Company number: 00025932

LCH LIMITED

(formerly LCH.Clearnet Limited)

ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016

Company information

Board of Directors

Type of director	Name	Note
Executive	Suneel Bakhshi	
Executive	Dennis McLaughlin	
Executive	Martin Pluves (CEO)	
Independent	Lex Hoogduin (Chairman)	
Independent	Ian Abrams	
Independent	Jonathan Eliot	
Independent	Shona Milne	
Independent	Graham Wright	Appointed 11 July 2016
Independent	Simon Davies	Resigned 31 December 2016
Group shareholder representative	Nikhil Rathi (LSEG)	
Group shareholder representative	Stephen Compton	Resigned 27 May 2016
Group shareholder representative	Charlotte Crosswell	Resigned 2 January 2017
Group shareholder representative	Matt Jerman	Appointed 5 October 2016
Group shareholder representative	Susan O'Flynn	Appointed 3 March 2016

Secretary

Robert Franklin

Auditors

Ernst & Young LLP
25, Churchill Place
London
E14 5EY

Registered office

Aldgate House
33 Aldgate High Street
London
EC3N 1EA

Telephone: +44 (0) 20 7426 7000

Registered in England, number: 00025932

LCH Limited (the Company) is a wholly owned subsidiary of LCH.Clearnet Group Limited and is a member of the LCH group of companies. The Company's ultimate parent is London Stock Exchange Group plc (LSEG).

Business model

The Company's principal activity during the year continued to be the provision of central counterparty (CCP) and related services to clearing members as a part of the LCH Group.

The Company is a leading multi-national clearing house. The Company provides services to mitigate counterparty risk across multiple asset classes for clearing members and their clients, operating through an open access model that clears for major exchanges and platforms as well as a range of over-the-counter (OTC) markets.

As a CCP, the Company sits in the middle of a trade as the buyer to every seller and the seller to every buyer. If either party defaults on the trade, the Company owns the defaulter's risk and becomes accountable for its liabilities. Fundamental to the Company's risk processes is its collection of quality collateral from clearing members and clients as insurance to recover or replace defaulted risk. During the life of a trade, or that of a portfolio of trades, the Company processes all cash flows and marks the trade or book to market, calling variation and initial margin in relation to the prevailing risk of the overall portfolio.

The Company earns its revenue in the OTC derivatives markets by charging members either an annual fee for all clearing or a lower annual fee with variable fees based on volume. Additional fees are levied for new services such as compression. Clients pay a fee based on OTC volumes or values cleared. In non-OTC markets, all users pay a fee based on volumes cleared. Net treasury income is earned on cash and securities held for margin and default funds.

The Company continues to satisfy the requirements of the Bank of England as a Recognised Clearing House in the UK and the requirements of all other regulatory bodies to whose rules it is subject. It provides CCP clearing services in respect of a broad range of cash and derivative products traded on or through various exchanges and trading platforms in the UK, Europe, Asia and the US as well as those traded in the OTC markets.

Strategic objectives

The Company's strategic objectives are:

- to provide robust risk management services to members and clients
- to deliver world class clearing services
- to partner with the markets we serve

The strategy for achieving these objectives is to maintain a sound risk management approach across all asset classes cleared and to work closely with market participants to develop and deliver new services.

Key performance Indicators

Financial and non-financial key performance indicators utilised by the directors to measure progress are as follows:

	2016	2015	Variance
SwapClear			
SwapClear members	**107**	101	6%
Notional cleared ($ trillion)	**666.0**	521.4	28%
Client trades ('000)	**952**	678	40%
ForexClear			
ForexClear members	**25**	23	9%
Notional cleared ($ billion)	**3,190.7**	1,049.6	204%
Fixed Income: notional cleared (€ trillion)	**37.1**	39.5	-6%
Listed Derivatives: contracts cleared (million)	**5.9**	6.9	-14%
Cash Equities: trades cleared (million)	**463.7**	308.2	50%
Average cash collateral (€ billion)	**54.6**	44.6	22%

Discussion of the key performance indicators is included in the development and performance section below.

Performance

Key developments during the year included the continued growth of new services for the OTC markets, including continued support for clients as clearing mandates and non-cleared margin rules go live, inflation swap clearing and expansion of compression services. LCH Spider, a new portfolio margining service for interest rate derivatives, was launched in May 2016 offering members and their clients the opportunity to benefit from risk and collateral efficiencies on an open access basis. Furthermore, LCH launched clearing for CurveGlobal.

As a global clearing house, LCH continued to expand. It started to offer clearing on UBS MTF in February 2016, making the cash equity clearing service available for users of 16 trading venues. In the Asia-Pacific region, LCH was granted the status of a Recognised Clearing House by the Monetary Authority of Singapore; authorised as a CCP by the Hong Kong Securities and Finance Commission, and was approved to clear non-Yen OTC interest rate derivatives for Japanese banks.

LCH won the Risk Magazine Clearing House Of The Year for the fourth year in a row, and the Market Infrastructure Provider of the Year Award by the Central Banking Journal. It was also recognised by Asia Risk as the Clearing House of the year in 2016.

SwapClear

SwapClear offers both buy and sell side clients access to unrivalled liquidity, cost saving efficiencies and rigorous risk management. The SwapClear service is used by members who are in general the sell side banks and by clients who are made up of other banks, pension funds, hedge funds and investment funds.

Increased volumes, client traction, and adoption and delivery of new products and services have delivered a strong overall performance for SwapClear. Client clearing activity continues to grow with new annual records achieved. Drivers of this growth include continued access to market liquidity, costs of uncleared margin rules further extenuating the benefits of clearing, evidenced by the increase in inflation swap clearing, and regulatory mandated clearing in Europe.

In 2016, SwapClear Membership increased to 107 (2015: 101). Total notional cleared increased by 28% to a record US$666 trillion (2015: US$521 trillion), of which client clearing increased 50%, also to a record US$139 trillion (2015: US$93 trillion) with client trades cleared up 40% to a record 952,000 (2015: 678,000). Increased notional cleared also benefitted net treasury income by way of increased margin collected.

SwapClear's compression services allow members and clients to combine or offset trades resulting in a reduction in notional outstanding, more efficient portfolios and may result in lower regulatory capital requirements. Compression continued to show good progress with a 17% increase, to a record US$384 trillion compressed (2015: US$328 trillion). SwapClear reached a landmark milestone of compressing a total of US$1 quadrillion in notional since it started offering compression services in 2008. It has also cleared a total of US$1.4 trillion in notional of inflation swaps since the service launched in April 2015. This achievement follows a significant increase in clearing activity on the buy and sell side following the implementation of non-cleared margin rules in US, Canada and Japan in September 2016.

Total clearing fee revenue for the year was €197.6 million (2015: €178.2 million).

ForexClear

ForexClear is LCH's service clearing foreign exchange (FX) non-deliverable forwards (NDF) in 12 Emerging Market currencies. ForexClear earns the majority of its clearing revenues from annual membership fees. ForexClear membership increased to 25 members (2015: 23), notional cleared increased by 204% to US$3,191 billion (2015: US$1,050 billion). Total clearing fee revenue for the year was €11.1 million (2015: €10.6 million).

While the uncleared margin rules only applied from September 2016, the Company is seeing significantly increased participation and interest from all regions in the ForexClear NDF service. Over US$500 billion of NDFs were cleared in October and average trade volume increased from 500 per day in the first half of the year to over 2,500 per day in the second half, with a peak day in November of over 7,000 trades.

Fixed Income

LCH clearing in repo and cash bond markets remained broadly stable at €37.1 trillion in 2016 (2015: €39.5 trillion). Total clearing fee revenue for the year was €31.0 million (2015: €33.3 million). Volumes traded in the repo market overall have declined due to more stringent regulatory requirements on member banks' leverage ratios. However, the leverage ratio has made central clearing and netting more attractive, such that cleared volumes at LCH have remained stable.

Listed Derivatives, Commodities and Cash Equities

The Company clears across various Listed Derivatives venues. Contracts cleared in 2016 decreased by 14% to 5.9 million (2015: 6.9 million). In Equities, there was significant volume growth with trades cleared in 2016 increasing by 50% to 463.7 million (2015: 308.2 million).

Total clearing fee revenue for the year was €16.7 million (2015: €27.2 million).

Net treasury income

Net treasury income is the result of interest earned on cash assets lodged with LCH as margin and default funds. Users of LCH post cash and receive an overnight interest rate less an agreed spread. The level of funds held is primarily driven by volumes cleared and volatility in the market. Income is also driven by short-term interest rates, predominantly in the US dollar, euro and UK sterling money markets. LCH may also benefit from short-term rates, typically 30 days, being higher than the overnight rate.

Average cash collateral held increased 22% to €54.6 billion (2015: €44.6 billion). Total net treasury income for 2016 increased by 32% to €71.9 million (2015: €54.3 million) on increased SwapClear margin collected and by achieving increased spreads.

Cost of sales

Cost of sales for 2016 has increased to €73.2 million (2015: €40.3 million) reflecting the growth in SwapClear and other businesses.

Operating expenses

Operating expenses before non-recurring items have decreased by 2% to €235.6 million (2015: €240.3 million).

Future development

ForexClear expansion includes plans to launch clearing for G10 countries NDFs and FX options.

Principal risks and uncertainties

The Company's activities expose it to a number of risks, principally market risk (foreign exchange risk, interest rate risk, volatility in financial markets), sovereign risk, credit risk, liquidity risk and pension risk. The Company manages these risks through various control mechanisms and its approach to risk management is to be prudent yet responsive to changes in the risk environment.

Note 2 provides descriptions of these risks and details the means by which the Company mitigates them.

Details of the Company's capital management processes are provided in note 23.

By order of the Board

Lex Hoogduin
Chairman
1 March 2017

The directors of LCH Limited (the Company), registered in England and Wales with company number 00025932, present their report to the shareholder, together with the audited financial statements for the year ended 31 December 2016. The Company changed its name from LCH.Clearnet Limited to LCH Limited on 9 December 2016.

Directors

The current directors and changes made during the year ended 31 December 2016 and subsequently are detailed on page 1.

Indemnity of directors

Directors are entitled to be indemnified by the Company against all costs, charges, losses and liabilities incurred by them in the proper exercise of their duties. Directors who have resigned during the year may also benefit from the same indemnity arrangement.

Transactions with directors and related parties

Details of transactions with related parties are set out in note 25. There were no transactions, other than those disclosed in note 18, with directors during the year.

Staff

It is the policy of the Company as a whole to ensure that no staff members or job applicants face discrimination on the grounds of ethnic origin, colour, religion, gender, sexual orientation, age or disability. Should an employee become disabled during his or her career with the Company every effort will be made to ensure continuing employment.

Staff involvement is encouraged through regular meetings and information is shared with staff through web based communication.

The Company recognises its responsibilities to provide a safe working environment for its staff and measures are in place to ensure that the appropriate health and safety at work regulations are strictly observed in all workplaces.

Dividends

On 2 March 2016, the directors of the Company recommended a final dividend for the year ended 31 December 2015 of €0.1884 per ordinary share. On 31 March 2016, the shareholder approved the dividend, and €59.0 million was paid to the shareholder on 18 April 2016.

On 28 October 2016, the Company paid an interim dividend of €0.0958 per ordinary share (€30.0 million) to its shareholder.

On 1 March 2017, the Board of Directors proposed a dividend of €0.2268 per share (€71.0 million), which is scheduled for approval and payment in March 2017.

Financial instruments

Details of the Company's financial instruments are provided in note 19.

Future developments

The future developments for the Company are discussed in detail in the strategic report.

Merger with Deutsche Börse

On 23 February 2016, London Stock Exchange Group plc ("LSEG"), the Company's ultimate parent undertaking, confirmed that detailed discussions about a potential merger of equals were under way with Deutsche Börse.

The potential merger would be structured as an all-share merger of equals under a new holding company. Under the terms of the potential merger, shareholders of LSEG would be entitled to receive 0.4421 new shares in exchange for each LSEG share and Deutsche Börse shareholders would be entitled to receive one new share in exchange for each Deutsche Börse share. Based on this exchange ratio, the parties anticipate that Deutsche Börse shareholders would hold 54.4%, and LSEG shareholders would hold 45.6% of the enlarged issued and to be issued share capital of the combined group. The combined group would have a unitary board composed of equal numbers of LSEG and Deutsche Börse directors.

LSEG shareholders approved the transaction on 4 July 2016 and 89.04% of shareholders of Deutsche Börse had accepted the offer by the end of the final expiration period on 12 August 2016, exceeding the required 60% threshold. Work is continuing to achieve the outstanding regulatory consents.

Going concern and liquidity risk

The directors have made an assessment of the Company's ability to continue as a going concern and to meet current and future regulatory capital requirements and are satisfied that it has the resources to continue in business for the foreseeable future, being at least 12 months from the date on which these accounts were approved by the Board. Contracts for the majority of the exchanges for which the Company clears have a notice period of at least one year. It has a large number of clearing members and is not unduly reliant on any single clearing member or group of clearing members.

Furthermore, the directors are not currently aware of any material uncertainties that may cast significant doubt upon the Company's ability to continue as a going concern. Therefore the financial statements continue to be prepared on the going concern basis.

Government grants

The Company has applied for Government grants in the form of tax credits for research and development work carried out. The amounts have been recognised in the results of the Company when it is deemed likely that the credits will be received (note 24). The Group carries out research and development into software for future use.

Disclosure of information to the auditors

Each of the persons who is a director at the date of approval of this report confirms that:

- so far as the director is aware there is no relevant audit information of which the Company's auditors are unaware
- the director has taken all steps that they ought to have taken as director in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information

Auditors

Ernst & Young LLP are deemed to have been reappointed as the Company's auditor under the provisions of the Companies Act 2006.

By order of the Board

Lex Hoogduin
Chairman
1 March 2017

The directors are responsible for preparing the strategic report, directors' report and financial statements in accordance with applicable United Kingdom law and those International Financial Reporting Standards (IFRSs) as adopted by the European Union.

