monitored on the basis of an internal rating system.

The fair value of securities received under reverse repurchase agreements (Clearstream subgroup, Eurex Clearing AG and Deutsche Börse AG) was €4,992.7 million (2015: €5,226.7 million). The Clearstream subgroup and Eurex Clearing AG are entitled to repledge the securities received to their central banks to regain liquidity.

As at 31 December 2016, Deutsche Börse Group (including the Clearstream subgroup, Eurex Clearing and Deutsche Börse AG) has not repledged any securities to central banks (2015: €3,114.5 million repledged by Clearsteam subgroup).

A portion of the available-for-sale fixed-income financial instruments and floating-rate notes held by Clearstream is transferred via transfer of title to central banks to collateralise the settlement facilities obtained. The fair value of transferred securities was €1,818.5 million as at 31 December 2016 (2015: €1,863.4 million).

Clearstream receives cash deposits from its customers in various currencies, and places these cash deposits in money market instruments. If negative interest rates apply to these cash investments, the interest expense is charged to the respective customers. This recharging policy was initiated in early 2015; at that time, it was limited to deposits in euro whose balances exceeded €7.5 million. It has now been extended to all currencies bearing a negative interest without any consideration of their long balances.

Eurex Clearing AG receives cash collateral from its clearing members mainly in its clearing currencies euro and Swiss francs. Negative interest rates resulting from reinvestments on this cash collateral are passed on to the clearing members after deducting an additional margin.

Loans for settling securities transactions
Clearstream grants customers technical overdraft facilities to maximise settlement efficiency. These settlement facilities are subject to internal credit review procedures. They are revocable at the option of the Clearstream subgroup and are largely collateralised. Technical overdraft facilities amounted to €123.8 billion as at 31 December 2016 (2015: €108.6 billion). Of this amount, €3.3 billion (2015: €3.4 billion) is unsecured, whereby a large proportion relates to credit lines granted to central banks and other government-backed institutions. Actual outstandings at the end of each business day generally represent a small fraction of the facilities and amounted to €293.8 million as at 31 December 2016 (2015: €378.8 million); see note 16.

Clearstream also guarantees the risk resulting from the Automated Securities Fails Financing programme it offers to its customers. This risk is collateralised. Guarantees given under this programme amounted to €1,403.2 million as at 31 December 2016 (2015: €927.1 million). Collateral received by Clearstream Banking S.A. in connection with these loans amounted to €1,858.3 million (2015: €868.5 million).

Under the ASLplus securities lending programme, Clearstream Banking S.A. had securities borrowings from various counterparties totalling €44,777.8 million as at 31 December 2016 (2015: €48,602.8 million). These securities were fully lent to other counterparties. Collateral received by Clearstream Banking S.A. in connection with these loans amounted to €47,068.1 million (2015: €50,409.4 million).

In 2015 and 2016, no losses from credit transactions occurred in relation to any of the transaction types described.

Financial instruments of the central counterparties

To safeguard the Group's central counterparties against the risk of default by a clearing member, the clearing conditions require the clearing members to deposit margins in the form of cash or securities on a daily basis or an intraday basis in the amount stipulated by the respective clearing house. Additional safety mechanisms of the Group's central counterparties are described in detail in the risk report.

The aggregate margin calls based on the executed transactions and clearing fund requirements after haircuts was €44,228.2 million at the reporting date (2015: €49,538.6 million). In fact, collateral totalling €57,172.8 million (2015: €63,273.8 million) was deposited.

Composition of collateral held by central counterparties

	Collateral value at 31 Dec 2016 €m	Collateral value at 31 Dec 2015 €m
Cash collateral (cash deposits)[1]	27,772.0	26,861.3
Securities and book-entry securities collateral[2] [3]	29,400.8	36,412.5
Total	**57,172.8**	**63,273.8**

1) The amount includes the clearing fund totalling €2,529.3 million (2015: €2,399.7 million).
2) The amount includes the clearing fund totalling €1,714.8 million (2015: €2,160.3 million).
3) The collateral value is determined on the basis of the fair value less a haircut.

Other receivables

Trading, settlement and custody fees are generally collected without delay by direct debit. Fees for other services, such as the provision of data and information, are settled mainly by transfer. As a result of default by customers, receivables of €2.1 million (2015: €3.1 million) relating to fees for trading and provision of data and IT services are not expected to be collectible.

In contrast to the risk-oriented net analysis of the transactions via the central counterparties, the gross amounts are reported in the balance sheet, as the offsetting rules defined in IAS 32 cannot be met. For a detailed explanation of this balance sheet item, see "Financial instruments held by central counterparties" section in note 3 or note 15. For an analysis of the carrying amount, see note 15.

Credit risk concentrations

Deutsche Börse Group's business model and the resulting business relationships mean that, as a rule, credit risk is concentrated on the financial services sector. Potential concentrations of credit risk on individual counterparties are limited by application of counterparty credit limits.

The regulatory requirements on concentration risks and so-called large exposures, such as those arising from articles 387–410 of regulation (EU) 575/2013 (Capital Requirements Regulation, CRR) and article 47 paragraph 8 of regulation (EU) 648/2012 (European Market Infrastructure Regulation, EMIR), are complied with. See also note 20 for an explanation of regulatory capital requirements.

The required economic capital (VaR with a 99.98 per cent confidence level) for credit risk is calculated for each business day and amounted to €407.0 million as at 31 December 2016 (2015: €409.0 million).

Deutsche Börse Group also applies additional methods in order to detect credit concentration risks. In 2016, no significant credit concentrations were assessed.

Market risk

As part of the annual planning, Deutsche Börse Group's treasury policy requires any net earnings exposure from currencies to be hedged using forward foreign-exchange transactions if the unhedged exposure of an individual currency exceeds 10 per cent of consolidated EBIT. Foreign-exchange exposures below 10 per cent of consolidated EBIT may also be hedged.

On an intraperiod basis, the risk exposure described above is monitored against the latest EBIT forecast.

In addition, the policy stipulates that intraperiod open net foreign-exchange positions are closed out when they exceed €15.0 million. This policy was complied with, as in the previous year; as at 31 December 2016, there were no significant net foreign-exchange positions.

Currency risks in the Group arise mainly from operating income and expenses denominated in US dollars, plus that portion of Clearstream's sales revenue and net interest income from banking business (less expenses) that is directly or indirectly generated in US dollars. The Clearstream segment generated 10 per cent of its sales revenue and net interest income (2015: 10 per cent) directly or indirectly in US dollars.

Acquisitions where payment of the purchase price results in material currency risk are generally hedged. Interest rate risks arise further from debt financing of acquisitions.

Deutsche Börse Group did not issue any bonds in 2016. For an overview on details on all bonds issued by Deutsche Börse Group see the "Net assets" section in the combined management report.

Risks from listed securities arise from contractual trust arrangements (CTAs) and from the Clearstream Pension Fund in Luxembourg. In addition, there are equity price risks arising from strategic equity investments in other exchange operators.

Economic capital is calculated at the end of each month for market risks that can arise in connection with cash investments or borrowing as a result of fluctuations in interest rates and foreign-exchange rates as well as through fluctuations of the asset value of the CTAs and the Clearstream Pension Fund in Luxembourg. On 31 December 2016, the economic capital for market risk was €67.0 million (2015: €59.0 million).

