DISCLAIMER

The PDF is an exact copy of the Annual Report & Accounts of LCH. Clearnet Group Limited as provided to the National Storage Mechanism.

The maintenance and integrity of the LCH.Clearnet Group Limited website 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 this website. Legislation in the United Kingdom governing the preparation and dissemination of the financial statements may differ from legislation in other jurisdictions.

Company number: 4743602

LCH.CLEARNET GROUP LIMITED

CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 **Company information**

Board of Directors		-
Type of director	<u>Name</u>	<u>Note</u>
Executive	Suneel Bakhshi (CEO)	
Independent	Lex Hoogduin (Chairman)	
Independent	lan Abrams	Senior Independent Director
Independent	Jill Considine	
Independent	Neil Walker	
Independent	Jonathan Eliot	
Independent	Shona Milne	Appointed 12 July 2016
Shareholder representative	Mike Bagguley	
Shareholder representative	Stéphane Boujnah	
Shareholder representative	Chris Corrado (LSEG)	
Shareholder representative	Jacques D'Estais	
Shareholder representative	Ashok Krishnan	
Shareholder representative	Xavier Rolet (LSEG)	
Shareholder representative	David Warren (LSEG)	
Shareholder representative	Jason Sippel	Appointed 12 July 2016
Shareholder representative	Puneet Malhi	Appointed 30 November 2016
Shareholder representative	Bob Greifeld	Resigned 30 November 2016
Customer representative	Yves Perrier	Resigned 22 December 2016
Secretary	Robert Franklin	
,		
	5 . O.V	

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: 4743602

LCH.Clearnet Group Limited is a majority owned subsidiary of London Stock Exchange Group plc (LSEG) and is the parent of the LCH group of companies.

Business model

The LCH group (the Group) is a leading multinational clearing house, with clearing operations in the UK, the Eurozone, the US and an expanding presence in the Asia-Pacific region. The Group 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 Central Counterparties (CCPs), the Group's operating companies sit 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 relevant CCP owns the defaulter's risk and becomes accountable for its liabilities. Fundamental to the Group's operating companies' 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 Group's operating companies process all cash flows and mark the trade or book to market, calling variation and initial margin in relation to the prevailing risk of the overall portfolio.

LCH 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.

Operating subsidiaries

LCH Limited (formerly LCH.Clearnet Limited) 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 (note 24). 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.

Banque Centrale de Compensation SA (trading as LCH SA), regulated by the L'Autorité de Contrôle Prudentiel et de Résolution (ACPR), acts as the clearing house for regulated markets in France, the Netherlands, Belgium and Portugal and for fixed income products and credit default swaps (CDS) traded either on regulated markets or trading platforms located in France, the UK and Italy. Its principal business is the provision of CCP clearing services in respect of equities and bonds, interest rate and commodity futures and options, equity and index futures and options, OTC bonds and repurchase agreements and CDS.

LCH.Clearnet LLC last cleared a trade in June 2016.

Strategic objectives

The LCH group'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 LCH Group's progress are as follows:

	2016	2015	Variance
SwapClear			
SwapClear members	107	116	-8%
Notional cleared (\$ trillion)	666.0	532.8	25%
Client trades ('000)	952	678	40%
CDSClear			
CDSClear members	12	11	9%
Notional cleared (€ billion)	449.2	172.8	160%
ForexClear			
ForexClear members	25	23	9%
Notional cleared (\$ billion)	3,190.7	1,049.6	204%
Fixed Income: notional cleared (€ trillion)	70.8	72.6	-3%
Listed Derivatives: contracts cleared (million)	131.9	142.8	-8%
Cash Equities: trades cleared (million)	697.2	549.1	27%
Average cash collateral (€ billion)	67.0	56.9	18%

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 19 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.

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Strategic report (continued)

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, after adjusting for the cessation of the US membership category (2015: 101 plus 15 US memberships). Total notional cleared increased by 25% to a record US\$666 trillion (2015: US\$533 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 noncleared margin rules in US, Canada and Japan in September 2016.

Total clearing fee revenue for the year was €197.6 million (2015: €180.7 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, LCH 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.

CDSClear

CDSClear clears the broadest set of credit default swaps (CDS) across both European and US underlyings with all the inherent netting benefits from being under the same risk framework. Close to 100 credit indices and 500 single names including CDS Referencing Banks are eligible for clearing, many of which are uniquely available at CDSClear.

CDSClear is dual registered (EMIR authorised in Europe, and in the US registered as a Derivative Clearing Organization (DCO) with the CFTC and as a Clearing Agency with the SEC), which allows it to act for members and clients both in the US and Europe.

CDSClear earns the majority of its clearing revenues from annual membership fees. CDSClear membership increased to 12 members (2015: 11), total notional cleared increased by 160% to €449 billion (2015: €173 billion).

In September 2016 the introduction of non-cleared margin rules saw clearing volumes of single name increase significantly with notional cleared rising by 277% to €58.4 billion in 2016 (2015: €15.5 billion). Total clearing fee revenue for the year was €24.8 million (2015: €24.8 million).