Under company law the directors must not approve the financial statements unless they are satisfied that they present fairly the financial position, financial performance and cash flows of the Company for that period. In preparing the financial statements the directors are required to:

- select suitable accounting policies in accordance with IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors, and then apply them consistently
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information
- provide additional disclosures when compliance with specific requirements in IFRSs is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Company's financial position and financial performance
- state that the Company has complied with IFRSs, subject to any material departures disclosed and explained in the financial statements
- make judgements and estimates that are reasonable and prudent

The directors are responsible for keeping adequate accounting records which disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

We have audited the financial statements of LCH Limited for the year ended 31 December 2016 which comprise the income statement, the statement of comprehensive income, the statement of financial position, the statement of cash flows, the statement of changes in equity and the related notes 1 to 25. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of directors and auditor

As explained more fully in the statement of directors' responsibilities (set out on page 8) the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the strategic report and the directors' report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the company's affairs as at 31 December 2016 and of its profit for the year then ended
- have been properly prepared in accordance with IFRSs as adopted by the European Union
- have been prepared in accordance with the requirements of the Companies Act 2006

Opinion on other matter prescribed by the Companies Act 2006

In our opinion:

- based on the work undertaken in the course of the audit
  - the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements
  - the strategic report and the directors' report have been prepared in accordance with applicable legal requirements

Matters on which we are required to report by exception

In light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we have identified no material misstatements in the strategic report or directors' report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit

Ernst & Young LLP

Maurice McCormick (Senior Statutory Auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London
1 March 2017

Notes:

1. The maintenance and integrity of the LCH web site is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the web site.

2. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Income statement

	Note	2016 Before impairment & non-recurring items €'m	2016 Impairment & non-recurring items €'m	2016 Total €'m	2015 Before impairment & non-recurring items €'m	2015 Impairment & non-recurring items €'m	2015 Total €'m
Clearing fees		256.4	-	256.4	249.2	-	249.2
Other fee income		77.3	-	77.3	58.7	-	58.7
Revenue sharing arrangements		(0.6)	-	(0.6)	(1.2)	-	(1.2)
Revenue		333.1	-	333.1	306.7	-	306.7
Treasury income	19	250.3	-	250.3	115.6	-	115.6
Treasury expense	19	(178.4)	-	(178.4)	(61.3)	-	(61.3)
Net treasury income		71.9	-	71.9	54.3	-	54.3
Settlement and other income		22.7	0.2	22.9	12.3	-	12.3
Settlement fees payable		(18.3)	-	(18.3)	(13.6)	-	(13.6)
Net settlement and other income		4.4	0.2	4.6	(1.3)	-	(1.3)
Total income		409.4	0.2	409.6	359.7	-	359.7
Revenue share costs		(59.6)	-	(59.6)	(27.2)	-	(27.2)
Other cost of sales		(13.6)	-	(13.6)	(13.1)	-	(13.1)
Total cost of sales		(73.2)	-	(73.2)	(40.3)	-	(40.3)
Gross profit		336.2	0.2	336.4	319.4	-	319.4
Operating expenses	4	(235.6)	(6.5)	(242.1)	(240.3)	0.2	(240.1)
Operating profit		100.6	(6.3)	94.3	79.1	0.2	79.3
Finance income	6	13.8	-	13.8	4.5	-	4.5
Finance expense	6	(3.1)	-	(3.1)	(0.1)	-	(0.1)
Profit before taxation		111.3	(6.3)	105.0	83.5	0.2	83.7
Taxation expense	7	(22.6)	1.3	(21.3)	(18.9)	-	(18.9)
Profit for the year		88.7	(5.0)	83.7	64.6	0.2	64.8

The results for both years are in respect of continuing operations.

The notes on pages 18 to 63 form an integral part of these financial statements.

Statement of comprehensive income

	Note	2016 €'m	2015 €'m
Profit for the year		**83.7**	64.8
Amounts that will subsequently be reclassified to profit for the year when specific conditions are met:			
Revaluation of available for sale assets		**4.6**	(1.8)
Amounts reclassified to the income statement in the year		**1.5**	0.3
Other		**-**	(0.3)
Amounts that will not subsequently be reclassified to profit for the year:			
Current tax relating to revaluation of available for sale assets	7	**(0.2)**	0.4
Deferred tax relating to revaluation of available for sale assets	7	**(0.9)**	-
Remeasurement (losses)/gains on UK defined benefit plan	18	**(31.0)**	11.7
Deferred tax relating to remeasurement of the UK defined benefit plan	7	**11.5**	(4.1)
Other comprehensive income for the year, net of tax		**(14.5)**	6.2
Total comprehensive income for the year, net of tax		**69.2**	71.0

The results for both years are in respect of continuing operations.

The notes on pages 18 to 63 form an integral part of these financial statements.

Statement of financial position

	Note	2016 €'m	2015 (re-presented)* €'m
Assets			
Non-current assets			
Intangible assets	8	**150.3**	100.7
Property, plant and equipment	10	**18.6**	14.7
Investment in subsidiaries	11	**-**	20.3
Deferred tax asset	7	**6.1**	-
Trade and other receivables	13	**0.9**	0.8
Employment benefits	18	**2.1**	34.2
Total non-current assets		**178.0**	170.7
Current assets			
Balances with clearing members	12	**118,045.3**	120,733.9
Trade and other receivables	13	**196.5**	84.8
Clearing business cash and cash equivalents	14	**45,171.5**	28,012.5
Cash and cash equivalents	14	**669.9**	575.4
Clearing business other financial assets	19	**20,716.8**	14,422.7
Total current assets		**184,800.0**	163,829.3
Total assets		**184,978.0**	164,000.0
Current liabilities			
Balances with clearing members	12	**(175,907.9)**	(157,897.8)
Trade and other payables	15	**(225.2)**	(196.3)
Interest bearing loans and borrowings	16	**(96.1)**	(0.4)
Income tax payable		**(7.7)**	(7.6)
Default funds	17	**(8,105.2)**	(5,232.2)
Total current liabilities		**(184,342.1)**	(163,334.3)
Non-current liabilities			
Deferred tax liability	7	**-**	(4.0)
Trade and other payables	15	**(11.7)**	(18.9)
Total non-current liabilities		**(11.7)**	(22.9)
Total liabilities		**(184,353.8)**	(163,357.2)
Net assets		**624.2**	642.8

Statement of financial position (continued)

	Note	2016 €'m	2015 (re-presented)* €'m
Capital and reserves			
Called up share capital	21	**313.0**	313.0
Share premium	21	**41.2**	41.2
Capital redemption reserve	21	**5.1**	5.1
Retained earnings	21	**264.9**	283.5
Total equity		**624.2**	642.8

*For details of the re-presentation, see page 18.

Lex Hoogduin
Chairman

Martin Pluves
Chief Executive Officer

The notes on pages 18 to 63 form an integral part of these financial statements.

The financial statements were approved by the Board on 1 March 2017.

Statement of cash flows

	Note	2016 €'m	2015 (re-presented)* €'m
Cash flows arising from operating activities			
Profit for the year		**83.7**	64.8
Taxation expense		**21.3**	18.9
Finance income		**(13.8)**	(4.5)
Finance expense		**3.1**	0.1
Depreciation and amortisation		**29.4**	21.4
Share-based payments expense		**5.2**	5.1
Increase in trade and other receivables		**(111.8)**	(13.9)
Increase in trade and other payables		**21.7**	78.9
Unrealised fair value losses/(gains) on financial instruments		**1.0**	(1.8)
Research and development tax credit		**(0.7)**	-
Profit on disposal of subsidiary		**(0.2)**	-
Increase in clearing business cash and cash equivalents		**(17,159.0)**	(6,666.7)
Decrease in fair value of member assets		**2,688.6**	25,222.4
Increase/(decrease) in fair value of member liabilities		**18,010.1**	(17,346.3)
Increase/(decrease) in default funds		**2,873.0**	(1,169.9)
Net cash inflow from operations		**6,451.6**	208.5
Tax paid		**(16.9)**	(22.5)
Net cash inflow from operating activities		**6,434.7**	186.0
Investing activities			
Investment in intangible assets		**(74.1)**	(47.4)
Purchase of property, plant and equipment		**(8.9)**	(9.5)
Purchase of clearing business other financial assets		**(6,294.1)**	(98.3)
Proceeds from sale of subsidiary company		**0.2**	-
Dividends received and capital returned		**32.5**	3.6
Net cash outflow from investing activities		**(6,344.4)**	(151.6)
Financing activities			
Loan amounts received		**96.1**	-
Interest received		**1.3**	-
Interest paid		**(3.0)**	(0.1)
Dividends paid		**(89.0)**	(15.0)
Share-based payments contribution		**(5.2)**	(5.1)
Finance lease principal payments		**(0.4)**	(0.4)
Net cash outflow from financing activities		**(0.2)**	(20.6)

	Note	2016 €'m	2015 (re-presented)* €'m
Increase in cash and cash equivalents		**90.1**	13.8
Cash and cash equivalents at 1 January		**575.4**	561.9
Effects of foreign exchange movements		**4.4**	(0.3)
Cash and cash equivalents at 31 December		**669.9**	575.4
Cash and cash equivalents at 31 December comprise:			
Investments in secured short-term deposits		**477.5**	569.7
Cash at bank and in hand		**192.4**	5.7
	14	**669.9**	575.4

* For details of the re-presentation see page 18.

The notes on pages 18 to 63 form an integral part of these financial statements.

Statement of changes in equity

	Called up share capital €'m	Share premium €'m	Capital redemption reserve €'m	Retained earnings €'m	Total €'m
Shareholder's equity at 1 January 2015	313.0	41.2	5.1	227.0	586.3
Profit for the year to 31 December 2015	-	-	-	64.8	64.8
Other comprehensive income	-	-	-	6.2	6.2
Total comprehensive income	-	-	-	71.0	71.0
Dividends paid	-	-	-	(15.0)	(15.0)
Share-based payments contribution	-	-	-	5.1	5.1
Share-based payments expense net of tax	-	-	-	(4.6)	(4.6)
Shareholder's equity at 31 December 2015	**313.0**	**41.2**	**5.1**	**283.5**	**642.8**
Profit for the year to 31 December 2016	-	-	-	**83.7**	**83.7**
Other comprehensive expense	-	-	-	**(14.5)**	**(14.5)**
Total comprehensive income	-	-	-	**69.2**	**69.2**
Dividends paid	-	-	-	**(89.0)**	**(89.0)**
Share-based payments contribution	-	-	-	**5.2**	**5.2**
Share-based payments expense net of tax	-	-	-	**(4.0)**	**(4.0)**
Shareholder's equity at 31 December 2016	**313.0**	**41.2**	**5.1**	**264.9**	**624.2**

The notes on pages 18 to 63 form an integral part of these financial statements.

1. Summary of significant accounting policies

Basis of preparation

These financial statements have been prepared in accordance with IFRSs and Interpretations Committee (IFRIC) interpretations issued by the International Accounting Standards Board (IASB) effective for 2016 reporting and endorsed by the EU, and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

The financial statements have been prepared under the historical cost convention as modified by the valuation of financial assets and liabilities held at fair value. A summary of significant accounting policies is set out below, together with an explanation of changes to previous policies on the adoption of new accounting standards.

The Company uses a columnar format for the presentation of its income statement. This aids the understanding of its results by presenting profit for the year before impairment and non-recurring items. Profit before impairment and non-recurring items is reconciled to profit before taxation on the face of the income statement.

The financial statements are presented in millions of euros except where otherwise indicated.

Changes in accounting presentation

The cash flow statement presentation has been updated to more clearly reflect the Company's cash position; it is now shown as a movement of own cash rather than the Company's total cash holding, which includes cash held on behalf of members.

The movement for 2015 has been re-presented. On 1 January 2015, the Group had total cash of €21,907.7 million, of which €561.9 million was own cash; at 31 December 2015 the Company had total cash of €28,587.9 million, of which €575.4 million was own cash. The remaining cash forms part of the Company's investment portfolio held on behalf of members, and the movement therein is recorded within movements in operating cash flows.

The statement of financial position has also been re-presented to show own cash separately from cash and cash equivalents held on behalf of members.

Presentational currency

The Company's financial statements are presented in euros, which is the functional currency of the Company.

Judgements and key sources of estimation uncertainty

The preparation of financial statements in conformity with IFRSs requires the use of judgements, estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these judgements and estimates are based on management's best knowledge of the amount, event or actions, actual results ultimately may be different.

The key sources of estimation uncertainty that have a significant risk of causing material adjustments to the carrying amounts of assets and liabilities within the next financial year are:

- the measurement and impairment of intangible assets: intangible assets are assessed when an indication of impairment arises. This requires the estimation of future cash flows and choosing a suitable discount rate (see note 9)
- the measurement of defined benefit pension obligations: measurement of defined benefit pension obligations requires estimation of inflation as well as mortality rates, the expected return on assets and the choice of a suitable discount rate (see note 18)
- the measurement of the provision for corporation taxes. The Group recognises liabilities for the estimated tax charge at the period end. Where the final tax liability is different from that estimate such differences are reflected in the period in which such determination is made. Income tax provisions are recognised on the basis that the relevant tax authorities are fully aware of any situations giving rise to uncertainty

Investments

The Company recognises its investments in subsidiaries at cost less the value of any impairment provision that may be necessary. Income is recognised from these investments in relation to any distributions received.

Foreign currencies

Monetary assets and liabilities denominated in currencies other than the functional currency of the Company are translated into the functional currency of the Company at the rates of exchange ruling on the statement of financial position date and the resulting exchange differences are recorded in the income statement. Transactions in foreign currencies are recorded at the prevailing foreign exchange rates on the date of the transaction in the income statement and are not revalued.

In the statement of cash flows, cash flows denominated in foreign currencies are translated into the functional currency of the Company at the average exchange rates for the year or at the rate prevailing at the time of the transaction where more appropriate.

Intangible assets

Intangible assets are initially recognised at cost and are capitalised on the statement of financial position. Where assets are acquired as a result of a business acquisition or the negotiation of an operating agreement, fair values are attributed to the assets acquired. Following initial recognition, the assets are amortised at rates calculated to write off their cost on a straight line basis over their estimated useful lives.

An internally generated intangible asset arising from the Company's business development is created if the asset can be identified, its cost measured reliably and it is probable that it will generate future economic benefits. Amortisation is charged from the date the developed product, service, process, or system is available for use. Self-developed software is amortised over periods between three and five years.

Property, plant and equipment

Property, plant and equipment is initially recognised at cost and capitalised in the statement of financial position and is stated at cost less accumulated depreciation and accumulated impairment losses. Depreciation is provided on all property, plant and equipment at rates calculated to write off the cost, less estimated residual value based on current prices, of each asset over its expected useful life as follows:

- leasehold refurbishment over the term of the lease (up to a maximum of ten years)
- computer equipment and purchased software over three years
- office equipment and other fixed assets between three and five years

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from continued use of the asset. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in the income statement in the year the item is derecognised.

Impairment of intangible assets and property, plant and equipment

Intangible assets in the course of development are subject to an annual impairment review or a more frequent review if there are events or changes in circumstances that indicate that the carrying amount of the asset may not be fully recoverable. Other intangible assets and property, plant and equipment are subject to an impairment review if there are events or changes in circumstances that indicate that the carrying amount of the fixed asset may not be fully recoverable.