In financial year 2016, impairment losses amounting to €7.1 million (2015: €5.8 million) were recognised in profit and loss for strategic investments that are not included in the VaR for market risk.

Liquidity risk

For the Group, liquidity risk may arise from potential difficulties in renewing maturing financing, such as commercial paper and bilateral and syndicated credit facilities. In addition, financing required for unexpected events may result in a liquidity risk. Most of the Group's cash investments are short-term to ensure that liquidity is available, should such a financing need arise. Eurex Clearing AG remains almost perfectly matched with respect to the durations of customer cash margins received and investments, only a limited amount of which may have tenors of up to one month, while the Clearstream subgroup may invest customer balances up to a maximum of one year, in secured money market products or in high-quality securities with a remaining maturity of less than ten years, subject to strict monitoring of mismatch and interest rate limits (see note 31 for an overview of the maturity structure). Term investments can be transacted via reverse repurchase agreements against highly liquid collateral that can be deposited with the central bank and can be used as a liquidity buffer if required.

Contractually agreed credit lines

Company	Purpose of credit line	Currency	Amount at 31 Dec 2016 m	Amount at 31 Dec 2015 m
Deutsche Börse AG	working capital[1]	€	605.0	605.0
Eurex Clearing AG	settlement	€	1,170.0	1,170.0
	settlement	CHF	200.0	100.0
Clearstream Banking S.A.	working capital[1]	€	750.0	750.0

1) €400.0 million of Deutsche Börse AG's working capital credit lines is a sub-credit line of Clearstream Banking S.A.'s €750.0 million working capital credit line.

For refinancing purposes, Eurex Clearing AG and the Clearstream subgroup can pledge eligible securities with their respective central banks.

Clearstream Banking S.A. has a bank guarantee (letter of credit) in favour of Euroclear Bank S.A./N.V. issued by an international consortium to secure daily deliveries of securities between Euroclear Bank S.A./N.V. and Clearstream Banking S.A. This guarantee amounted to US$3.0 billion as at 31 December 2016 (2015: US$3.0 billion). Euroclear Bank S.A./N.V. has also issued a guarantee in favour of Clearstream Banking S.A. amounting to US$2.5 billion (2015: US$2.5 billion).

Furthermore, Eurex Clearing AG holds a credit facility of US$1.7 billion (2015: US$2.1 billion) granted by Euroclear Bank S.A./N.V. in order to maximise settlement efficiency.

A commercial paper programme offers Deutsche Börse AG an opportunity for flexible, short-term financing, involving a total facility of €2.5 billion in various currencies. As at year-end, there was no commercial paper outstanding (2015: €95.0 million).

Clearstream Banking S.A. also has a commercial paper programme with a programme limit of €1.0 billion, which is used to provide additional short-term liquidity. As at 31 December 2016, commercial paper with a nominal value of €349.5 million had been issued (2015: €286.5 million).

In December 2016, Standard & Poor's confirmed Deutsche Börse AG's "AA" credit rating with a negative outlook. Deutsche Börse AG was one of only two DAX-listed companies that had been given an AA rating by Standard & Poor's. Deutsche Börse AG's commercial paper programme was awarded the best possible short-term rating of A–1+.

The "AA" rating of Clearstream Banking S.A. was confirmed with a stable outlook by the rating agencies Fitch and Standard & Poor's in October 2016. For further details on the rating of Deutsche Börse Group, see the "Financial position" section in the combined management report.

37. Financial liabilities and other risks

For the coming financial years, the Group's expenses in connection with long-term contracts relating to maintenance contracts and other contracts (without rental and lease agreements, see note 38) are presented in the following:

Breakdown of future financial obligations

	31 Dec 2016 €m	31 Dec 2015 €m
Up to 1 year	47.0	60.9
1 to 5 years	39.2	60.8
More than 5 years	9.1	9.9
Total	**95.3**	**131.6**

Other litigation and liability risks

Contingent liabilities may result from present obligations and from possible obligations arising from events in the past. Deutsche Börse Group recognises provisions for the possible incurrence of losses only if there is a present obligation arising from a past event that is likely to result in an outflow of resources, and if Deutsche Börse Group can reliably estimate the amount of the obligation (see also note 3). In order to identify the litigation for which the possibility of incurring a loss is more than unlikely, as well as how the possible loss is estimated, Deutsche Börse Group considers a large number of factors, including the nature of the claim and the facts on which it is based, the jurisdiction and course of the individual proceedings, the experience of Deutsche Börse Group, prior settlement talks (as far as have already taken place) as well as expert reports and evaluations of legal advisors. However, it is also possible that no reliable estimate for any specific litigation could be determined before the approval of the consolidated financial statements, and that – as a result – no provisions are recognised.

Peterson vs Clearstream Banking S.A., Citibank NA et al. ("Peterson I") and Heiser vs Clearstream Banking S.A.

In its 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$250.0 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.

Peterson vs Clearstream Banking S.A. ("Peterson II")

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.

Havlish vs Clearstream Banking S.A. ("Havlish")

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.

Criminal investigations against Clearstream Banking S.A.

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.

Dispute between MBB Clean Energy AG and investors

A dispute has arisen between MBB Clean Energy AG (MBB), the issuer of a bond eligible in Clearstream 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 €500.0 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.

In addition to the matters described above and in prior disclosures, Deutsche Börse Group is from time to time involved in various legal proceedings that arise in the ordinary course of its business. The Group recognises provisions for litigation and regulatory matters when it has a present obligation arising from a past event, an outflow of resources with economic benefit to settle the obligation is probable, and it is able to reliably estimate the amount. In such cases, there may be an exposure to loss in excess of the amounts recognised as provisions. When the conditions are not met, the Group does not recognise a provision. As a litigation or regulatory matter develops, Deutsche Börse Group evaluates on an ongoing basis whether the requirements to recognise a provision are met. The Group may not be able to predict what the eventual loss or range of loss related to such matters will be. The Group does not believe, based on currently available information, that the results of any of these various proceedings will have a material adverse effect on its financial data as a whole.

Other liability risks

In connection with the planned transaction with London Stock Exchange Group, Deutsche Börse AG has entered into agreements with service providers, in particular relating to consultancy services, that include fees which only fall due in the event of the transaction being closed successfully. These success-based fees amount to €70.2 million.

Tax risks

Due to its business activities in various countries, Deutsche Börse Group is exposed to tax risks. A process has been developed to recognise and evaluate these risks, which are initially recognised depending on the probability of occurence. In a second step, these risks are measured on the basis of their expected value. A tax provision is recognised in the event that it is more probable than not that the risks will occur. Deutsche Börse Group continuously reviews whether the conditions for recognising corresponding tax provisions are met.

38. Leases

Finance leases

There were no minimum lease payments from finance leases for Deutsche Börse Group neither as at 31 December 2016 nor as at 31 December 2015.

Operating leases (as lessee)

Deutsche Börse Group has entered into leases to be classified as operating leases due to their economic substance, meaning that the leased asset is allocated to the lessor. These leases relate mainly to buildings, IT hardware and software.

Minimum lease payments from operating leases[1)]

	31 Dec 2016 €m	31 Dec 2015[2)] €m
Up to 1 year	59.8	67.6
1 to 5 years	176.7	193.7
More than 5 years	116.7	155.4
Total	**353.2**	**416.7**

1) The expected payments in US dollars were translated into euros applying the closing rate of 31 December.
2) Includes minimum lease payments of International Securities Exchange Holdings, Inc., which was fully consolidated until Q2/2016. For details, see note 2.

In the reporting period, minimum lease payments amounting to €58.5 million (2015: €63.3 million) were recognised as expenses. No expenses were incurred for subleases or contingent rentals in the reporting period.

Operating leases for buildings, some of which are subleased, have a maximum remaining term of six years. The lease contracts usually terminate automatically when the lease expires. The Group has options to extend some leases.

Expected rental income from subleases[1)]

	31 Dec 2016 €m	31 Dec 2015[2)] €m
Up to 1 year	0.6	0.9
1 to 5 years	0	0.7
More than 5 years	0	0
Total	**0.6**	**1.6**

1) The expected payments in US dollars were translated into euros applying the closing rate of 31 December.
2) Includes rental income from subleases of International Securities Exchange Holdings, Inc., which was fully consolidated until Q2/2016. For details, see note 2.

39. Share-based payment

Stock Bonus Plan (SBP)

In the reporting period, the company established an additional tranche of the SBP. In order to participate in the SBP, a beneficiary must have earned a bonus. The number of stock options for senior executives is determined by the amount of the individual and performance-based SBP bonus for the financial year, divided by the average share price (Xetra closing price) of Deutsche Börse AG's shares in the fourth quarter of the financial year in question. Neither the converted SBP bonus nor the stock options are paid at the time the bonus is determined. Rather, the entitlement is generally received three years after the grant date (waiting period). Within this period, beneficiaries cannot assert shareholder rights (in particular, the rights to receive dividends and attend the Annual General Meeting). Once they have met the condition of service, the beneficiaries' claims resulting from the SBP are calculated on the first trading day following the last day of the waiting period. The current market price at that date (closing auction price of Deutsche Börse shares in electronic trading on the Frankfurt Stock Exchange) is multiplied by the number of stock options.

For the stock bonus of senior executives under the 2013 to 2014 tranches, Deutsche Börse AG has an option to settle a beneficiary's claim in cash or shares. The company resolved a cash settlement for claims relating to the 2013 tranche due in February 2017. Cash settlement has been agreed upon with the introduction of the 2015 tranche. A cash settlement obligation has also existed for claims relating to the Stock Plan for the executive board members of the Clearstream companies since the 2011 tranche.

The SBP for members of the Executive Board of Deutsche Börse AG was terminated prematurely on 31 December 2015. Settlement of the stock bonus from the 2013 to 2015 tranches took place in the first half of 2016; payments made from the 2014 and 2015 tranches are subject to a restriction on disposal until 31 December 2016 and 31 December 2017, respectively. According to the new remuneration scheme, members of the Executive Board are obliged to invest the payments made in Deutsche Börse AG shares, where not restricted by takeover legislation with regard to the intended business combination with London Stock Exchange Group plc or other legal provisions.

For further information on the number of stock options granted to members of the Executive Board, and the new remuneration system for members of the Executive Board applicable since 1 January 2016, please also refer to the remuneration report.

Stock Plan

On 20 April 2009, the Luxembourg Commission de Surveillance du Secteur Financier (CSSF) published a circular on remuneration policies in the banking sector that addresses key aspects of remuneration practices for sustainable corporate governance and supports their implementation in banking institutions' day-to-day operations. According to this circular, every banking institution is required to introduce a remuneration policy that is aligned with its business strategy and corporate goals and values, as well as with the long-term interests of the financial enterprise, its clients and investors, and that minimises the institution's risk exposure. Clearstream companies in Luxembourg have therefore revised their remuneration system for executive boards in line with the circular, and introduced a Stock Plan. This plan stipulates the allocation of a stock bonus at the end of each financial year, which will be paid in three tranches of equal size with maturities of one, two or three years after the grant date. Claims under the Stock Plan have to be cash-settled if the performance targets already agreed in the year in which the targets were specified are met, irrespective of any condition of service.

The number of stock options under the Stock Plan is determined by the amount of the individual performance-based bonus established for each executive board member, divided by the average market price (Xetra closing price) for Deutsche Börse AG shares in the fourth quarter of the financial year in question. As the contracts require the stock bonus to be exercised gradually, it is divided into three separate tranches, which are measured according to their respective residual term using the corresponding parameters of the SBP for senior executives. This programme expired at the end of financial year 2013.

Evaluation of the Stock Bonus Plan (SBP) and the Stock Plan
In accordance with IFRS 2, the company uses an adjusted Black-Scholes model (Merton model) to calculate the fair value of the stock options.

Valuation parameters for SBP stock options

		Tranche 2016	Tranche 2015	Tranche 2014	Tranche 2013[1]
Term to		31 Mar 2020	31 Mar 2019	31 Dec 2016 to 31 Mar 2018	31 Dec 2016 to 31 Jan 2017
Risk-free interest rate	%	–0.65	–0.76	–0.92 to – 0.80	–0.92
Volatility of Deutsche Börse AG shares	%	23.71	25.49	0 to 26.23	0 to 18.15
Dividend yield	%	2.75	2.75	2.75	2.75
Exercise price	€	0	0	0	0

1) The SBP 2013 tranche also includes SBP options of the Stock Plan for the executive board members of the Luxembourg companies.

The valuation model does not take into account exercise hurdles. The volatilities applied correspond to the market volatilities of comparable options with comparable maturities.

Valuation of SBP stock options

Tranche	Balance at 31 Dec 2016 Number	Deutsche Börse AG share price at 31 Dec 2016 €	Intrinsic value/ option at 31 Dec 2016 €	Fair value/ option at 31 Dec 2016 €	Settlement obligation €m	Current provision at 31 Dec 2016 €m	Non-current provision at 31 Dec 2016 €m
2013	70,652	76.42	76.42	76.24 – 76.98	5.4	5.3	0
2014	19,521	76.42	76.42	73.86 – 76.98	1.4	0	1.0
2015	16,082	76.42	76.42	71.89	1.2	0	0.6
2016	25,931[1]	76.42	76.42	69.96	1.8	0	0.4
Total	**132,186**				**9.8**	**5.3**	**2.0**

1) Given that the 2016 tranche stock options for senior executives will not be granted until 2017, the number of shares applicable as at the reporting date may be adjusted subsequently.

Average price of the exercised and forfeited stock options

Tranche	Average price of the exercised stock options €	Average price of the forfeited stock options €
2012	78.94	–
2013	79.70	61.38
2014	79.75	39.47
2015	79.86	25.79

The stock options from the 2012 SBP tranche were exercised in the reporting period following expiration of the vesting period. Shares of the SBP tranches 2013, 2014 and 2015 were paid to former employees as part of severance payments in the year under review.

The carrying amount of the provision for the SBP results from the measurement of the number of SBP stock options at the fair value of the closing auction price of Deutsche Börse shares in electronic trading at the Frankfurt Stock Exchange at the reporting date and its proportionate recognition over the vesting period.