For the purpose of impairment testing assets are allocated to cash generating units monitored by management, usually at statutory company level. The impairment review involves a comparison of the carrying amount of the asset allocated to the related cash generating units, with its recoverable amount, which is the higher of fair value less costs to sell and value in use. Fair value less costs to sell is calculated by reference to the amount at which the asset could be disposed of less the costs associated with the sale.

Value in use is calculated by discounting the expected future cash flows obtainable as a result of the assets continued use, including those resulting from its ultimate disposal, at a market based discount rate on a pre-tax basis. The carrying values of intangible assets or property, plant and equipment are written down by the amount of any impairment and this loss is recognised in the income statement in the year in which it occurs.

Financial instruments

The Company classifies its financial instruments into the following categories: financial assets and liabilities at fair value through profit or loss, available for sale assets, held to maturity investments, loans and receivables, cash and short-term deposits, trade and other payables, interest bearing loans and borrowings and derivative financial instruments.

Financial assets and liabilities at fair value through profit or loss are financial assets which are either acquired for trading purposes, or as designated by management. Financial instruments held in this category are initially recognised and subsequently measured at fair value with transaction costs taken directly to the income statement. Changes in fair value are recorded within net treasury income. Interest earned or incurred is accrued in interest income or expense, or finance income or cost according to the purpose of the financial instrument.

Balances with clearing members are included in this category upon initial recognition and are recorded on a settlement date basis. Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

Available for sale assets are non-derivative financial assets with fixed or determinable payments and fixed maturities which the Group may sell before maturity. After initial measurement available for sale financial assets are subsequently measured at fair value. Changes in fair value are recorded within other comprehensive income until the asset is sold when the whole amount will be recognised in the income statement.

Held to maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturities which the Company has the intention and ability to hold to maturity. After initial measurement held to maturity financial investments are subsequently measured at amortised cost using the effective interest rate less impairment. The amortisation of any premium or discount is included in interest income.

If the Company sells or reclassifies a significant amount of held to maturity investments before maturity (other than in certain specific circumstances) the entire category would have to be reclassified as available for sale. The Company would then be prohibited from classifying any financial asset as held to maturity during the following two years.

Securities sold under agreements to repurchase at a specified future date are not derecognised from the statement of financial position as the Company retains substantially all the risks and rewards of ownership. The corresponding cash received is recognised in the statement of financial position as an asset with a corresponding obligation to return it, including accrued interest as a liability, reflecting the transaction's economic substance as a loan to the Company. The difference between the sale and repurchase prices is treated as interest expense and is accrued over the life of the agreement using the effective interest rate method.

Conversely, securities purchased under agreements to resell at a specified future date are not recognised in the statement of financial position. The consideration paid, including accrued interest, is recorded in the statement of financial position, reflecting the transaction's economic substance as a loan by the Company. The difference between the purchase and resale prices is recorded in interest income and is accrued over the life of the agreement using the effective interest rate method.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial recognition at fair value, loans and receivables are subsequently measured at amortised cost using the effective interest rate method, less allowance for impairment.

Cash and short-term deposits comprise cash in hand and current balances with banks and similar institutions which are readily convertible to known amounts of cash and which are subject to insignificant risk of changes in value and have an original maturity of three months or less. For the purposes of the cash flow statement cash and cash equivalents are as defined above, but with an original maturity of three months or less, net of bank overdrafts (which are included within interest bearing loans and borrowings in current liabilities on the statement of financial position).

Other financial assets include government backed certificates of deposit issued by banks, notes and treasury bills directly issued by state or national governments. These assets are initially recognised and subsequently measured at fair value.

Interest bearing loans and other borrowings and default funds are initially recorded at fair value. Subsequent measurement is at amortised cost using the effective interest method, and amortised cost is calculated by taking into account any discount or premium on the issue and costs that are an integral part of the effective interest rate.

The Company establishes fair value using recognised valuation techniques. These include the use of externally available market prices, discounted cash flow analysis and other valuation techniques commonly used by market participants. Where discounted cash flow analysis and other valuation techniques are used assumptions are validated against market observable inputs.

Default fund and margin deposits

Default fund contributions paid by clearing members are in cash. Clearing members may elect to use cash or securities to cover initial margin requirements; realised variation margin may only be covered in cash. Members may pledge securities directly using a bilateral delivery mechanism. Cash initial margin, variation margin and default fund deposits are reflected in the statement of financial condition as assets and liabilities.

The amount of margin deposits on hand will fluctuate over time as a result of, among other things, the extent of open positions held at any point in time by market participants in contracts and the margin rates then in effect for such contract.

Non-cash initial margin is not reflected in the statement of financial condition. These non-cash assets are held in safekeeping, and the Company does not take legal ownership of the assets as the risks and rewards remain with the clearing members, unless and until such time as a clearing member defaults on its obligations to the Company.

Derecognition of financial assets and financial liabilities

A financial asset or liability is generally derecognised when the contract that gives rise to it is settled, sold, cancelled or expires. Where an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a de-recognition of the original liability and the recognition of a new liability, such that the difference in the respective carrying amounts together with any costs or fees incurred are recognised in the income statement.

Taxation

Deferred and current tax assets and liabilities are only offset when they arise in the same reporting tax group and where there is both a legal right of offset and the intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

Income tax relating to items recognised directly in other comprehensive income is charged or credited as appropriate to other comprehensive income and there is no effect on profit for the year.

Current tax

Current tax assets and liabilities for current and prior periods are measured at the amount expected to be recovered from or paid to relevant taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the date on which the Board approves the financial statements.

Deferred tax

Deferred income tax is provided using the liability method on temporary differences at the statement of financial position date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes using tax rates and laws enacted or substantively enacted by the date on which the Board approves the financial statements.

Deferred tax liabilities are recognised for all temporary differences. Deferred income tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilised, except where the deferred income tax asset arises through investments in subsidiaries and it is not probable that the temporary differences will reverse in the foreseeable future.

Provisions

Provisions are recognised for current obligations arising as consequences of past events where it is probable that a transfer of economic benefits will be necessary to settle the obligation and it can be reliably estimated. All provisions, except for those arising under pension liabilities, are undiscounted.

Share capital

Called up share capital comprises ordinary shares. Other capital reserves are described in note 21. Other instruments are classified as liabilities if there is an obligation to transfer economic benefits and if not they are included in shareholder's funds. The finance cost recognised in the income statement in respect of capital instruments other than equity shares is allocated to periods over the term of the instrument at a constant rate on the carrying amount.

The share premium comprises the difference between the issue proceeds of shares and their nominal value.

Revenue recognition

Clearing fee income and rebates, together with other fee income and net settlement fees, are recognised on a transaction by transaction basis in accordance with the Group's fee scales. Non-cash collateral fees are charged on non-cash collateral provided by clearing members and are included in other fee income.

Net treasury income is the total of revenue earned on the cash and other financial assets held that have been generated from clearing member activity, less interest on clearing members' margin and other monies lodged with the Company. Interest expense or income is recorded using the effective interest rate method, which is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to the net carrying amount of the financial instrument.

In conditions where negative interest rates apply, the Company recognises interest paid on cash and other assets as an expense and interest received on clearing members' margin as income.

Revenue sharing arrangements – amounts deducted from revenue

Amounts deducted from revenue relate to surplus or revenue share arrangements whereby, as part of an operating agreement, amounts are due back to either the other party to the operating agreement or the actual clearing customers.

Revenue sharing arrangements - revenue share costs

Revenue share costs relate to revenue share arrangements with clearing members where the revenue share is not limited to the amount of revenues receivable from the specific clearing members. As such this has been classified within cost of sales, as it arises, rather than as a deduction from revenue.

Where a financial liability has been created following the recognition of assets used to generate a revenue share, it will be recognised in the income statement on a systematic basis over the useful life of those assets and offset against the related revenue share costs.

Cost of sales

Items of expense that are directly attributable to creating a product or provide a service that directly generates revenue or has the ability to generate revenue are classified as cost of sales.

Employee benefits

The Company operated a defined benefit pension scheme for its UK employees which required contributions to be made to a separate trustee administered fund. This was closed to new members from 30 September 2009 and curtailed on 31 March 2013.

The cost of providing benefits under the defined benefit plan is determined using the projected unit method. Under this method each participant's benefits under the scheme are estimated based on the total pension to which each participant is expected to become entitled at retirement. The liability is the total present value of the individuals' attributed benefits for the valuation purposes at the measurement date and is based on actuarial advice. Past service costs are recognised in the income statement on a straight line basis over the vesting period or immediately if the benefits have vested. When a settlement or a curtailment occurs, the change in the present value of the scheme liabilities and the fair value of the plan assets reflects the gain or loss which is recognised in the income statement.

The net interest amount charged to profit or loss is calculated using actuarial assumptions fixed at the start of the annual report period and the defined benefit liability and asset value at the start of the annual reporting period adjusted for the actual contributions and benefit payments made during the period.

Actuarial gains and losses are recognised in full in the statement of comprehensive income in the period in which they occur. The defined benefit pension liability in the statement of financial position comprises the total for each plan of the present value of the defined benefit obligation (using a discount rate based on high quality corporate bonds that have been rated at AA or equivalent status), less the fair value of plan assets out of which the obligations are to be settled directly. Fair value is based on market price information, and in the case of quoted securities is the published bid market price.

The Company also operates a defined contribution section of the pension plan in the UK which has been open since January 2010 for new staff. The contribution payable to a defined contribution plan is in proportion to the services rendered to the Company by the employees and is recorded as an expense in the income statement within employee benefits as incurred.

Share-based compensation

The Company operates share-based compensation plans for employees, settled in shares of the ultimate parent company, London Stock Exchange Group plc. The charge to the income statement is determined by the fair value of the options granted or shares awarded at the date of grant as an indirect measure of the value of employee services received by the Company and recognised over the relevant vesting period.

The share-based compensation plans are accounted for as equity settled. The Company does record a cost for these transactions, representative of the fact that the Company has received a capital contribution from LSEG which has been spent on share-based compensation, with the corresponding credit recorded in equity. A debit will then also be recorded in equity and an intercompany payable recorded reflecting the Group's investment.

Leases

The Company is a lessee. Leases of property, plant and equipment where substantially all the risks and rewards of ownership have passed to the Company are capitalised in the statement of financial position as property, plant and equipment. Finance leases are capitalised at the lower of the fair value of the leased property and the present value of the minimum lease payments. The capital element of future obligations under finance leases is included as a liability in the statement of financial position. The interest element of rental obligations is charged to the income statement over the period of the lease and represents a constant proportion of the balance of capital repayments outstanding. Property, plant and equipment acquired under finance leases are depreciated over the shorter of the useful economic life of the asset or the lease term.

Leases of property, plant and equipment where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Rentals payable under operating leases are charged in the income statement on a straight line basis over the lease term. Lease incentives are recognised over the lease term. Where a lease becomes onerous the full value of net future costs is immediately recognised in the income statement.

Fair value measurement

The Company measures financial instruments such as derivatives at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in an arm's length transaction at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability or in the absence of a principal market, in the most advantageous market for the asset or liability. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs. All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described in note 19.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. For the purpose of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

Non-recurring items

Items of income and expense that are material by size and/or nature and are non-recurring are classified as non-recurring items on the face of the income statement within their relevant category. The separate reporting of these items together with impairment of intangible assets helps give an indication of underlying performance.

New accounting standards, amendments and interpretations

Standards issued and adopted for the financial year beginning 1 January 2016

The following amendments and clarifications have been adopted where appropriate and have had no material effect on the results of the Group.

	Effective date for periods beginning on or after
Amendments to IFRS 11: Accounting for Acquisitions of Interests in Joint Operations	1 January 2016
Amendment to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets: Clarification of Acceptable Methods of Depreciation and Amortisation	1 January 2016
Amendments to IAS 27: Equity Method in Separate Financial Statements	1 January 2016
Amendments to IAS 16 and IAS 41: Bearer Plants	1 January 2016
Annual Improvements 2012-2014	1 January 2016
Amendments to IFRS 10, IFRS 12 and IAS 28: Investment Entities – Applying the Consolidation Exception	1 January 2016
Amendments to IAS 1: Disclosure Initiative	1 January 2016

Standards issued but not effective for the financial year beginning 1 January 2016 and not early adopted

The following standards, amendments and interpretations have been issued by the IASB and IFRIC with an effective date after 31 December 2016.

	Effective date for periods beginning on or after
Amendments to IAS 12: Recognition of Deferred Tax Assets for Unrealised Losses*	1 January 2017
Amendments to IAS 7: Disclosure Initiative*	1 January 2017
IFRS 9 Financial Instruments	1 January 2018
IFRS 15 Revenue From Contracts With Customers	1 January 2018
Amendments to IFRS 2: Classification and Measurement of Share-based payment*	1 January 2018
Amendments to IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts*	1 January 2018
IFRS 16 Leases*	1 January 2019
IFRS 14 Regulatory Deferral Accounts*	Awaiting final standard

* subject to EU endorsement

IFRS 15 Revenue from Contracts with Customers:

- IFRS 15 Revenue from Contracts with Customers introduces new accounting principles for revenue recognition for all types of sales of goods or services. It is effective from 1 January 2018 and as a result the Company will adopt IFRS 15 in both the interim and annual 2018 financial statements. IFRS 15 provides a single, principles-based five-step model to be applied to all sales contracts, based on the transfer of control of goods and services to customers, and replaces the separate models for goods, services and construction contracts currently included in IAS 11 Construction Contracts and IAS 18 Revenue.
- Based on the provisional assessment, the key areas of judgement expected on initial adoption of IFRS 15 are in relation to: (i) the timing of revenue recognition for services provided; (ii) the measurement of variable consideration which changes against factors outside of the Company's control; and (iii) how performance obligations are satisfied in contracts providing several services to customers.
- The Company will continue to assess the impact during 2017, but does not expect any material changes to the timing of revenue being recognised.

IFRS 9 Financial Instruments:

- IFRS 9 Financial Instruments is effective for the year ended 31 December 2018 and will simplify the classification of financial assets for measurement purposes, but is not anticipated to have a significant impact on the financial statements.

IFRS 16 Leases:

- IFRS 16 Leases is effective for the year ended 31 December 2019 (not yet endorsed by the EU) and will require all leases to be recognised on the balance sheet. Currently, IAS 17 Leases only requires leases categorised as finance leases to be recognised on the balance sheet, with leases categorised as operating leases not recognised. In broad terms, the impact will be to recognise a lease liability and corresponding asset for the operating lease commitments set out in note 20.

2. Risk management

Introduction

The Company's activities expose it to a number of financial risks, principally market risk (financial market volatility, interest rate risk, foreign exchange risk), sovereign risk, credit risk and liquidity risk. In addition to the financial risks, the Company is also exposed to other risks such as operational, legal, compliance and reputational risk. The Company manages these risks through various control mechanisms and its approach to risk management is to be prudent yet responsive to changes in the risk environment.

Overall responsibility for risk management rests with the Company's Board. Day to day responsibility is delegated to the Chief Risk Officer, who ensures effective delegation to the executives in the Company on the basis of risk policies which are calibrated to the Board's risk appetite and are discussed and agreed by the Company's Risk Committee and Board. The application of these policies is undertaken by the business functions as the first line of defence and by the risk management team forming the second line of independent assurance, who control and manage the exposures arising from the various clearing activities. The continued appropriateness of risk policies and key risk data are regularly reviewed by the Risk Committee and Board, and audits of processes within risk management are undertaken periodically. Risk policies are harmonised across the Group.

Enterprise Risk Management framework

Each of the risks identified in this section are governed by the Risk Governance Framework, issued and refreshed at least annually by the Board. The framework describes the overall risk appetite of the Company, defines each risk type and specifies ownership and the tolerance levels. The framework also requires that all risks are measured, monitored and reported periodically via an Enterprise Risk Management framework coordinated by the Chief Risk Officer.

For each of the principal risk types, a description and outline of the risk management approach is provided below.

Financial market volatility (latent market risk)

Risk description

Volatility within the financial markets in which the Company operates can adversely affect its earnings and its ability to meet its business objectives. The Company runs a balanced position in all cleared contracts and runs no significant market risk unless a clearing member defaults. In such an event, the Company faces market risk which is correlated to clearing member positions and market conditions.

Risk management approach

The market and credit risk management policies of the Company are reviewed and approved by its Risk Committee and Board at least annually. A variety of measurement methodologies, including both empirical and analytical margin models, stress testing and scenario analysis, are used daily to quantify and assess the levels of credit and market risk to which the Company is exposed, and hence the amount of resources that should be held to cover such risks, under both normal and extreme, but plausible, market conditions.

Initial margins for all clearing services are calibrated and back-tested to a 99.7% confidence level. This has the effect of reducing the probability of loss from the default of a clearing member with the worst acceptable credit to the level of an AAA rated credit for the next 12 months.

Potential market risk is reduced by collecting variation margin on marked to market positions and by establishing initial margin requirements which are the Company's estimate of likely future market risk under normal and stressed market conditions, calibrated to a 99.7% confidence level for all products. Variation margin add-ons are calculated for clearing member specific concentration, liquidity, wrong way risk and credit risk. Both variation and initial margin are collected daily and replenished intraday subject to credit related thresholds.

The Company accepts both cash in major currencies and high quality liquid non-cash collateral to cover margin requirements. The list of acceptable non-cash collateral issuers is restricted and haircuts are set for each security type taking into account market, credit, foreign exchange, country and liquidity risks and are calibrated to a 99.7% confidence level. All non-cash collateral is revalued daily.

As at 31 December 2016 the total margin liability of clearing members amounted to €124.0 billion (2015: €85.5 billion), against which the Company had received €56.3 billion (2015: €37.6 billion) in cash and €67.7 billion (2015: €47.9 billion) in non-cash securities. The maximum margin liability during the year was €129.2 billion (2015: €91.6 billion).

New applicants for clearing must meet strict credit, financial and operational criteria, which are regularly, reviewed as part of the Company's risk policies. All clearing members are assigned an Internal Credit Score (ICS) and the ICS methodology is subject to independent validation at least annually.

The Company also requires all clearing members to contribute to pre-funded default funds to be used should the margins of a defaulted clearing member not fully cover close out costs. Supplementary financial resources include a proportion of the Company's own capital and further clearing member contributions to ensure the continuity of ongoing operations. The pre-funded default funds are segregated by clearing service and sized to be sufficient at all times to cover the default of the two clearing member groups giving rise to the greatest losses above margin under a wide range of plausible scenarios of extreme market conditions.

As at 31 December 2016 the total of clearing member contributions to the default funds amounted to €8.1 billion (2015: €5.2 billion) (note 17). The maximum amount during the year was €8.3 billion (2015: €7.0 billion). Clearing members are committed to contribute further amounts in the event of a clearing member default equivalent to approximately twice this amount.

The models which calculate margins, collateral haircuts, counterparty credit scores and default fund contributions are independently validated at least annually and meet all applicable regulatory requirements.

Sovereign risk

Risk description

Distress amongst sovereigns through market concerns over the levels of government debt and the ability of certain governments to service their debts over time could have adverse effects on the value and liquidity of the Company's cleared products, margin collateral and investments, and on the clearing membership, their clients, and the financial industry as a whole.

Risk management approach

Specific risk frameworks manage sovereign risk for both fixed income clearing and margin collateral, and all clearing members' portfolios are monitored regularly against a suite of sovereign stress scenarios which model escalations in sovereign risk. In addition, investment limits and both counterparty and clearing membership monitoring frameworks are sensitive to changes in economic and financial market indicators, to ensure that the Company is able to measure, monitor and mitigate exposures to sovereign risk and respond quickly to actual or anticipated changes.

The Risk Committee and Board continually monitor such risks and the sovereign risk framework continues to protect the Company against potentially severe market volatility in the sovereign debt markets.

The Company has investments in the following Sovereigns (or equivalent issuer) as at 31 December 2016:

	2016		2015	
Sovereign (or equivalent)	**Investment value € billion**	**Proportion**	Investment value € billion	Proportion
USA	**13.9**	**46%**	5.2	30%
UK	**4.4**	**14%**	3.6	20%
France	**2.4**	**8%**	5.1	30%
Belgium	**0.8**	**3%**	1.3	7%
Germany	**0.8**	**3%**	0.8	4%
EU	**1.0**	**3%**	0.9	5%
Other	**7.2**	**23%**	0.6	4%
Total	**30.5**	**100%**	17.5	100%

The above total includes all other financial assets of €20,716.8 million (2015: €14,422.7 million) along with central bank cash deposits.

Credit risk

Risk description

Credit risk is the risk that a counterparty of the Company will be unable or unwilling to meet a financial commitment to the Company. Credit risk exposure arises as a direct result of the reinvestment of the cash which the Company holds, primarily as part of its CCP activities, in collecting margin and default fund contributions from its clearing members.

Risk management approach

The Company's investment portfolio is invested in accordance with clear risk policies which require secure investment of a significant portion of the portfolio either via reverse repurchase agreements with credit and financial institutions, receiving high quality government, government guaranteed or supranational securities as collateral, by investing directly in such securities or by the placement of cash with central banks.

The Investment Risk Policy requires that securities received as collateral are subject to a haircut on their market value, that the average maturity of the portfolio will not exceed two years, and that while cash may be deposited on an unsecured basis, this can only be short term with high quality banking institutions and limited to a 12 month average of 5% and a maximum of 10% of all credit institution investment.

The amount of the Company's capital at risk to the default of a banking institution or the issuer of a debt instrument is limited to €15.0 million by the non-default loss provision to be used in respect of losses that arise other than from a clearing member's default and which threaten the central counterparty's solvency introduced in response to the revision of UK CCP Recognition Requirements which became effective on 1 May 2014. Treasury default losses in excess of €15.0 million would be allocated among clearing members.

The investment portfolio at 31 December 2016 was €66.6 billion (2015: €43.0 billion), of which 99.8% (2015: 99.8%) was invested securely with an overall average maturity of 68 days (2015: 28 days). The maximum portfolio size during the year was €71.3 billion (2015: €51.7 billion). Note 19 contains further analysis of the investment portfolio including by type and fair value hierarchy.

All counterparties, including clearing members, interoperating CCPs, investment counterparties, custodians and settlement and payment institutions, sovereigns and central banks, are assessed according to an internal credit scoring framework. This framework incorporates elements of the counterparty's financial profile, including funding, liquidity, capital and profitability, and a detailed operational capability assessment. The scoring framework is independently validated at least annually and is continuously monitored for performance. Minimum credit scores are set for joining any clearing service and also for institutions to be eligible for investment or as interoperating CCPs and payment, settlement and custodial intermediaries. These minimum credit scores are set within the risk policies which are reviewed and approved by the Board annually. Risk policy also requires that increased margins be applied to clearing members when their credit score deteriorates below the entry level. Other actions may include reduced credit tolerances and forced reduction of exposures.

The Company currently interoperates with several other CCPs in Europe for cash cleared products. Interoperability with another CCP poses risks similar to the risks to which the Company is exposed with its clearing members. Credit risk is managed according to the same credit assessment framework applied to clearing members and other counterparties. To cover the latent market risk arising on interoperating exposures, all interoperating CCPs are subject to daily margining. Under European regulations, CCPs are not permitted to contribute to another CCP's default fund but equivalent margin add-ons are applied to interoperating exposures which ensure full protection is pre-funded at all times.

The maximum credit risk exposure relating to financial assets is represented by the carrying value as at the statement of financial position date.

Analysis by credit rating

The table below shows the Company's clearing member balances and investment portfolio by reference to the credit rating (Fitch) of the counterparty. The treasury portfolio includes cash at bank and other financial assets.

	Note	**2016 €'m**	2015 €'m
Fair value of transactions with clearing members (ratings as measured by Fitch)			
Clearing members rated AAA		**17,467.9**	24,962.6
AA		**2,445.1**	3,853.7
AA-		**6,506.6**	13,333.0
A+		**9,897.6**	9,231.4
A		**54,430.8**	59,816.5
A-		**19,653.0**	2,069.1
BBB+		**5,461.5**	5,449.8
BBB		**46.2**	758.0
Other, < BBB		**1,200.8**	534.2
Unrated		**456.6**	366.1
	12	**117,566.1**	120,374.4

	2016 €'m	2015 €'m
Company investment portfolio (ratings assigned with reference to major agencies)		
AAA/AA+/AA- Government backed	**30,497.2**	17,480.3
AA/AA+/AAA Secured	**3,484.3**	2,049.9
AA/AA+/AAA Unsecured	**-**	67.0
AA-/A+/A/A-/BBB+ Secured	**32,463.3**	23,375.9
A+/AA- Unsecured	**113.4**	37.5
	66,558.2	43,010.6

The total credit risk of the Company is represented by the total financial assets of the Company as disclosed in note 19.

Concentration risk

Risk description

Concentration risk may arise through having large connected individual exposures and significant exposures to groups of counterparties whose likelihood of default is driven by common underlying factors.

Risk management approach

Direct concentration risk arises in several areas of the Company's activities, and in order to avoid excessive concentrations of risk the Company maintains a diversified portfolio of high quality liquid investments and uses a diversified range of custodians, payment and settlement banks and agents.

Indirect concentration risks, conditional upon a clearing member default, are managed under risk policy through various means, including margin add-ons for large concentrated positions, restrictions on certain non-cash collateral issuers and limits on aggregated exposures to member groups across clearing and investment activities.

The largest concentration of investment exposures as at 31 December 2016 was 20.9% of the total investment to the US Government (2015: 12.0% to the US Government).

Procyclicality

Risk description

Systemically important CCPs recognise that they have an important responsibility towards their clearing members and other market participants to ensure that their actions do not unnecessarily amplify existing market stresses. Indeed, risk mitigating actions that are excessively procyclical are undesirable to the Company from a narrow risk management perspective as well as from a macro-economic and regulatory perspective.

Risk management approach

The Company acknowledges that while some level of procyclicality may be unavoidable, as it must protect itself by ensuring adequate margins are held against risk, standards have been introduced for ensuring that procyclicality concerns are appropriately addressed in the risk framework and the margin, haircut and credit scoring models. These standards require all models which are used for setting the levels of resources called from participants, and which therefore may be sources of procyclical outputs, to be tested using an extended period of historical inputs.

Interest rate risk

Risk description

The Company is exposed to interest rate risk arising from the cash and investment balances it maintains, the margin and default fund balances it holds from clearing members and the loans and borrowings it has issued.

Risk management approach

Interest bearing assets are generally invested for a longer term than the interest bearing liabilities, whose interest rate is generally reset daily. This makes treasury income vulnerable to volatility in overnight rates and shifts in spreads between overnight and term rates. Interest rate exposures are managed within defined risk appetite parameters against which sensitivities are monitored daily. The risk to the Company's capital is managed within interest rate risk limits expressed as a percentage of the Company's capital and calculated under stressed scenarios.

Interest rate sensitivity analysis

The Company aims to minimise its exposure to interest rate fluctuations. Any exposure is predominantly due to the mismatch between the Company's interest bearing assets and interest bearing member liabilities. Since the return paid on member liabilities is generally reset to prevailing market interest rates on an overnight basis, the Company is exposed for the time it takes to reset the interest rates on its investments and the shifts in spreads between overnight and term rates. The maximum fixed exposure on any asset in the treasury portfolio is one year and the portfolio is subject to an overall interest rate risk limit.

The following table shows the estimated impact of the exposure described in the paragraph above on profit after tax and on retained earnings within shareholder's equity:

	2016			2015		
	+25bp €'m	**+50bp €'m**	**+100bp €'m**	+25bp €'m	+50bp €'m	+100bp €'m
Net exposure of cash and member margin balances	**(11.4)**	**(22.7)**	**(45.4)**	(7.2)	(14.4)	(28.8)
Tax effect of above	**2.3**	**4.6**	**9.2**	1.5	2.9	5.8
Decrease in profit after tax	**(9.1)**	**(18.1)**	**(36.2)**	(5.7)	(11.5)	(23.0)
	-25bp €'m	**-50bp €'m**	**-100bp €'m**	-25bp €'m	-50bp €'m	-100bp €'m
Net exposure of cash and member margin balances	**11.4**	**22.7**	**45.4**	7.2	14.4	28.8
Tax effect of above	**(2.3)**	**(4.6)**	**(9.2)**	(1.5)	(2.9)	(5.8)
Increase in profit after tax	**9.1**	**18.1**	**36.2**	5.7	11.5	23.0

Liquidity risk

Risk description

Liquidity risk is the risk that the Company is unable to meet its payment obligations when they fall due.

Liquidity risk exists as a result of day to day operational flows such as repayments of cash collateral to clearing members, provision of liquidity to facilitate settlement and cash flows resulting from investment activity. In the case of a clearing member default, the Company must transfer or liquidate the defaulter's portfolio. This default management process may give rise to additional liquidity requirements to meet losses arising from portfolio hedging or close out as well as fulfilling the defaulter's settlement and margin obligations until the portfolio is fully closed out or transferred.