Provisions for the SBP and the Stock Plan amounting to €7.3 million were recognised at the reporting date of 31 December 2016 (31 December 2015: €22.7 million). Of these provisions, none were attributable to members of the Executive Board (2015: €16.7 million). The total expense for the stock options in the reporting period was €2.3 million (2015: €4.5 million). Of that amount, no expense was attributable to members of the Executive Board active at the reporting date (2015: €14.9 million). The provisions recognised in the previous year included provisions for the Co-Performance Investment Plan (CPIP), see section “Co-Performance Investment Plan (CPIP)”.

Change in number of SBP stock options allocated

	Balance at 31 Dec 2015	Additions/ (disposals) Tranche 2013	Additions/ (disposals) Tranche 2014	Additions/ (disposals) Tranche 2015	Additions Tranche 2016	Fully settled cash options	Options forfeited	Balance at 31 Dec 2016
To the Executive Board	209,944[1)]	0	0	0	0	209,944	0	0
To other senior executives	117,592[2)]	0	0	1,042	25,931	11,622	757	132,186
Total	**327,536**	**0**	**0**	**1,042**	**25,931**	**221,566**	**757**	**132,186**

1) Including Executive Board stock options from the 2014 and 2015 SBP tranches, which expired as at 31 December 2015. For further information on stock options from the Co-Performance Investment Plan (CPIP), please refer to section “Co-Performance Investment Plan (CPIP)”.
2) Given that the 2016 SBP tranche stock options for senior executives will not be granted until 2017, the number of shares applicable as at the reporting date may be adjusted subsequently.

Long-term Sustainable Instrument (LSI) and Restricted Stock Units (RSU)

Deutsche Börse Group introduced another share-based payment programme effective 1 January 2014. The programme meets the provisions for remuneration systems according to the supervisory requirements for the remuneration systems of institutions laid down in the Institutsvergütungsverordnung (InstitutsVergV, German Remuneration Regulation for Institutions), effective 16 December 2013, and the Kreditwesengesetz (German Banking Act), through which the provisions of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013, in particular, were transposed into German law. The aim of the InstitutsVergV is to align the corporate goals even more closely with remuneration, especially in the banking sector, and thus to ensure the company’s success is more sustainable. In the year under review, the company launched another LSI tranche and expanded its share-based payment programme by adding an RSU tranche. Accordingly, the disclosures for the 2014 and 2015 tranches include the information for the LSI stock options, and the 2016 tranche includes the disclosures for the stock options under LSI and RSU.

The LSI remuneration model requires at least half of a part of the variable remuneration to be settled in cash and half in shares of Deutsche Börse AG (LSI shares). A portion of the variable remuneration is paid in the subsequent year and another portion over a further period of three or four years. Moreover, a portion of the variable remuneration shall be converted into RSU, subject to a three-year retention period after grant and a one-year waiting period (RSU shares).

The number of LSI and RSU shares is calculated by dividing the proportionate LSI or RSU bonus, respectively, for the year in question by the average closing price of Deutsche Börse AG shares in the last month of a financial year. This results in individual LSI tranches for the LSI bonus, which have maturities of between one and up to five years. The RSU bonus is used as a basis for a further four-year tranche. Payment of each tranche is made after a vesting period of one year. The remuneration system does not stipulate any condition of service. Following the expiry of the vesting period, both the LSI and the RSU shares are measured on the basis of the average closing price of Deutsche Börse AG shares in the last month preceding the end of the vesting period. Settlement is generally made in cash, although the employer has the right to settle by delivering Deutsche Börse AG shares for the 2014 tranche.

Evaluation of the LSI and the RSU

In accordance with IFRS 2, the company uses an adjusted Black-Scholes model (Merton model) to calculate the fair value of the LSI and RSU stock options.

Valuation parameters for LSI and RSU stock options

		Tranche 2016	Tranche 2015	Tranche 2014
Term to		31 Mar 2018 –31 Mar 2022	31 Mar 2017 –31 Mar 2021	31 Mar 2017 –31 Mar 2020
Risk-free interest rate	%	–0.84 to – 0.51	–0.84 to 0	–0.84 to 0
Volatility of Deutsche Börse AG shares	%	23.02 to 26.20	0 to 26.2	0 to 26.2
Dividend yield	%	2.75	2.75	2.75
Exercise price	€	0	0	0

The valuation model does not take into account exercise hurdles. The volatilities applied correspond to the market volatilities of comparable options with comparable maturities.

Valuation of LSI and RSU stock options

Tranche	Balance as at 31 Dec 2016 Number	Deutsche Börse AG share price as at 31 Dec 2016 €	Intrinsic value/ option as at 31 Dec 2016 €	Fair value/ option as at 31 Dec 2016 €	Settlement obligation €m	Current provision as at 31 Dec 2016 €m	Non-current provision as at 31 Dec 2016 €m
2014	24,898[1)]	76.42	76.42	70.44 –75.03	1.9	0.6	1.3
2015	49,109[1)]	76.42	76.42	68.56 –75.03	3.6	1.4	2.1
2016	108,971[1)]	76.42	76.42	66.72 –74.37	7.8	0	7.7
Total	**182,978**				**13.3**	**2.0**	**11.1**

1) As part of the grant dates for the 2014, 2015 and 2016 tranches are in future financial years, the number indicated at the reporting date may change subsequently.

The carrying amount of the provisions for the LSI and the RSU results from the measurement of the number of LSI and RSU stock options at the fair value of the closing auction price of Deutsche Börse shares in electronic trading at the Frankfurt Stock Exchange as at the reporting date.

Provisions amounting to €13.1 million were recognised as at 31 December 2016 (31 December 2015: €7.2 million). The total expense for LSI stock options in the reporting period amounted to €7.6 million (31 December 2015: €4.6 million).

Change in number of LSI and RSU stock options allocated

	Balance at 31 Dec 2015	Additions/ (disposals) Tranche 2014	Additions/ (disposals) Tranche 2015	Additions Tranche 2016	Fully settled cash options	Options forfeited	Balance at 31 Dec 2016
To other senior executives	93,742	669[1)]	1,564[1)]	108,971[1)]	21,968	0	182,978
Total	**93,742**	**669**	**1,564**	**108,971**	**21,968**	**0**	**182,978**

1) As part of the grant dates for the 2014, 2015 and 2016 tranches are in future financial years, the number indicated at the reporting date may change subsequently.

Co-Performance Investment Plan (CPIP) and Performance Share Plan (PSP)

In the 2015 financial year, a new remuneration programme (Co-Performance Investment Plan, CPIP) was introduced, and the CEO was offered a one-time participation. The appropriate number of phantom shares was calculated based on the number of shares granted and the increase of Deutsche Börse AG's net profit for the period attributable to shareholders of Deutsche Börse AG, as well as on the relative performance of the total shareholder return (TSR) on Deutsche Börse AG's shares compared with the total shareholder return of the STOXX Europe 600 Financials Index entities. The performance period for the measurement of the performance criteria commenced on 1 January 2015 and ends on 31 December 2019. The shares are subject to a performance period of five years and a holding period until 31 December 2019. The subsequent payment of the stock bonus will be settled in cash, by 31 March 2021.

On 1 January 2016, the Group launched its new share-based remuneration programme, the Performance Share Plan (PSP), for the Executive Board of Deutsche Börse AG as well as selected executives and employees of Deutsche Börse AG and participating subsidiaries. The 100 per cent stock bonus target was calculated in euros for each Executive Board member. The 100 per cent stock bonus target for selected executives and employees of Deutsche Börse AG and participating subsidiaries is defined by the responsible decision-making bodies.