Risk management approach

Liquidity risk is managed by ensuring that the Company has sufficient cash to meet its payment obligations supported by facilities to meet short term imbalances between available cash and payment obligations. The Company maintains liquidity buffers against expected daily operational liquidity needs, based on the maximum relevant liquidity outflow observed from an extensive data history, and against the modelled default of the two clearing member groups with the largest liquidity requirements when additional liquidity will be required so that the Company can continue to meet its obligations to clearing members and other counterparties.

The Company's liquidity management is subject to strict minimum liquidity targets set by senior executives within its Risk and Collateral & Liquidity Management (CaLM) departments. These targets are reviewed regularly and reported to the Risk Committee and Board. On a day to day basis CaLM is tasked with ensuring that the Company can meet its financing needs at all times, in particular to ensure the business continues to operate smoothly even in the event of the default of one or more clearing members.

The ability to access liquidity under extreme market conditions is modelled daily. Liquid resources include available cash balances and secured financing facilities. The Company uses central bank money where such facilities are available to it as a CCP and are practicable as determined through internal review.

The table below analyses the Company's financial liabilities into relevant maturity groupings based on the remaining period from the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

As at 31 December 2016	**On demand €'m**	**Less than three months €'m**	**Three months to one year €'m**	**One to five years €'m**	**Total €'m**
Fair value of transactions with clearing members	-	**(115,911.7)**	**(1,652.5)**	**(1.9)**	**(117,566.1)**
Initial margin and other clearing member balances	-	**(58,354.1)**	-	-	**(58.354.1)**
Default fund	-	-	**(8,105.2)**	-	**(8,105.2)**
Trade and other payables	**(77.5)**	**(53.7)**	**(70.8)**	**(2.3)**	**(204.3)**
Interest bearing loans and borrowings	-	**(96.1)**	-	-	**(96.1)**

As at 31 December 2015	On demand €'m	Less than three months €'m	Three months to one year €'m	One to five years €'m	Total €'m
Fair value of transactions with clearing members	-	(118,696.3)	(1,677.7)	(0.4)	(120,374.4)
Initial margin and other clearing member balances	-	(37,523.5)	-	-	(37,523.5)
Default fund	-	-	(5,232.2)	-	(5,232.2)
Trade and other payables	(20.4)	(78.3)	(81.9)	-	(180.6)
Interest bearing loans and borrowings	-	(0.1)	(0.4)	-	(0.5)

For the default funds, the tenor of the liability is matched with the interest reset dates of the asset. The weighted average maturity of the total treasury portfolio is 68 days (2015: 28 days), with strict risk criteria related to interest rate exposure being applied.

Interest due on the financial liabilities is based upon rates set on a daily basis.

Foreign exchange risk

Risk description

The Company incurs the majority of its expenses in UK sterling, while earning revenues and treasury income in several major currencies. This then exposes the Company to foreign exchange risk; this is primarily because the Company translates net assets and liabilities arising in other currencies (principally UK sterling and US dollars) to its functional currency.

Risk management approach

The Company converts surplus foreign currency balances to euros where practicable on a monthly basis. This partially mitigates the impact of exchange rate fluctuations on the Company's financial performance. Any exchange differences on the translation of net assets and liabilities that remain are recorded in the income statement.

The Company has no designated hedges, but seeks to manage its risk by matching currency liabilities against monetary assets. The Company's income statement and regulatory capital volatility as a result of exchange rate movements are monitored.

Foreign exchange sensitivity

The Company reviews sensitivities to movements in exchange rates which are appropriate to market conditions. As at 31 December 2016, the Company has considered movements in UK sterling and US dollars during 2016 and has concluded that a 10% movement in rates is a reasonable level to measure the risk to the Company. At 31 December 2016, if the euro had weakened or strengthened by 10% against UK sterling and/or US dollar with all other variables held constant, the impact on post tax profit for the year ended 31 December 2016 and on equity at 31 December 2016 is set out, with comparatives, in the table below. Movements in other currencies and entities are not significant.

	2016		2015	
	Post tax profit €'m	**Equity €'m**	Post tax profit €'m	Equity €'m
UK sterling – euro strengthen	**1.8**	**0.6**	1.2	1.9
UK sterling – euro weaken	**(2.2)**	**(0.7)**	(1.4)	(2.4)
US dollar – euro strengthen	**(0.8)**	**(0.4)**	(0.5)	(0.6)
US dollar – euro weaken	**1.0**	**0.4**	0.6	0.8

If the average euro exchange rate for the year ended 31 December 2016 had moved 10p against UK sterling and 10 cents against US dollar, this would have changed the Company's operating profit for the year by up to €3.3 million (2015: €4.7 million).

Settlement risk

Risk description

Settlement risk is the risk that the Company makes a payment or delivery without simultaneously receiving the delivery or payment from the counterparty.

Risk management approach

The Company materially mitigates this risk through the use of guaranteed and irrevocable delivery versus payment mechanisms where available.

Settlement bank risk

Risk description

The Company is exposed to the risk that a settlement bank could fail, creating credit losses and liquidity pressures for the Company.

Risk management approach

The Company uses a combination of central bank, payment agent and commercial settlement bank models. The policy requires that only minimal unsecured balances at commercial settlement banks are permitted to remain overnight, with the majority placed with central banks. Any such unsecured balances reduce commercial bank deposit limits. Intraday credit exposures to commercial concentration banks are also monitored and closely controlled.

For monies due from clearing members, if the payment agent or commercial settlement bank is not able to transfer funds to the Company, the clearing members remain liable for the fulfilment of their payment obligations to the Company.

Risk policies specify minimum credit scores for all payment and settlement intermediaries and that these are monitored continually, with a full counterparty credit review conducted annually and a full due diligence exercise carried out at least every two years. The counterparty credit scores are derived from the framework described under credit risk above.

Custody risk

Risk description

Custody risk is the risk of loss on securities in safekeeping as a result of the custodian's insolvency, negligence, misuse of assets, poor administration or inadequate record keeping.

Risk management approach

Although the risk of insolvency of central securities depositories or custodian banks used by the Company is low, the Company mitigates this risk through a due diligence framework which ensures that appropriate legal arrangements and operational processes are in place. In addition, policy sets minimum eligibility requirements, and requires regular credit assessment and back-up contingency arrangements to be in place.

Capital risk

Risk description

Capital risk is the risk that the Company may not maintain sufficient capital to meet its obligations. This includes the risks that regulators may increase capital requirements or that own capital levels may become eroded. Capital is specifically allocated, and therefore at risk ahead of clearing member resources, in the event of either a clearing member or investment counterparty default. In addition, capital may be at risk to operational losses in excess of insurance protection.

Risk management approach

The Company's approach to capital management and a review of the current regulatory requirements are detailed in note 23. In addition:

- the default waterfalls for each clearing service feature the Company's own capital, to be utilised after the defaulted clearing member's collateral and default fund contributions and before the balance of the mutualised default funds and further, non-prefunded, resources available from the clearing members. In aggregate this capital at risk is equivalent to 25% of regulatory capital requirement for the Company
- the non-default loss provision for the Company (as detailed on page 28) limits the amount of capital at risk to the investment default/loss of a banking institution or the issuer of a debt instrument to €15 million for this entity

- the Company can manage its capital structure by varying returns to its shareholder, issuing new shares or increasing or reducing borrowings

Pension risk

Pension risk arises from the potential deficit in the Company's defined benefit pension plan due to a number of factors such as mortality rates or changes in inflation assumptions. The scheme is exposed to inflation, interest rate risks and changes in the life expectancy for members. As the schemes' assets include a significant investment in equity shares, the Company is exposed to equity market risk.

The pension scheme is UK-based and is governed under the relevant laws and managed by the Trustees who are required to undertake a formal funding valuation every three years and, where assets are deemed to be insufficient, to agree a schedule of contributions to be paid by the Company to make good any shortfall over a period of time. Details of the pension scheme and assumptions used in valuing their assets and liabilities are included in note 18.

Operational risk

Risk description

Operational risk is the risk of loss arising through failures associated with personnel, processes or systems or from external events. It is inherent in every business organisation and covers a wide spectrum of issues. First line operational risk is managed by the business, for example through procedures, documentation of processes, independent authorisation and reconciliation of transactions.

Risk management approach

The Company has adopted a framework, supported by tailored enterprise-wide software, systematically to identify, assess, monitor and manage operational risks. This is achieved through self assessment of risks and controls using a Group-wide comprehensive risk and control library, the collection and analysis of loss data and the development of key risk indicators as appropriate, enabling the embedding of operational risk awareness within the corporate culture. An independent department performs second line operational risk management, validating the self-assessments of risks and controls and reporting on operational risk to senior management and the Board.

Business operations are subject to a programme of internal audit reviews, which are independent of line management, and the results are reported directly to the Company's senior management and Audit Committee. Following each review, management will put in place an action plan to address any issues identified. Internal Audit evaluates the adequacy and effectiveness of the Company's systems of internal control, as well as the level of compliance with policies, and reports, in addition to management's own combined assurance reporting, to the Audit Committee and senior management. Any significant weaknesses are reported to the Board.

The Company maintains comprehensive contingency plans to support its operations and ensure business continuity. These facilities are regularly tested.

Other risks

Legal, compliance and regulatory risk

These risk categories include the risk arising from the potential that unenforceable contracts, lawsuits, or adverse judgements can disrupt or otherwise negatively affect the operations or condition of the organisation, and the risk of loss of license or other penalties imposed due to non-compliance with regulations governing clearing house activities in each jurisdiction in which the Company operates.

It is the responsibility of the Heads of the Legal, Regulatory and Compliance functions to provide assurance to the Board that these risks are measured and monitored, while the responsibility for any mitigation actions resides with the relevant business and functional heads.

In the normal course of business, the Company receives legal claims in respect of commercial, employment and other matters. Where a claim is more likely than not to result in an economic outflow of benefits from the Company (and is measureable), a provision is made representing the expected cost of settling such claims.

Reputational risk

The maintenance of the Company's strong reputation is key to its continued profitability and is the responsibility of the Board, management and staff. In particular the efficiency, reliability and effectiveness of the day to day operations of the Company are paramount to its reputation.

Business and strategic risks

Business risk is the risk of loss or of profit decrease where declining volumes lead to lower revenues which cannot be offset by adjusting variable costs within a reasonable time period, while strategic risk is the risk of reduction in earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes. Business heads are responsible for managing these risks and liaising closely with the Board when issues arise.

Brexit

The Company relies on the right for UK CCPs under EMIR to offer clearing services to EU regulated firms. The Group has analysed the potential impacts of the UK's exit from the EU and has considered contingency plans that may be implemented should these rights not be replaced by equivalent rights outside of EU membership.

Project risk and business continuity, information security and cyber risks

These risk categories include the risk to earnings and capital arising from project execution deficiencies, the risk of loss arising from the disruption of critical business or IT processes due to adverse circumstances or events, and the risk that valuable and sensitive LCH data is compromised, lost or misused. The Heads of dedicated business functions and of each business are responsible for managing these risks.

Model risk

This is the risk that, for example, a margin model may not capture the essence of the stress loss/events being modelled, or that there are mistakes in the underlying calculation, which may result in systemic under-margining for the products in question. Model risk management is the responsibility of the heads of business lines which place reliance on the models, and is effected through appropriate testing and maintenance of the models and in particular through the strict governance required for model change, including independent expert validation and senior executive approval. Board approval is required for material changes to important models.

Default management risk

This is the risk arising from not having a well defined and rehearsed process in place prior to a default event, leading to inefficiencies in the handling of a default such that a material deterioration in the market value of assets held may result in the erosion of CCP capital and the default funds.

For each service, it is the responsibility of the business head to ensure that a functioning Default Management Group is in place in accordance with the group default management policy and guidelines (owned by the CRO). Fire drill tests are held regularly to assess the CCP default management process and identify any areas for improvement.

3. Exchange rates

The most significant exchange rates for the Company are as follows:

	2016 Closing rate	2016 Average rate	2015 Closing rate	2015 Average rate
Euro (€) to US dollar ($)	**1.05**	**1.11**	1.09	1.11
Euro (€) to pound sterling (£)	**0.85**	**0.82**	0.74	0.73

4. Operating expenses

The following items are included in operating expenses (total operating expenses includes non-recurring items; a full analysis is given in note 5):

	2016 €'m	2015 (re-presented)* €'m
Employee costs (note 18)	**128.2**	169.9
Depreciation and amortisation (see below)	**29.4**	21.4
Other operating expenses	**84.5**	48.8
Operating expenses	**242.1**	240.1
Depreciation and amortisation		
Depreciation of property, plant and equipment	**4.9**	4.2
Write down of intangible assets	**1.4**	-
Amortisation of intangible assets	**23.1**	17.2
	29.4	21.4
Other operating expenses include:		
Property lease rentals	**4.2**	4.7
Foreign exchange gains	**(1.6)**	(2.0)
Auditor's remuneration		
Audit fees	**0.3**	0.3

5. Non-recurring items

	2016 €'m	2015 €'m
Restructuring programme	(6.5)	-
Profit on sale of subsidiary	0.2	-
Synergy plan gains	-	0.2
Total non-recurring items	(6.3)	0.2
Tax effect of non-recurring items	1.3	-
Net non-recurring items	(5.0)	0.2

During 2016, the board approved a three year restructuring programme to improve the efficiency of the Company.

In December 2016, the Company sold its investment in its subsidiary to its parent for consideration of €0.2 million.

6. Finance income and expense

	2016 €'m	2015 €'m
Dividends received	12.2	3.6
Interest received on cash and cash equivalents	0.1	-
Interest received on intercompany loan balances	0.3	-
Net finance income on pension assets	1.2	0.9
Finance income	13.8	4.5
Interest paid on cash and cash equivalents	(3.1)	-
Interest paid on finance leases	-	(0.1)
Net finance income	10.7	4.4

The Company attracts negative interest rates on some of its cash deposits and intercompany loans.