Based on the PSP 100 per cent stock bonus target, the corresponding number of phantom shares for each beneficiary is calculated by dividing the stock bonus target by the average share price (Xetra closing price) of Deutsche Börse AG's shares in the last calendar month preceding the performance period. Any right to payment of a PSP stock bonus vests only at the end of a five-year performance period.

The final number of Performance Shares is calculated by multiplying the original number of Performance Shares with the level of overall target achievement. The PSP level of overall target achievement is based on two performance factors during the performance period: firstly, on the relative performance of the total shareholder return (TSR) on Deutsche Börse AG's shares compared with the total shareholder return of the STOXX Europe 600 Financials Index; and secondly, on the increase of Deutsche Börse AG's net profit for the period attributable to shareholders of Deutsche Börse AG. The two performance factors contribute 50 per cent each to calculate overall target achievement.

The payout amount is calculated by multiplying the final number of Performance Shares with the average share price (Xetra closing price) of Deutsche Börse AG's shares in the last calendar month preceding the performance period, plus the total of dividend payments made during the performance period based on the final number of Performance Shares.

Evaluation of the Co-Performance Investment Plan (CPIP) and the Performance Share Plan (PSP)
In accordance with IFRS 2, the company uses an adjusted Black-Scholes model (Merton model) to calculate the fair value of the CPIP and PSP stock options.

Valuation parameters for CPIP and PSP stock options

		Tranche 2016	Tranche 2015
Term to		31 Dec 2020	31 Dec 2019
Risk-free interest rate	%	–0.65	–0.76
Volatility of Deutsche Börse AG shares	%	23.02	23.88
Dividend yield	%	0	0
Exercise price	€	0	0
Relative total shareholder return	%	50.00	235.00
Increase in net profit for the period attributable to Deutsche Börse AG shareholders	%	190.00	155.00

The valuation model does not take into account exercise hurdles. The volatilities applied correspond to the market volatilities of comparable options with comparable maturities.

Valuation of CPIP and PSP stock options

Tranche	Balance as at 31 Dec 2016 Number	Deutsche Börse AG share price as at 31 Dec 2016 €	Intrinsic value/ option as at 31 Dec 2016 €	Fair value/ option as at 31 Dec 2016 €	Settlement obligation €m	Current provision as at 31 Dec 2016 €m	Non-current provision as at 31 Dec 2016 €m
2015	134,529	76.42	76.42	76.41	10.3	0	3.8
2016	84,177	76.42	76.42	76.41	6.4	0	1.3
Total	**218,706**				**16.7**	**0**	**5.1**

Provisions for the CPIP and the PSP amounting to €5.1 million were recognised at the reporting date of 31 December 2016 (31 December 2015: €1.1 million). Of the provisions, €4.6 million were attributable to members of the Executive Board (2015: €1.1 million). The total expense for CPIP and PSP stock options in the reporting period was €4.0 million (2015: €1.1 million). Of that amount, an expense of €3.5 million was attributable to members of the Executive Board active at the reporting date (2015: €1.1 million).

Change in number of CPIP and PSP stock options allocated

	Balance at 31 Dec 2015	Additions/ (disposals) Tranche 2015	Additions Tranche 2016	Fully settled cash options	Options forfeited	Balance at 31 Dec 2016
To the Executive Board	93,064	41,465	55,676	0	0	190,205
To other senior executives	0	0	28,501	0	0	28,501
Total	**93,064**	**41,465**	**84,177**	**0**	**0**	**218,706**

For further information on the number of stock options granted to Executive Board members, and on the remuneration system for Executive Board members introduced on 1 January 2016, please refer to the remuneration report.

Group Share Plan (GSP)

Employees of Deutsche Börse Group who are not members of the Executive Board or senior executives have the opportunity to subscribe for shares of Deutsche Börse AG at a discount of 30 or 40 per cent to the issue price under the Group Share Plan (GSP). This discount is based on the employee's length of service. Under the 2016 GSP tranche, eligible employees were able to buy up to 100 shares of the company. The purchased shares must be held for at least two years.

In the reporting period, an expense totalling €2.6 million (2015: €1.8 million) was recognised in staff expense for the Group Share Plan.

40. Executive bodies

The members of the company's executive bodies are listed in the "The Executive Board" and "The Supervisory Board" chapters of this financial report.

41. Corporate governance

On 8 December 2016, the Executive and Supervisory Boards issued the latest version of the declaration of conformity in accordance with section 161 of the Aktiengesetz (AktG, the German Stock Corporation Act) and made it permanently available to shareholders on the company's website (see also the corporate governance declaration in the combined management report).

42. Related party disclosures

Related parties as defined by IAS 24 are members of the executive bodies of Deutsche Börse AG as well as the companies classified as associates of Deutsche Börse AG, investors and investees, and companies that are controlled or significantly influenced by members of the executive bodies.

The remuneration of the individual members of the Executive and Supervisory Boards is presented in the
"Remuneration report" in the combined management report.

Executive Board

In 2016, the fixed and variable remuneration of the members of the Executive Board, including non-cash benefits, amounted to a total of €20.4 million (2015: €15.3 million; figure includes members who have since retired from the Executive Board).

During the 2016 financial year, expenses of €2.7 million (2015: €1.1 million) were recognised in connection with the Co-Performance Investment Plan (CPIP). In addition, expenses of €0.8 million were recognised in connection with the Performance Share Plan (PSP) during the year under review.

The actuarial present value of the pension obligations to Executive Board members was €21.5 million as at 31 December 2016 (2015: €18.0 million). Expenses of €2.8 million (2015: €2.1 million) were recognised as additions to pension provisions.

Former members of the Executive Board or their surviving dependants

The remuneration paid to former members of the Executive Board or their surviving dependants amounted to €4.5 million in 2016 (2015: €2.3 million). The actuarial present value of the pension obligations was €74.2 million as at 31 December 2016 (2015: €71.8 million).

Supervisory Board

The aggregate remuneration paid to members of the Supervisory Board in financial year 2016 was €1.8 million (2015: €2.0 million).

In financial year 2016, the employee representatives on Deutsche Börse AG's Supervisory Board received salaries (excluding Supervisory Board remuneration) amounting to €0.5 million (2015: €0.7 million). The total consists of the respective total gross amounts for those employee representatives who drew salaries from Deutsche Börse AG in the year under review.

Business relationships with related parties and key management personnel

Business relationships with related parties

The following table shows transactions entered into within the scope of business relationships with non-consolidated companies of Deutsche Börse AG during the 2016 financial year. All transactions were concluded at prevailing market terms.

Transactions with related entities

	Amount of the transactions revenues		Amount of the transactions expenses		Outstanding balances receivables		Outstanding balances liabilities	
	2016 €m	2015 €m	2016 €m	2015 €m	31 Dec 2016 €m	31 Dec 2015 €m	31 Dec 2016 €m	31 Dec 2015 €m
Associates	13.0	10.9	–12.3	–9.1	2.5	4.7	–3.6	–0.6
Joint ventures	0	0.2	0	0	0	0	0	0
Other shareholdings	0.5	3.1[1]	–1.0	– 1.6[2]	0	0	0	–1.2
Total sum of business transactions	**13.5**	**14.2**	**–13.3**	**–10.7**	**2.5**	**4.7**	**–3.6**	**–1.8**

1) Two companies formerly categorised as associated companies were retroactively reclassified as other shareholdings.
2) Thereof €–0.4 million arising from two companies formerly categorised as associated companies which were retroactively reclassified as other shareholdings

Monetary business relationships with key management personnel
Key management personnel are persons who directly or indirectly have authority and responsibility for planning, directing and controlling the activities of Deutsche Börse Group. The Group defines the members of the Executive Board and the Supervisory Board as key management personnel for the purposes of IAS 24.

European Commodity Clearing Luxembourg S.à r.l., Luxembourg, (ECC Luxembourg), – a subsidiary of European Commodity Clearing AG and therefore a member of the EEX group – entered into a managing director agreement with IDS Lux S.à r.l. The subject of the agreement is to provide a natural person for the function of managing director in the management of ECC Luxembourg. In addition to this position as managing director of ECC Luxembourg, this person is also a member of the key management personnel at IDS Lux S.à r.l. ECC Luxembourg paid €14.0 thousand for these management services during the 2016 financial year.

Moreover, a member of the Supervisory Board of STOXX Ltd., Zurich, Switzerland, also holds a key management position within the law firm Lenz & Staehelin, Geneva, Switzerland. Deutsche Börse Group reported expenses to this law firm of €1,174.4 thousand in the 2016 financial year.

On the Board of Directors of European Energy Exchange AG's subsidiary Powernext SA, Paris, France, representatives of Powernext SA's other shareholders hold key positions. These shareholder representatives also hold key positions in Powernext SA's shareholder companies, i.e. GRTgaz, Bois-Colombes, France (parent company of 3GRT, Tarascon, France), and EDEV S.A., Courbevoie, France. During the 2016 financial year, Powernext rendered development and maintenance services for customised software solutions in the area of market coupling and balancing, as well as in connection with an electronic trading platform for 3GRT. The company generated €936.7 thousand in revenue with these services during the 2016 financial year.

The Board of Directors and the Executive Board, of LuxCSD S.A., an associate from Deutsche Börse Groups' perspective, each comprise two members of management of fully consolidated subsidiaries who are maintaining a key position within these subsidiaries of Deutsche Börse Group, too. There have been business transactions with Clearstream Banking S.A., Clearstream Services S.A., Clearstream International S.A. and Clearstream Banking AG to LuxCSD. Overall, revenue of €623.0 thousand as well as expenses of €1,609.6 thousand were recognised for such contracts during the 2016 financial year.

Furthermore, an Executive Board member of Clearstream Banking AG concurrently holds an executive position within Deutsche Börse Commodities GmbH, an associate of Deutsche Börse Group. During the 2016 financial year, Deutsche Börse Group realised revenue of €2,057.3 thousand and incurred expenses of €8,890.6 thousand based on the business relationship with Deutsche Börse Commodities GmbH.

One member of Eurex Frankfurt AG's Executive Board was, until February 2016, the Chief Executive Officer of ZDB Cloud Exchange GmbH, and Zimory GmbH, both associates of Deutsche Börse Group. During the 2016 financial year, Deutsche Börse Group realised revenue of €375.5 thousand and expenses of €1.8 thousand based on the business relationship with ZDB Cloud Exchange GmbH.

Two Executive Board members of Deutsche Börse AG are members of the Supervisory Board of China Europe International AG (CEINEX), a joint venture of Shanghai Stock Exchange Ltd., the China Financial Futures Exchange and Deutsche Börse AG. During the 2016 financial year, Deutsche Börse Group realised revenue of €456.9 thousand and incurred expenses of €6.0 thousand based on the business relationship with CEINEX.

Other business relationships with key management personnel
Selected executives of Deutsche Börse Group subsidiaries also hold a key management position within the Clearstream Pension Fund ("association d'épargne pension", ASSEP). This defined benefit plan, established in favour of Luxembourg staff of Clearstream International S.A., Clearstream Banking S.A., as well as Clearstream Services S.A., is funded through cash payments to an ASSEP under Luxembourg law.

43. Employees

Employees

	2016	2015
Average number of employees during the year	5,095	4,760
Employed at the reporting date	5,176	5,100
Employees (average annual FTEs)	4,731	4,460

Of the average number of employees during the year, 29 (2015: 25) were classified as Managing Directors (excluding Executive Board members), 348 (2015: 358) as senior executives and 4,718 (2015: 4,377) as employees.

There was an average of 4,731 full-time equivalent (FTE) employees during the year (2015: 4,460). Please refer also to the "Employees" section in the combined management report.

44. Events after the end of the reporting period

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 (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 business combination 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 business combination 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.

45. Date of approval for publication

Deutsche Börse AG's Executive Board approved the consolidated financial statements for submission to the Supervisory Board on 7 March 2017. The Supervisory Board is responsible for examining the consolidated financial statements and stating whether it endorses them.

Responsibility statement by the Executive Board

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the combined management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Frankfurt/Main, 10 March 2017
Deutsche Börse AG

Carsten Kengeter | Andreas Preuss | Gregor Pottmeyer

Hauke Stars | Jeffrey Tessler

Auditor’s report

We have audited the consolidated financial statements prepared by Deutsche Börse Aktiengesellschaft, Frankfurt/Main, comprising the consolidated income statement, the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated cash flow statement, the consolidated statement of changes in equity and the notes to the consolidated financial statements, together with the combined management report for the financial year from 1 January to 31 December 2016. The preparation of the consolidated financial statements and the combined management report in accordance with IFRSs, as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315a (1) of the German Commercial Code [HGB] are the responsibility of the Company’s executive board. Our responsibility is to express an opinion on the consolidated financial statements and on the combined management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] [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 consolidated financial statements in accordance with the applicable financial reporting framework and in the combined management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group 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 consolidated 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 annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by executive board, as well as evaluating the overall presentation of the consolidated 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 consolidated financial statements comply with IFRSs, as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The combined management report is consistent with the consolidated financial statements, complies with the German statutory requirements, and as a whole provides a suitable view of the Group’s position and suitably presents the opportunities and risks of future development.