7. Taxation

The major components of taxation expense are:

	2016 €'m	2015 €'m
Current tax		
United Kingdom current tax charge	**(18.9)**	(16.5)
Adjustments in respect of current tax in previous years	**0.2**	(2.3)
Overseas current tax charge	**(0.7)**	(0.7)
Adjustments in respect of current taxation in previous years	**0.1**	(0.1)
Total current tax	**(19.3)**	(19.6)
Deferred tax		
Deferred tax relating to the origination and reversal of temporary differences	**(1.2)**	(1.2)
Deferred tax effect of future rate changes	**(0.3)**	2.6
Adjustment in respect of deferred tax in previous years	**(0.5)**	(0.7)
Deferred tax	**(2.0)**	0.7
Tax expense reported in the income statement	**(21.3)**	(18.9)
Statement of comprehensive income		
Deferred tax relating to remeasurement of UK defined benefit pension plan	**11.5**	(4.1)
Tax relating to revaluation of available for sale assets	**(1.1)**	0.4
Tax credit/(expense) reported in the statement of comprehensive income	**10.4**	(3.7)
Statement of changes in equity		
Tax allowance on share awards in excess of expense recognised	**1.2**	0.5
Tax credit reported directly in equity	**1.2**	0.5

Reconciliation of tax expense

The income statement tax charge for the year differs from the standard rate of corporation tax in the UK as explained below:

	2016 €'m	2015 €'m
Accounting profit before taxation	**105.0**	83.7
Tax at UK statutory corporation tax rate of 20.0% (2015: 20.25%)	**(21.0)**	(16.9)
Effect of:		
Disallowed expenses	**-**	(0.7)
Non-taxable income	**2.0**	-
Adjustments in respect of prior periods	**(0.2)**	0.2
Remeasurement of deferred tax – change in corporation tax rate	**(0.9)**	(0.7)
Higher rate of tax on overseas earnings	**(0.4)**	(0.4)
Provision for diverted profits tax (DPT)	**(1.0)**	-
Higher rate of tax on pension surplus	**-**	(0.1)
Foreign exchange adjustment	**0.2**	(0.3)
Total tax charge	**(21.3)**	(18.9)
Effective corporate tax rate	**20.3%**	22.6%

The UK Finance Bill 2016 was enacted in September 2016 reducing the standard rate of corporation tax from 20% to 19% effective from 1 April 2017 and 17% effective from 1 April 2020. Accordingly the UK deferred tax balances at December 2016 have been stated at 20%, 19%, 17% or 35% dependent on when the timing differences are expected to reverse.
The effective tax rate (ETR) for the company of 20.3% reflects changes to the rate at which deferred tax is calculated offset by a provision for DPT in respect of the payments for intellectual property (IP) made to a related party, tax resident in Luxembourg. This related party is in the process of being wound up and the IP has been transferred to the company. In the future a provision for DPT will not be required due to this transfer, therefore longer term it is expected that the company's ETR will continue to decline in line with the expected reduction in the UK's corporate tax rate.

An amount of €5.2 million has been provided for uncertain tax positions in respect of discussions with the tax authorities relating to a change of accounting policy and the Groups' submission to HMRC with regard to the uncertainty surrounding the introduction of DPT.

Exchange differences have arisen on the translation of the closing sterling tax creditor which is payable to HMRC.

Deferred tax

	Statement of financial position		Income statement	
	2016	2015	**2016**	2015
	€'m	€'m	**€'m**	€'m
Post-employment benefits	**(0.7)**	(11.9)	**(1.6)**	0.6
Reduced depreciation for tax purposes	**4.3**	5.4	**(1.0)**	(0.3)
Deferred compensation	**0.8**	0.9	**-**	(0.3)
Share-based payments	**2.6**	1.6	**0.6**	(0.7)
Revaluation of available for sale assets	**(0.9)**	-	**-**	-
Deferred tax charge			**(2.0)**	(0.7)
Deferred tax asset/(liability)	**6.1**	(4.0)		

	2016	2015
	€'m	€'m
Net deferred tax liability at 1 January	**(4.0)**	(1.1)
Deferred tax in income statement	**(2.0)**	0.7
Deferred tax relating to share based payments	**0.6**	0.5
Deferred tax relating to remeasurement losses on UK defined benefit pension plan	**10.6**	(4.1)
Foreign exchange translation	**0.9**	-
Net deferred tax asset/(liability) at 31 December	**6.1**	(4.0)

8. Intangible assets

	2016	2015
Self-developed software	**€'m**	€'m
Cost		
At 1 January	**188.9**	141.5
Additions	**74.1**	47.4
Disposals	**(2.1)**	-
Write down	**(1.4)**	-
At 31 December	**259.5**	188.9
Accumulated amortisation		
At 1 January	**88.2**	71.0
Amortisation charge for the year	**23.1**	17.2
Disposal	**(2.1)**	-
At 31 December	**109.2**	88.2
Net book value at 31 December	**150.3**	100.7

The portion of capitalised self-developed software costs disclosed above that relates to software not currently brought into use amounted to €53.2 million (2015: €38.2 million). No amortisation has been charged during the year against these assets (2015: nil), but instead they are tested for impairment (note 9). A write down of the cost of these assets of €1.4 million (2015: nil) has been recognised in the year.

In November 2016, the Company acquired the rights to the software development intellectual property it previously licensed from its subsidiary company, LCH.Clearnet (Luxembourg) S.à.r.l., at fair value.

9. Impairment testing of intangible assets

The Company carries out annual impairment testing on software not currently brought into use in December of each year, or more often if circumstances show that an impairment may be likely.

For intangible assets, impairment is assessed by reviewing the carrying value of the asset against its recoverable amount, which is determined by value in use calculations for the relevant cash generating unit using discounted cash flow projections.

Assumptions

The key assumptions used in the valuations relate to discounted cash flow projections prepared by management covering a five year period. The cash flow projections are based on the Company's budget for 2017 and the approved plan for the two financial years following the last financial year in the budget. Cash flows beyond this period are extrapolated using the estimated long term growth rates and applying the pre-tax discount rates.

Management has based its value in use calculations for each CGU on key assumptions about short- and medium-term revenue and cost growth, long -term economic growth rates (used to determine terminal values) and pre-tax discount rates, as follows:

i) The values assigned to short and medium term revenue and cost growth are based on the 2017 budget and the Group approved plan. The assumptions are derived from an assessment of current trends, anticipated market and regulatory developments, discussions with customers and suppliers and management's experience. These factors are considered in conjunction with the Company's long-term strategic objectives to determine appropriate short and medium term growth assumptions
ii) Long-term growth rates of 2% (2015: 2%) represent management's internal forecasts based on external estimates of GDP and inflation
iii) The pre-tax discount rate of 11.6% (2015: 10.5%) is based on a number of factors including the risk-free rate and the Company's estimated market risk premium

Impairment results

Having completed the tests as described above, self-developed software assets were found to be impaired by €1.4 million (2015: nil).

Sensitivity analysis

Reasonably possible changes in key assumptions and rates are detailed below and the impact on the impairment recognised noted:

As at 31 December 2016	**Base case**	**Adjusted**	**Increase to impairment €'m**
Reduction in clearing revenues	various	-10%	-
Pre-tax discount rate	11.6%	14.6%	-

As at 31 December 2015	Base case	Adjusted	Increase to impairment €'m
Reduction in clearing revenues	various	-10%	-
Pre-tax discount rate	10.5%	13.5%	-

10. Property, plant and equipment

As at 31 December 2016	**Leasehold refurbishment €'m**	**Computer equipment €'m**	**Office equipment €'m**	**Total €'m**
Cost				
At 1 January	**9.4**	**41.3**	**3.9**	**54.6**
Additions	**0.3**	**8.6**	**-**	**8.9**
Disposals	**(0.3)**	**(10.4)**	**(0.2)**	**(10.9)**
At 31 December	**9.4**	**39.5**	**3.7**	**52.6**
Accumulated depreciation				
At 1 January	**3.9**	**32.1**	**3.9**	**39.9**
Depreciation charge for the year	**0.8**	**4.1**	-	**4.9**
Disposals	**(0.2)**	**(10.4)**	**(0.2)**	**(10.8)**
At 31 December	**4.5**	**25.8**	**3.7**	**34.0**
Net book value at 31 December	**4.9**	**13.7**	**-**	**18.6**

As at 31 December 2015	Leasehold refurbishment €'m	Computer equipment €'m	Office equipment €'m	Total €'m
Cost				
At 1 January	9.1	32.1	3.9	45.1
Additions	0.3	9.2	-	9.5
Disposals	-	-	-	-
At 31 December	9.4	41.3	3.9	54.6
Accumulated depreciation				
At 1 January	3.0	28.8	3.9	35.7
Depreciation charge for the year	0.9	3.3	-	4.2
Disposals	-	-	-	-
At 31 December	3.9	32.1	3.9	39.9
Net book value at 31 December	5.5	9.2	-	14.7

11. Investment in subsidiaries

	2016 €'m	2015 €'m
Cost at 1 January	**20.3**	20.3
Capital repayment	**(20.3)**	-
Disposal	-	-
Cost at 31 December	-	20.3

In November 2016, the Company's major subsidiary company, LCH.Clearnet (Luxembourg) S.à.r.l. (Luxco), sold its intellectual property rights to the Company and a fellow subsidiary company. Subsequently, Luxco undertook a capital reduction and as a result repaid the Company capital of €20.3 million.

On 16 December 2016, the Company sold its 51% holding in Luxco to its parent company, LCH.Clearnet Group Limited for consideration of €0.2 million realising a profit on disposal of €0.2 million.

The Company has taken advantage of the exemption from preparing consolidated financial statements afforded by section 400 of the Companies Act 2006 as its parent company, LCH.Clearnet Group Limited, prepares consolidated financial statements which are publicly available.

The Company also owns the following dormant companies that are not material.

Company name	Principal activity	Country of incorporation
BondClear Limited	Dormant	England and Wales
SwapClear Limited	Dormant	England and Wales
LCH Pensions Limited	Trustee company	England and Wales
RepoClear Limited	Dormant	England and Wales
CommodityClear Limited (formerly Bondnet Limited)	Dormant	England and Wales
EquityClear Limited	Dormant	England and Wales
The London Clearing House Limited	Dormant	England and Wales
LCH Group Holdings Limited (formerly RepoNet Limited)	Dormant	England and Wales
ForexClear Limited	Dormant	England and Wales
International Commodities Clearing House Limited	Dormant	England and Wales
The London Produce Clearing House Limited	Dormant	England and Wales

The Company has representative offices in the USA and Australia and a branch in Japan.

12. Balances with clearing members

	2016 €'m	2015 €'m
Assets		
Fair value of transactions with clearing members	**117,566.1**	120,374.4
Other clearing member balances	**479.2**	359.5
	118,045.3	120,733.9
Liabilities		
Fair value of transactions with clearing members	**(117,566.1)**	(120,374.4)
Initial margin and other clearing member balances	**(58,341.8)**	(37,523.4)
	(175,907.9)	(157,897.8)

The balances due from clearing members recorded in the statement of financial position of €117,566.1 million (2015: €120,374.4 million) are fully secured by collateral held by the Company.

At 31 December 2016 the total of fully collateralised loans in respect of fixed income transactions was €114,791.0 million (2015: €151,714.4 million). This collateral has in turn, been passed on to fixed income counterparties to secure the Company's liabilities in respect of fixed income contracts.

The total net amount of non-cash collateral not recognised on the balance sheet, including that in respect of initial margin, at 31 December 2016 was €67,740.6 million (2015: €47,886.1 million).

13. Trade and other receivables

	2016 €'m	2015 €'m
Non-current		
Other receivables	**0.9**	0.8
Current		
Trade receivables	**33.1**	26.7
Other receivables	**26.5**	39.8
Provision for doubtful debts	**(0.1)**	(0.4)
Margin receivable on repurchase contracts	**110.0**	-
Prepayments	**7.9**	8.8
Amount owed by parent companies	**9.8**	3.7
Amount owed by fellow subsidiary companies	**9.3**	6.2
	196.5	84.8

Doubtful debt provisions of €0.4 million were brought forward. This was fully utilised during the year and new provisions of €0.1 million were established in relation to specific uncertain accounts during 2016.

14. Cash and cash equivalents

	2016 €'m	2015 (re-presented) €'m
Cash at bank and in hand	**192.4**	5.7
Short-term deposits	**477.5**	569.7
Cash and cash-equivalents	**669.9**	575.4
Clearing business cash at bank	**9,243.0**	2,761.4
Clearing business short-term deposits	**35,928.5**	25,251.1
Clearing business cash and cash-equivalents	**45,171.5**	28,012.5
	45,841.4	28,587.9

The short-term deposits are collateralised by sovereign and investment grade corporate securities in accordance with eligibility criteria approved by the Risk Committee.

€76.0 million (2015: €71.0 million) of own cash is restricted as the Company's own resources to be used in the default waterfall. This is allocated by default fund on a pro-rata basis as follows at 31 December 2016: SwapClear €55.0 million, RepoClear €11.0 million, ForexClear €9.0 million, Equities / Listed Derivatives €0.9 million and Commodities €0.1 million.

The remaining cash represents the balance of default funds and margin monies placed on deposit for the purpose of earning treasury income.

15. Trade and other payables

	2016 €'m	2015 €'m
Non-current		
Accruals	**2.2**	-
Other payables	**9.5**	18.9
	11.7	18.9
Current		
Trade payables	**5.4**	6.8
Other taxation and social security	**10.3**	6.2
Accruals	**48.2**	49.1
Amount owed to parent companies	**2.3**	2.4
Amount owed to fellow subsidiary companies	**19.1**	2.7
Amount owed to subsidiary company	**-**	15.3
Deferred income	**3.5**	2.8
Margin on reverse repurchase investments	**56.3**	71.5
Other payables	**80.1**	39.5
	225.2	196.3

Other payables (current and non-current) include liabilities of €18.9 million (2015: €28.4 million) that were created on the recognition of intangible assets as a result of the renegotiated operating agreements in respect of SwapClear and ForexClear. These liabilities are being recognised in the income statement on a systematic basis over the useful life of the assets recognised.

Within other payables are balances that include accounting estimates. During the year a decrease in liabilities of €3.1 million was recorded in these estimates. In 2015, these balances were held within trade and other receivables where an increase of €7.0 million in assets was recorded.

16. Interest bearing loans and borrowings

	2016 €'m	2015 €'m
Current		
Loan from parent company	**96.1**	-
Finance leases	**-**	0.4
	96.1	0.4

In November 2016, the Company signed a five year revolving credit facility with its parent company which is repayable with three month's notice. Interest is charged on the loan at market rates.

17. Default funds

The purpose of the default funds is to absorb any losses incurred by the Company in the event of clearing member default if margin collateral is insufficient to cover the management and close out of the positions of the defaulting clearing member. Default funds are segregated to cover the different business lines of the Company. The total default funds held by the Company at 31 December 2016 were €8,105.2 million (2015: €5,232.2 million).

18. Employee benefits

i) Staff costs

All employees and directors	2016 €'m	2015 (re-presented) €'m
Salaries and other benefits	**101.5**	145.7
Social security costs	**10.4**	10.4
Share-based payment costs	**5.2**	5.1
Pension costs	**7.5**	8.9
Staff costs before non-recurring items	**124.6**	170.1
Staff costs included in non-recurring items (note 5)	**3.6**	(0.2)
Total staff costs	**128.2**	169.9
Average monthly number of staff employed (re-presented)	**687**	734

Staff costs and the average number of staff have been re-presented to include the costs of contract staff who are not on the payroll, but fulfil a similar role to employees.

Key management personnel	2016 €'m	2015 €'m
Remuneration and other short-term benefits	**5.5**	4.7
Deferred bonus and other long-term benefits	**0.9**	1.5
Share-based payment costs	**1.8**	1.7
Pension contributions	**0.3**	0.3
Compensation for loss of office	**0.3**	1.1
Aggregate emoluments of key management personnel	**8.8**	9.3

The costs above include deferred bonuses, other long-term incentive plan (LTIP) awards and share-based payment costs on an accrued basis.

Key management personnel consists of the executive directors and certain senior staff who are regarded as running the business on a day to day basis.

Directors' remuneration	**2016 €'m**	2015 €'m
Remuneration	**3.2**	3.6
Total directors' remuneration	**3.2**	3.6

Remuneration of directors who are also directors of other LCH Group companies is charged by way of a management charge from LCH.Clearnet Group Limited and is included above.

The costs above include deferred bonuses, other LTIP awards and share-based payment costs when they vest or become payable.

The highest paid director received total remuneration of €1,147,145 (2015: €1,266,854) in the year.

One director is a deferred member of the Company's defined benefit pension scheme. Contributions of €112,016 (2015: €62,587) have been made on behalf of three (2015: two) directors to the defined contribution scheme.

Three (2015: three) directors, including the highest paid director, participate in the share-based award schemes detailed below.

Independent non-executive directors received fees for their services. The Board determines fees that reflect the level of individual responsibilities, attendance of meetings and membership of Board committees. Non-executive directors representing shareholders did not receive fees.

ii) Share-based payments

Company employees were eligible to participate in one or more of the following London Stock Exchange Group (LSEG) share option based arrangements during the financial year:

i. The LSEG Long Term Incentive Plan 2014 (LSEG LTIP)
ii. The LCH Group Long Term Incentive Plan (LCH LTIP)
iii. The LSEG SAYE Option Scheme and LSEG International Sharesave Plan (together SAYE plans)
iv. The LSEG Restricted Share Award Plan 2008 and LCH.C Companies' Retention Plan 2014 (together Restricted Plans)

The **LSEG LTIP** has two elements, an award of Performance Shares and a conditional award of Matching Shares, which is linked to a co-investment being made by the executive. Awards are made in the form of nil-cost options. Under the Matching Shares arrangement, selected executives may invest up to the value of 50% of their net-of-tax base salary in LSEG shares (Invested Value). The Invested Value is then matched with a performance related Matching Share award, matched 2:1 on a pre-tax basis (up to a maximum Matching Share award of 100% of pre-tax base salary).

Vesting of the LSEG LTIP awards is dependent upon LSEG's total shareholder return (TSR) performance and adjusted basic earnings per share growth (EPS) (50% on each) over a three year period. The following targets applied to options granted in 2016:

EPS element (50%): Average growth over 3 years	TSR element (50%): Absolute growth over 3 years	Proportion of element that vests
More than 12% p.a.	More than 14% p.a.	100%
6% p.a.	6% p.a.	25%*
Less than 6% p.a.	Less than 6% p.a.	0%

* Straight line pro-rating applies between this trigger and 100% vesting.

The **LCH LTIP** also has two elements, an award of Performance Shares and a conditional award of Matching Shares, which is linked to a co-investment being made by the executive. The Matching Shares element only applies to selected senior management. The Performance Shares are available to a wider group of executives. Awards are made in the form of nil-cost options. Under the Matching Shares arrangement, selected executives may invest up to the value of 50% of their net-of-tax base salary in LSEG shares (Invested Value). The Invested Value is then matched with a performance related Matching Share award, matched 2:1 on a pre-tax basis (up to a maximum Matching Share award of 100% of pre-tax base salary).

Vesting of the LCH LTIP award is initially dependent upon the achievement of a risk management gateway. If this is achieved, the degree of vesting of the award is assessed against three conditions, measured independently over three years:

1) **Regulatory metric**: a qualitative assessment of LCH Group performance on regulatory matters (comprising up to 34% of the award)
2) **Cost metric:** a quantitative assessment of qualifying cost savings during the performance period (comprising up to 33% of the award)
3) **EBIT metric:** a quantitative assessment of LCH Group earnings before interest and tax (EBIT) performance at the end of the performance period (comprising up to 33% of the award)

For Internal Audit, Risk and Compliance participants, the Cost and EBIT metrics do not apply. Assuming the risk management gateway is achieved, the vesting of the award is assessed against the Regulatory metric only.

The risk management gateway will be assessed by the LCH Group Remuneration Committee ('Committee') who will assess if the LCH Group has managed its risk effectively over the three year period. The award lapses in full if any of the LCH Group CCPs suffers an aggregate loss of more than €12 million (Higher Level Losses). Equally, if, during the performance period any of the LCH Group CCPs suffers losses below this level or circumstances arise in the reasonable opinion of the Committee that have or could have resulted in a significant adverse event which did or could have materially damaged future business operations, the Committee shall determine whether management could or should have taken action to prevent such circumstances and may lapse the award accordingly.

The Regulatory metric shall vest at 100% if it is determined that LCH Group management actions in relation to regulatory matters were wholly effective during the performance period. If it is determined that management actions in relation to regulatory matters were not wholly effective during the performance period, then the Remuneration Committee shall determine a lesser level of vesting as it deems appropriate.

In order for the portion of the Performance Share or Matching Share Award subject to the Cost metric to vest, the Committee must determine the amount of cumulative net consolidated cost savings of London Stock Exchange Group achieved over the performance period by reference to specified cost saving projections and adjustments set out in the rules of the Plan.

The Cost and EBIT metrics shall vest as follows:

Cost metric: amount of qualifying cost savings determined to have been achieved	EBIT metric: EBIT level	Percentage of shares that vest
2014 award:		
€100 million or more	€120 million or more	100%
€75 million	€106 million	62.5%
€50 million	€92 million	25%
Below €50 million	Below €92 million	0%
2015 award:		
€50 million or more	€152 million or more	100%
€40 million	€138 million	62.5%
€30 million	€124 million	25%
Below €30 million	Below €124 million	0%
2016 award:		
€60 million or more	€230 million or more	100%
€50 million	€200 million	62.5%
€40 million	€170 million	25%
Below €40 million	Below €170 million	0%

Straight line vesting applies between the relevant percentages listed above in respect of the Cost and EBIT metrics.

At the end of the performance period, the Committee shall calculate LCH Group EBIT for the last financial year in the performance period, as approved by the LCH.Clearnet Group Limited Audit Committee. EBIT means earnings before interest, tax and non-recurring items, as reported in the consolidated accounts for LCH.Clearnet Group Limited, subject to such adjustments as the Remuneration Committee considers necessary to take account of matters that it considers to be appropriate.

If circumstances occur, which, in the reasonable opinion of the Committee, justify a reduction to awards granted the Committee may at its discretion reduce an award or not grant future awards. In the event that an award has already vested, the Committee may determine that a repayment is made. The circumstances and timeframe in which the Committee may consider it appropriate to exercise such discretions are covered in the Plan Rules.

The **SAYE schemes** provide for grants of options to employees who enter into a SAYE savings contract; options are granted at 20% below fair market value. The scheme is available to employees based in the UK and US (and approved by HMRC in the UK). The options vest in full after three years, providing the employee remains employed by the LCH Group or the wider LSEG group of companies.

The **Restricted Plans** allow for grants to be made in the form of conditional awards over ordinary shares of LSEG, in the form of nil-cost options to certain executives. The vesting of such awards granted to date under the plans are conditional upon tenure and furthermore, in the case of the LCH.C Companies' Retention Plan 2014 (Retention Plan), upon successful achievement of a risk management gateway. No grants have been made under the Retention Plan in the year.

Movements in the number of share options and awards outstanding and their weighted average exercise price in GBP are as follows:

	LSEG LTIP	LCH LTIP	SAYE schemes		Restricted Plans
	Number	Number	Number	£	Number
1 January 2015	123,555	248,721	179,529	12.76	72,271
Granted in year	48,820	299,829	35,429	20.42	18,751
Exercised in year	-	-	-		(27,050)
Lapsed/forfeited in year	-	(12,796)	(9,867)	13.06	-
31 December 2015	**172,375**	**535,754**	**205,091**	**14.07**	**63,972**
Granted in year	19,031	321,360	33,231	20.42	10,423
Exercised in year	-	-	(3,879)	14.20	(40,488)
Lapsed/forfeited in year	(1,392)	(122,468)	(51,867)	13.74	(15,398)
31 December 2016	**190,014**	**734,646**	**182,576**	**15.60**	**18,509**

13,642 of the options were exercisable as at 31 December 2016 (2015: nil). The weighted average exercise price is nil for all other schemes except the SAYE. The weighted average share price of LSEG plc shares during the year was £26.96 (2015: £24.89).

The range of exercise prices and weighted average remaining contractual life of awards and options outstanding are as follows:

As at 31 December 2016	Number outstanding	Weighted average remaining contractual life Years
LSEG LTIP - nil	190,014	0.71
LCH LTIP - nil	734,646	1.60
SAYE - over £11.00	182,576	0.91
Restricted Plans - nil	18,509	1.53
Total	**1,125,745**	

The fair value of share options granted during the year was determined using a stochastic valuation model. The key assumptions used in the valuation were as follows:

	LSEG LTIP	LCH LTIP			
	Matching shares	Performance shares	Matching shares	Performance shares	Matching shares
Grant date	18/03/2016	17/03/2016	18/03/2016	23/06/2016	23/06/2016
Grant date share price	£28.92	£28.90	£28.92	£27.35	£27.35
Options granted	19,031	244,416	50,570	13,187	13,187
Expected life	3 years	3 years	3 years	3 years	3 years
Dividend yield	1.00%	1.00%	1.00%	0.80%	0.80%
Risk-free interest rate	0.50%	0.60%	0.50%	0.60%	0.60%
Volatility	25%	25%	25%	26%	26%
Fair value TSR	£10.15	-	-	-	-
Fair value EPS	£28.06	-	-	-	-
Fair value non-market conditions	-	£28.04	£28.06	£26.70	£26.70

	SAYE	Restricted Plans	
Grant date	05/05/2016	17/03/2016	14/10/2016
Grant date share price	£26.14	£28.90	£28.43
Options granted	33,231	696	9,727
Expected life	3.16 years	3 years	0.38 – 3.54 years
Exercise price	£22.38	-	-
Dividend yield	0.90%	1.00%	1.31%
Risk-free interest rate	0.60%	0.6%	0.12% - 0.29%
Volatility	25%	25%	25.2% - 29.4%
Fair value non-market conditions	£6.11	£28.04	£27.14 - £28.29

The volatility is based on a statistical analysis of LSEG's weekly share price since its flotation in July 2001.

The fair value for LSEG LTIP performance and matching shares granted during the year is based on a total shareholder return (TSR) pricing model which takes into account the TSR vesting conditions. All other fair values of options granted are based on a Black-Scholes model. Holders of share awards and share options are not entitled to receive dividends declared during the vesting period.

iii) Pension commitments

Defined contribution scheme

The Company pays fixed contributions to the defined contribution scheme and there is no legal or constructive obligation to pay further contributions. The assets of the plan are held separately from those of the Company in a fund under the control of the trustees. The total expense charged to the income statement of €6.9 million (2015: €7.4 million) represents contributions payable to the plan by the Company at rates specified in the rules of the plan.

Defined benefit scheme

The Company operated a defined benefit pension scheme for its employees in the UK (now the LCH defined benefit section of the LSEG Pension Scheme), which required contributions to be made to a separate trustee administered fund. This was closed to new members from 30 September 2009 and closed to further employee contributions on 31 March 2013. The LCH Pension Scheme was merged into the new London Stock Exchange Group Pension Scheme on 5 September 2016. The LCH

Pension Scheme underwent a sectionalised merger into a new London Stock Exchange Group Pension Scheme on 5 September 2016. The scheme maintains separate LCH and LSEG sections with the Company sponsoring only the LCH section.

A full actuarial valuation of the UK pension scheme was carried out at 30 June 2013 and partially updated to 31 December 2016 by a qualified independent actuary. Due to the scheme's merger, the next full actuarial valuation is being performed at 31 December 2016, but will only be completed later in 2017.

The valuations of the scheme conducted for financial reporting purposes are based on the triennial actuarial valuation as at 30 June 2013. A summary of the principal assumptions used is detailed below. The Company is not aware of any events subsequent to 31 December 2016, which would have a material impact on the results of the valuation. There was no impact of the asset ceiling test.

Weighted average assumptions to determine benefit obligations

	2016	2015
Discount rate	**2.7%**	4.0%
Rate of salary increase	**n/a**	n/a
Rate of price inflation	**3.3%**	3.2%
Rate of pension increases	**2.3%**	2.2%

Implied life expectancy at age 60

	2016	2015
Male currently aged 60	**28.1**	28.3
Male currently aged 45	**29.7**	29.9
Female currently aged 60	**30.4**	30.5
Female currently aged 45	**32.2**	32.4

The discount rate for the UK scheme has been determined from a curve of AA corporate bond rates by duration which is consistent with the estimated weighted average duration of the scheme's liabilities at around 25 years. Scheme assets are stated at their market value at the respective statement of financial position dates.

Changes in benefit obligation

	2016	2015
	€'m	€'m
Benefit obligation as at 1 January	**236.0**	238.5
Pension expense:		
Current service cost	**-**	-
Past service loss	**-**	0.1
Net interest	**8.1**	9.4
Re-measurement losses/(gains):		
Effect of changes in demographic assumptions	**(3.3)**	-
Effect of changes in financial assumptions	**94.3**	(21.5)
Effect of experience adjustments	**-**	-
Benefits paid	**(5.7)**	(3.8)
Foreign exchange	**(32.6)**	13.3
Benefit obligation as at 31 December	**296.8**	236.0

Changes in scheme assets

	2016 €'m	2015 €'m
Fair value of scheme assets as at 1 January	**270.2**	259.2
Pension income:		
Net interest	**9.3**	10.2
Re-measurement gains:		
Return on plan assets (excluding interest income)	**60.0**	(9.8)
Employer contributions	**3.0**	0.1
Benefits paid	**(5.7)**	(3.8)
Foreign exchange	**(37.9)**	14.3
Fair value of scheme assets as at 31 December	**298.9**	270.2

Fair value of scheme assets with a quoted market price

	2016 €'m	2015 €'m
Cash and cash equivalents	**2.7**	3.9
Equity instruments	**122.3**	127.0
Debt / LDI instruments	**173.9**	139.3
Total fair value of assets	**298.9**	270.2
Present value of funded obligations	**(296.8)**	(236.0)
Surplus	**2.1**	34.2

Sensitivity analysis

The sensitivity of the value of the benefit obligation to the discount rate is shown below:

	2016 €'m	2015 €'m
Discount rate - increase by 0.5%	**(38.6)**	(28.7)
Revaluation in deferment (CPI) and salary increases - increase by 0.5%	**12.1**	11.7
Pension increases in payment - increase by 0.5%	**19.6**	13.9
Life expectancy - increase by 1 year	**8.1**	5.2

The sensitivity analysis above has been determined based on a method that extrapolates the impact on net defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

Payment from the defined benefit obligation

The following payments are expected to be made in future years out of the defined benefit plan obligation:

	2016
	€'m
Within the next 12 months	**2.7**
Between 2 and 5 years	**11.3**
Following 5 years	**15.9**
Total	**29.9**

Contributions

During 2016, contributions of £2.5 million (€3.0 million (2015: €0.1 million) were made to the defined benefit pension plan in the UK. No further commitments in respect of the scheme have currently been agreed.