Frankfurt/Main, 10 March 2017

KPMG AG
Wirtschaftsprüfungsgesellschaft

Braun	Dielehner
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Section B: Additional supplementary information relating to the Deutsche Börse Group

This Section B of Annex 1 contains following information relating to the Deutsche Börse Group which have been extracted from the financial report of Deutsche Börse AG for the year ended 31 December 2016:

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

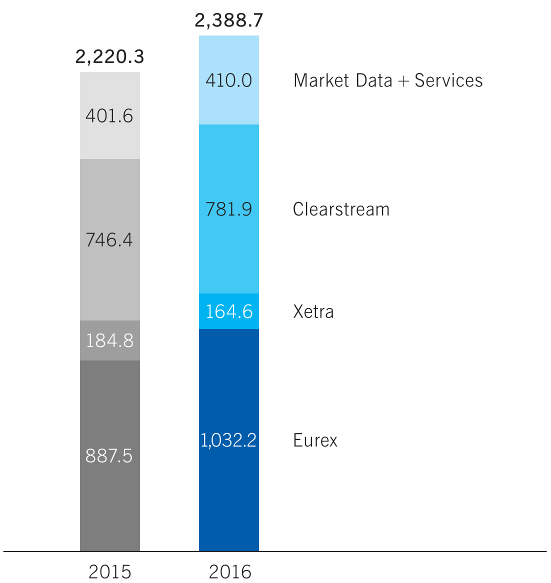
Results of operations

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

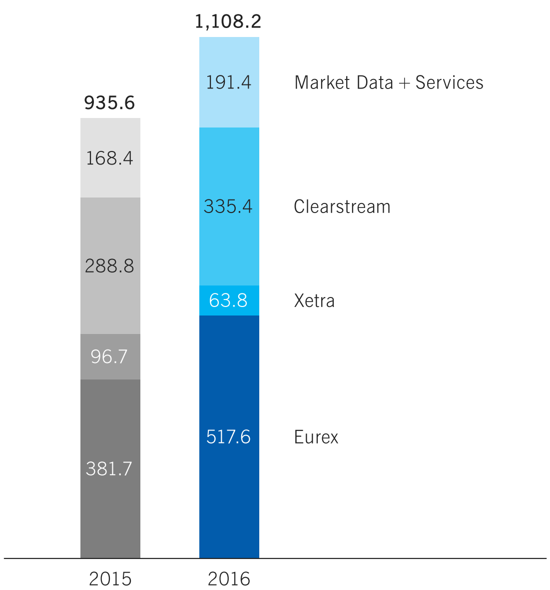
Net revenue by segment

€ millions



EBIT by segment

€ millions



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 (€42.7 million), criminal proceedings against Clearstream Banking S.A. in the US (€19.7 million) as well as efficiency programmes (€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 €15.1 million or 1 per cent (2015: €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 €–74.6 million (2015: €–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 €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
For 2016, Deutsche Börse Group originally expected an increase in net revenue between 5 and 10 per cent given the cyclical market environment showing improving already in 2015, and the multiple structural growth initiatives being part of the "Accelerate" programme. Although the average stock market volatility remained under the previous year's figure, and the low interest rate environment in Europe prevailed throughout the year under review, the conditions described earlier in the "Business developments" section partly reflected the assumptions used in the forecast. Based on its highly diversified business model, Deutsche Börse Group increased its net revenue by 8 per cent, and thus reached the mean of its 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.

Key figures by quarter (adjusted)

	Q1		Q2		Q3		Q4	
	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €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

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 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 %	Result %
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	
	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €m	2016 €m	2015 €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[1]	1,727.5	1,672.6	3
Equity index derivatives[2]	894.0	837.7	7
Interest rate derivatives	526.6	509.1	3
Equity derivatives[2]	291.1	311.8	–7
Commodities: trading volume on EEX[3) 4)]	**TWh / m t CO_2**	**TWh / m t CO_2**	**%**
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**	**€bn**	**%**
Average daily volume on 360T®	57.6	55.3	4

1) The total deviates from the sum of individual figures since it includes additional traded products, such as ETF, volatility, currency and precious metals derivatives.
2) Dividend derivatives are assigned to equity index and equity derivatives.
3) Volumes traded on EEX – in terawatt hours (TWh) for power and gas contracts, and in million tonnes of CO_2 for emissions trading
4) 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.

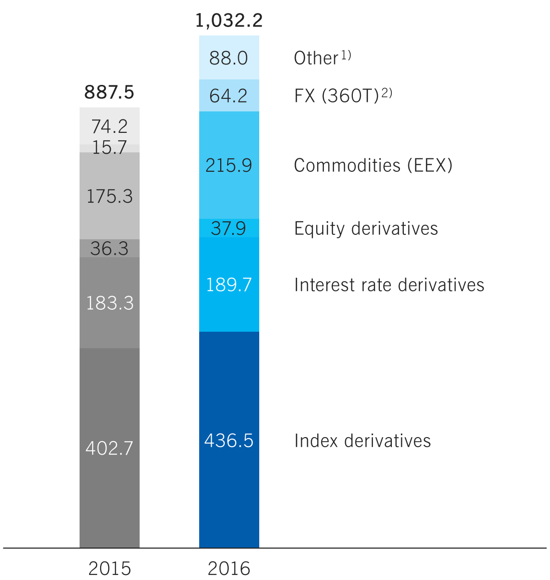
Xetra segment

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

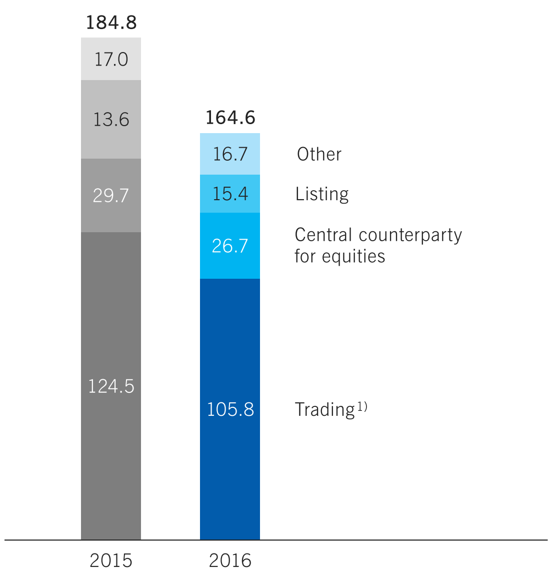
€ millions



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

Net revenue in the Xetra segment

€ millions



1) 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 generated

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®	1,262.1	1,505.8	–16
Frankfurt Stock Exchange	43.9	54.6	–19
Tradegate	71.0	75.3	–6

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**	**€tn**	%
Value of securities under custody (average value during the year)	1.9	1.8	5
Global Securities Financing	**€bn**	**€bn**	**%**
Outstanding volume (average value during the year)	515.9	598.6	–14
Net interest income from banking business	**€bn**	**€bn**	**%**
Average daily cash balances[1]	13.1	12.4	5

1) 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.

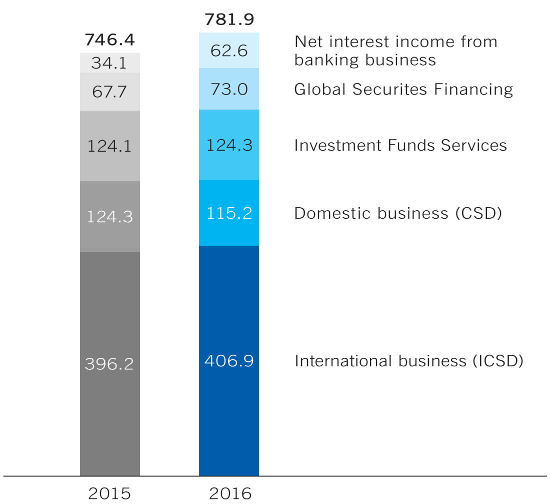
Average outstanding volumes in GSF decreased by 14 per cent. After the ECB flooded markets with liquidity within the scope of its quantitative easing policy, volumes were down significantly, especially in GC Pooling. At the same time, order flows shifted towards smaller, higher-priced lending volumes,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

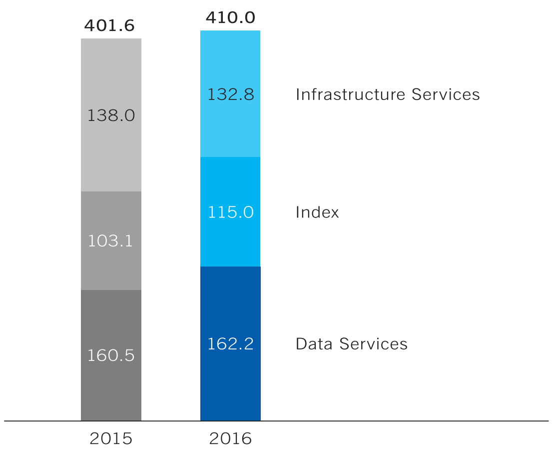
Net revenue in the Clearstream segment

€ 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).