Further contributions to the defined benefit pension plans may be required following completion of the next triennial valuation during 2017.

19. Financial instruments

Financial assets and liabilities

	Note	**2016**	2015 (re-presented)
		€'m	€'m
Financial assets at fair value through profit or loss			
Fair value of transactions with clearing members	12	**117,566.1**	120,374.4
Treasury bills		**10,139.2**	9,764.3
Available for sale assets			
Government issued bonds		**10,577.6**	4,658.4
Other financial assets in the statement of financial position		**20,716.8**	14,422.7
Loans and receivables			
Trade and other receivables	13	**189.5**	58.9
Other clearing member balances	12	**479.2**	359.5
Cash and short-term deposits	14	**669.9**	574.4
Clearing business cash and cash equivalents including short-term deposits	14	**45,171.5**	28,012.5
Financial liabilities at fair value through profit or loss			
Fair value of transactions with clearing members	12	**(117,566.1)**	(120,374.4)
Financial liabilities at amortised cost			
Trade and other payables	15	**(204.3)**	(180.6)
Initial margin and other clearing member balances	12	**(58,341.8)**	(37,523.4)
Default funds	17	**(8,105.2)**	(5,232.2)
Interest bearing loans and borrowings	16	**(96.1)**	(0.4)

Prepayments and other taxes within trade and other receivables are not classified as financial assets. Other taxes and the liability in respect of the renegotiated operating agreements within trade and other payables are not classified as financial liabilities.

For assets not marked to market there is no material difference between the carrying value and fair value.

All financial assets held at fair value are designated as such on initial recognition by the Company.

Fair value hierarchy

The Company uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: other techniques for which all inputs, which have a significant effect on the recorded fair value are observable, either directly or indirectly
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data. The Company has no financial instruments in this category

The Company held the following significant financial instruments measured at fair value:

		2016			2015	
	Level 1 €'m	**Level 2 €'m**	**Total €'m**	Level 1 €'m	Level 2 €'m	Total €'m
Assets measured at fair value						
Fair value of transactions with clearing members	**12.1**	**117,554.0**	**117,566.1**	6.9	120,367.5	120,374.4
Government issued bonds at fair value through the profit or loss	**10,139.2**	**-**	**10,139.2**	9,764.3	-	9,764.3
Government issued bonds available for sale	**10,577.6**	**-**	**10,577.6**	4,658.4	-	4,658.4
Liabilities measured at fair value						
Fair value of transactions with clearing members	**(12.1)**	**(117,554.0)**	**(117,566.1)**	(6.9)	(120,367.5)	(120,374.4)

For assets and liabilities classified as level 1, the fair value is based on market price quotations at the reporting date.

For assets and liabilities classified as level 2, the fair value is calculated using valuation techniques with market observable inputs. Frequently applied techniques include forward pricing and swap models using present value calculations. The models incorporate various inputs including foreign exchange spot and forward rates, interest rate curves and forward rate curves.

Income statement

Amounts included in the income statement in relation to financial instruments are as follows:

	2016 €'m	2015 €'m
Treasury income on assets held at fair value through the income statement	**31.1**	8.8
Treasury income on other financial assets	**107.5**	53.9
Treasury income on liabilities held at amortised cost	**112.7**	51.3
Net fair value gain on revaluation of other financial assets held at fair value included in net interest income	**(1.0)**	1.6
Treasury income	**250.3**	115.6
Treasury expense on assets held at fair value through the income statement	**(34.7)**	(8.7)
Treasury expense on other financial assets	**(49.8)**	(14.5)
Treasury expense on liabilities held at amortised cost	**(93.9)**	(38.1)
Treasury expense	**(178.4)**	(61.3)
Net treasury income	**71.9**	54.3
Net finance income on pension fund assets	**1.2**	0.9
Finance income on assets held at amortised cost	**0.1**	-
Finance income on liabilities held at amortised cost	**0.3**	-
Finance expense on assets held at amortised cost	**(3.1)**	(0.1)
Net finance (expense)/income from financial instruments	**(1.5)**	0.8

Treasury income on liabilities held at amortised cost represents amounts earned from clearing members' cash collateral deposits which attract negative interest rates. Treasury expense on assets held at amortised cost represents amounts where the Company incurs negative interest on its cash deposits.

Offsetting financial assets and financial liabilities

The Company reports financial assets and financial liabilities on a net basis on the balance sheet where there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The following table shows the impact of netting arrangements on all financial assets and liabilities that are reported net on the balance sheet.

As at 31 December 2016	Gross amounts €m	Amount offset €m	Net amount as reported €m
Derivative financial assets	2,491,349	(2,488,574)	2,775
Reverse repurchase agreements	305,918	(191,127)	114,791
Total assets	**2,797,267**	**(2,679,701)**	**117,566**
Derivative financial liabilities	(2,492,528)	2,489,753	(2,775)
Reverse repurchase agreements	(305,918)	191,127	(114,791)
Total liabilities	**(2,798,446)**	**2,680,880**	**(117,566)**

As at 31 December 2015	Gross amounts €m	Amount offset €m	Net amount as reported €m
Derivative financial assets	2,197,819	(2,194,955)	2,864
Reverse repurchase agreements	313,775	(196,265)	117,510
Total assets	**2,511,594**	**(2,391,220)**	**120,374**
Derivative financial liabilities	(2,189,981)	2,187,117	(2,864)
Reverse repurchase agreements	(313,775)	196,265	(117,510)
Total liabilities	**(2,503,756)**	**2,383,382**	**(120,374)**

As a CCP, the Company sits in the middle of clearing members' transactions and holds default funds and margin amounts as a contingency against the default of a clearing member. As such, further amounts are available to offset in the event of a default reducing the asset and liability of €117,566 million (2015: €120,374 million) to nil. Default funds for derivatives of €6,820 million (2015: €3,801 million), repurchase agreements of €1,171 million (2015: €1,163 million) and other transactions of €114 million (2015: €268 million) are held by the Company. In addition, the Company holds initial margin of €102,986 million (2015: €66,924 million) for derivatives, €11,525 million (2015: €10,097 million) for repurchase agreements and €1,464 million (2015: €1,429 million) for other transactions, as well as additional variation margin amounts which are not allocated by business line.

Included within member assets and liabilities are €327.5 million (2015: €376.6 million) and €220.2 million (2015: €112.8 million) respectively in relation to contracts where changes in net present value have settled to market (available for members to opt in with effect from December 2015).

20. Commitments and contingencies

Operating leases

At 31 December 2016 the Company had annual commitments under non-cancellable operating leases. The total future minimum lease payments due are as follows:

Property	**2016 €'m**	2015 €'m
Within one year	**3.6**	3.8
More than one year, but less than five	**13.4**	14.8
More than five years	**11.7**	17.8
	28.7	36.4

The main London office lease expires in 2026. The main New York office lease expires in 2023. Other leases are on rolling 12 month contracts.

Finance leases

The Company's finance leases for various items of office equipment expired during the year and no further payments as due.

	2016		2015	
	Minimum payments €'m	**Present value of payments €'m**	Minimum payments €'m	Present value of payments €'m
Within one year	-	-	0.5	0.4
Total minimum lease payments	-	-	0.5	0.4
Less: future financing charges	-	-	(0.1)	-
	-	-	0.4	0.4

Treasury assets supporting operational facilities

At 31 December 2016, the Company had assets and collateral in support of the following operational facilities:

	2016 €'m	2015 €'m
Central bank activity	**9,779.3**	3,057.6
Concentration bank services	**191.5**	353.0
Fixed Income settlement*	**21,647.3**	15,157.1
	31,618.1	18,567.7

* The Company holds collateral as security against tri-party cash loans as well as government debt and government backed bank issued debt, which is used to support RepoClear settlement activity.

21. Issued capital and reserves

Share capital

Ordinary shares

The company has 313,036,873 fully paid-up ordinary shares of €1.00 each in issue as at 31 December 2016 (2015: 313,036,873).

No shares were issued in the year. All the Company's shares are owned by LCH.Clearnet Group Limited.

Other reserves

Share premium

No additional share premium has been recognised on the shares issued in the year and the balance of €41.2 million is unchanged in the year.

Capital redemption reserve

The balance of €5.1 million is unchanged during the year and represents the nominal value of ordinary shares that have been repurchased and cancelled.

Distributable reserves

Retained earnings of €264.9 million (2015: €283.5 million) are regarded as distributable under the Companies Act 2006, but may be subject to additional regulatory restrictions (see note 23). Included within retained earnings is a revaluation reserve of €4.6 million (2015: negative €1.4 million) in relation to the Company's available for sale assets.

22. Dividends

	2016 €'m	2015 €'m
Final dividend paid of €0.1884 per ordinary share	**59.0**	-
Interim dividend paid of €0.0958 (2015: €0.0479) per ordinary share	**30.0**	15.0
Total dividends paid	**89.0**	15.0

On 1 March 2017, the Board of Directors proposed a dividend of €0.2268 per share (€71.0 million), which is scheduled for approval and payment in March 2017.

23. Capital management

The Company's approach to capital management is to maintain a strong capital base that will support the development of the business and meet regulatory capital requirements at all times. This is managed with reference to external capital requirements, including a consideration of future impacts to the Company. Capital plans are included within the Company's medium-term financial plan which is presented to the Board annually. The capital plans take into account current and future regulatory requirements and the development of the Company's business.

The Company is considered as a Qualifying Central Counterparty (QCCP) under the European Capital Requirements Regulations (CRR) as it has received authorisation under European Markets Infrastructure Regulations (EMIR). It is also registered as a Derivatives Clearing Organization (DCO) in the USA affording it QCCP status for USA members.

The Company is regulated by the Bank of England as a Recognised Clearing House under the Financial Services and Markets Act 2000 and is subject to capital adequacy rules under the EMIR. It is also regulated by the CFTC as a DCO in the USA, and is licensed by the Swiss Financial Markets Supervisory Authority (FINMA) as a CCP to SIX Swiss Exchange in Switzerland. In Canada it is recognised as a Clearing Agent by the Ontario Securities Commission (OSC) in Ontario, and the AMF in Québec, and in Australia it is recognised as a CCP by the Australian Securities & Investments Commission (ASIC). The Company is also subject to oversight by other market regulators and central banks in jurisdictions in which business is carried out.

The Company has fully complied with its externally imposed capital requirements in the year.

In particular the Company is required to ensure that its EMIR Capital Requirement (required by the Bank of England) is met by both its capital and audited reserves and adjusted liquid financial resources.

The Capital Requirement at the end of 2016 was €309.7 million (2015: €306.9 million) and as at the 31 December 2016 the Company's adjusted liquid financial assets were measured as €593.9 million (2015: €504.4 million) after deduction of the contribution to a clearing member default of €76.0 million (2015: €71.0 million). The Company's adjusted net capital as at 31 December 2016 was €477.8 million (2015: €500.3 million) after deduction of the contribution to a clearing member default. The audited retained earnings for the year of €70.4 million (2015: €71.5 million) will be included in the adjusted net capital of the Company when the financial statements have been approved for publication.

24. Government grants

The Company qualifies for government assistance in the form of research and development tax credits. The grant is received as a reduction of the tax payable. In 2016, €0.7 million has been recognised in the income statement as a reduction of expenses, and the amount of tax payable has been reduced by the same amount.

The grant is subject to potential tax audit to ensure the eligibility of the expenses claimed. No provision has been made for any repayment of the amounts receivable as this is deemed highly unlikely to occur.

25. Related party transactions

Key management personnel

Details of key management personnel and their total remuneration are disclosed in note 18.

Ultimate parent company and group companies

London Stock Exchange Group plc (LSEG) is the ultimate parent company of the Company and the largest group that prepares consolidated accounts. LCH.Clearnet Group Limited is the immediate parent company and the smallest group that prepares consolidated accounts.

Copies of the consolidated financial statements for LCH.Clearnet Group Limited for the year ended 31 December 2016 are available from the Company Secretary at the registered office. Copies of the consolidated financial statements for London Stock Exchange Group plc for the year ended 31 December 2016 are available from the Company Secretary, London Stock Exchange Group plc, 10 Paternoster Square, London, EC4M 7LS.

Other group companies

Sales to and purchases from other group companies are at arm's length and at normal market rates. Outstanding balances at the year end are unsecured and are settled in cash. For the year ended 31 December 2016, the Company has not raised any provision for doubtful debts relating to amounts owed by other group companies.

Details of transactions with the Company's parent, subsidiary and fellow subsidiary companies which have passed through the income statement during the year, together with details of outstanding balances, are set out below.

	2016 €m	2015 €m
Transactions with parent companies		
Income statement		
Services recharged to parent companies	**12.9**	12.1
Services recharged from parent companies	**(13.8)**	(11.0)
	(0.9)	1.1
Statement of financial position		
Intercompany loan from parent company (note 16)	**(96.1)**	-
Amount due from parent companies at 31 December	**7.5**	1.3

	2016 €m	2015 €m
Transactions with fellow subsidiaries		
Income statement		
Services recharged to fellow subsidiaries	**20.1**	15.1
Services recharged from fellow subsidiaries	**(51.6)**	(16.5)
	(31.5)	(1.4)
Statement of financial position		
Amount due from/(to) fellow subsidiaries at 31 December	**(9.8)**	3.5
Transactions with subsidiary company		
Income statement		
Royalties and maintenance recharged from subsidiary	**(8.4)**	(12.0)
Statement of financial position		
Intangible assets acquired from subsidiary company (note 8)	**22.3**	-
Amount due to subsidiary company at 31 December	-	(15.3)