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.

ANNEX 2

DEUTSCHE BÖRSE 2017 PROFIT FORECAST

Section A: Deutsche Börse 2017 Profit Forecast

On 15 February 2017, Deutsche Börse AG released its unaudited preliminary results for the fourth quarter and full year ended 31 December 2016.

Included in the announcement released by Deutsche Börse AG on 15 February 2017 relating to its unaudited preliminary results for the fourth quarter and full year ended 31 December 2016 was the following guidance for the financial year ending 31 December 2017 (the "**Deutsche Börse 2017 Profit Forecast**"):

- 5 per cent.—10 per cent. net revenue growth.
- 0 per cent.—5 per cent. operating costs growth (adjusted).
- 10 per cent.—15 per cent. net income growth (adjusted).

The Deutsche Börse 2017 Profit Forecast set out above is repeated as at the date of this document. The Deutsche Börse 2017 Profit Forecast relates to net revenue growth, operating cost growth and net income growth, in line with the previous guidance given by Deutsche Börse AG and as a means of evaluating the financial and operating performance of the Deutsche Börse Group. Deutsche Börse AG makes a net profit forecast annually.

The Deutsche Börse 2017 Profit Forecast was given under the requirements of the relevant German accounting standard (GAS 20 Group Management Report) with respect to the Deutsche Börse Group on a standalone basis and was based on its continued operation as an independent group. The Deutsche Börse 2017 Profit Forecast does not reflect any synergies, opportunities, reorganisation, restructuring or transaction costs associated with the Merger. Deutsche Börse AG has a fixed tax rate and the market is therefore able to calculate its profit before tax.

Basis of preparation

The Deutsche Börse 2017 Profit Forecast is based on a forecast for the 12 months to 31 December 2017. The profit forecast is required to be presented on a basis consistent with the accounting policies of the Company.

Assumptions

The Deutsche Börse 2017 Profit Forecast is based on the following assumptions for the period to which they relate:

Factors outside the influence or control of the Directors

- There will be continued recovery of the eurozone and world economies.
- There will be no material changes to the conditions of the markets in which Deutsche Börse AG operates.
- The main exchange rates and inflation and tax rates in Deutsche Börse AG's principal markets will remain materially unchanged from the prevailing rates.
- There will be no material changes in legislation or regulatory requirements impacting on Deutsche Börse AG's operations or its accounting policies.
- There will be no material changes to Deutsche Börse AG's obligations to customers.
- There will be no material change to the competitive environment leading to an adverse impact on consumer preferences or the capacity of the Deutsche Börse AG business to penetrate new markets.

Factors within the influence and control of the Directors

- There will be no material impact on Deutsche Börse AG's ability to negotiate new business.
- There will be no material change to Deutsche Börse AG's customer base or the ability or willingness of the customer base to meet its obligations to Deutsche Börse AG from that which is currently anticipated by the Directors and the Proposed Directors.

LSEG

Not applicable. There is no profit forecast or estimate for LSEG plc.

HoldCo

Not applicable. There is no profit forecast or estimate for HoldCo.

Section B: Accountant's Report on the Deutsche Börse 2017 Profit Forecast

KPMG LLP
15 Canada Square
London E14 5GL
United Kingdom

The Directors and Proposed Directors
HLDCO123 PLC
10 Paternoster Square
London EC4M 7LS

22 March 2017

Ladies and Gentlemen

Deutsche Börse AG ("DBAG")

We report on the profit forecast comprising forecast of net revenue, operating costs, and net income of DBAG for the year ending 31 December 2017 (the "**Profit Forecast"**). The Profit Forecast, and the material assumptions upon which it is based, are set out in Section A of Annex 2 of the Supplementary Prospectus issued by HLDCO123 PLC (the "**Company**") dated 22 March 2017 (the "**Supplementary Prospectus**"). This report is required by paragraph 13.2 of Annex I of the Prospectus Directive Regulation and is given for the purpose of complying with that paragraph and for no other purpose.

Responsibilities

It is the responsibility of the directors and proposed directors of the Company to prepare the Profit Forecast in accordance with the requirements of the Prospectus Directive Regulation.

It is our responsibility to form an opinion as required by the Prospectus Directive Regulation as to the proper compilation of the Profit Forecast and to report that opinion to you.

Save for any responsibility arising under Prospectus Rule 5.5.3R (2)(f) to any person as and to the extent there provided, to the fullest extent permitted by law we do not assume any responsibility and will not accept any liability to any other person for any loss suffered by any such other person as a result of, arising out of, or in connection with this report or our statement, required by and given solely for the purposes of complying with paragraph 23.1 of Annex I of the Prospectus Directive Regulation, consenting to its inclusion in the Supplementary Prospectus.

Basis of preparation of the Profit Forecast

The Profit Forecast has been prepared on the basis stated in Section A of Annex 2 of the Supplementary Prospectus and is based on a forecast for the 12 months to 31 December 2017. The Profit Forecast is required to be presented on a basis consistent with the accounting policies of the Company.

Basis of opinion

We conducted our work in accordance with the Standards for Investment Reporting issued by the Auditing Practices Board in the United Kingdom. Our work included evaluating the basis on which the historical financial information included in the Profit Forecast has been prepared and considering whether the Profit Forecast has been accurately computed based upon the disclosed assumptions and the accounting policies of the Company. Whilst the assumptions upon which the Profit Forecast are based are solely the responsibility of the directors and proposed directors of the Company, we considered whether anything came to our attention to indicate that any of the assumptions adopted by the directors and proposed directors of the Company which, in our opinion, are necessary for a proper understanding of the Profit Forecast have not been disclosed and whether any material assumption made by the directors and proposed directors of the Company appears to us to be unrealistic.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with reasonable assurance that the Profit Forecast has been properly compiled on the basis stated.

Since the Profit Forecast and the assumptions on which it is based relate to the future and may therefore be affected by unforeseen events, we can express no opinion as to whether the actual results reported will correspond to those shown in the Profit Forecast and differences may be material.

Our work has not been carried out in accordance with auditing or other standards and practices generally accepted in the United States of America and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices.

Opinion

In our opinion the Profit Forecast has been properly compiled on the basis stated and the basis of accounting used is consistent with the accounting policies of the Company.

Declaration

For the purposes of Prospectus Rule 5.5.3R (2)(f) we are responsible for this report as part of the Supplementary Prospectus and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Supplementary Prospectus in compliance with paragraph 1.2 of Annex I of the Prospectus Directive Regulation.

Yours faithfully

KPMG LLP