Fixed Income

LCH clearing in repo and cash bond markets remained broadly stable at €70.8 trillion in 2016 (2015: €72.6 trillion). The LCH Fixed Income service clears across 15 European government markets including LSEG's MTS bond markets and third party venues. Total clearing fee revenue for the year was €54.7 million (2015: €55.5 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 and Cash Equities

The various Listed Derivatives venues cleared by LCH include London Stock Exchange Derivatives Market (LSEDM), Euronext Derivatives Markets and NASDAQ's NLX. Contracts cleared in 2016 decreased by 8% to 131.9 million (2015: 142.8 million). In 2016, our product base expanded with the launch of Oslo contracts and weekly options with LSEDM. Partnering with Euronext, LCH expanded index futures and options and additional listing of spotlight options. In Commodities, a new nitrogen fertiliser contract was launched.

In Equities, LCH now offers the broadest venue coverage of any European equity CCP, clearing for 19 trading venues. In 2016 LCH expanded pan-European trading venue coverage with the addition of Sigma X MTF and UBS MTF. There was significant volume growth with trades cleared in 2016 increasing by 27% to 697.2 million (2015: 549.1 million).

Total clearing fee revenue for the year was €88.0 million (2015: €102.5 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 18% to €67.0 billion (2015: €56.9 billion). Total net treasury income for LCH for 2016 increased by 22% to €98.6 million (2015: €80.5 million) on increased SwapClear margin collected and by achieving increased spreads.

Cost of sales

Cost of sales for 2016 has increased to €68.3 million (2015: €39.0 million) reflecting the growth in SwapClear and other businesses.

Operating expenses

Operating expenses before non-recurring items have decreased by 1% to €331.3 million (2015: €334.6 million).

Future developments

Expected to launch mid 2017, LCH SwapAgent is a new service designed to simplify the processing, margining and settlement of non-cleared derivatives. LCH SwapAgent benefits from LCH's expertise in serving and managing risk for the cleared Rates and FX derivatives market providing solutions to materially improve standardisation, efficiency and simplicity in the bilateral derivatives market by extending the clearing infrastructure without requiring novation to a central counterparty.

Other key developments for LCH in 2017 are expected to be:

- ForexClear expansion includes plans to launch clearing for G10 countries NDFs and FX options
- for CDSClear, the European mandate to clear European index CDS is being introduced in 2017 with mandatory members clearing effective from February and large clients expected to clear from August
- in 2017, CDSClear membership is expected to increase with a new membership tier called Select Membership being
 introduced targeting non-CDS market maker banks. Clients are also set to start onboarding the CDSClear platform
 ahead of the CDS clearing obligation expected in the second quarter of 2017
- in Equities, LCH will aim to create greater efficiencies and enhanced capabilities in a highly competitive environment. LCH's next generation clearing platform with Millennium Technology is targeted to go live in late 2017

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Strategic report (continued)

Principal risks and uncertainties

The Group's activities expose it to a number of risks, principally market risk (financial market volatility, interest rate risk, foreign exchange risk), sovereign risk, credit risk, liquidity risk and pension risk. The Group 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 Group mitigates them.

Details of the Group's capital management processes are provided in note 24.

By order of the Board

Lex Hoogduin Chairman

2 March 2017

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Directors' report

The directors of LCH.Clearnet Group Limited (the Company), registered in England and Wales with company number 4743602, present their report to the shareholders, together with the audited consolidated financial statements for the year ended 31 December 2016. The principal activity of the Company is the holding of investments in operating subsidiaries.

Directors

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

Indemnity of directors

Directors are entitled to be indemnified by the Group 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 26 to the consolidated financial statements. There were no transactions, other than those disclosed in note 18, with directors during the year.

Staff

It is the policy of the Group 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 Group every effort will be made to ensure continued employment. Staff involvement is encouraged through regular meetings and information is shared with staff through web based communication. The Group 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.

Merger with Deutsche Börse and potential sale of LCH SA

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 ("Merger")

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.

On 3 January 2017, the Group announced it had agreed the sale of the LCH SA business to Euronext NV for an irrevocable all cash offer of €510 million subject to adjustments for surplus regulatory capital movement between 30 June 2016 and completion. The proposed sale is subject to the review and approval by the European Commission in connection with the Merger, which was announced on 16 March 2016, and the receipt of various regulatory and other consents and approvals, including completion of the Works Council consultation process. It is also conditional on the successful closing of the Merger and conditional upon Euronext NV shareholder approval at an Extraordinary General Meeting to be held in the first quarter of 2017.

The sale is expected to complete within the next financial year.

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Directors' report (continued)

Dividends

On 2 March 2016, the directors of the Company recommended a final dividend for the year ended 31 December 2015 of €0.40 per ordinary share. At the AGM of the Company on 31 March 2016, the shareholders approved the dividend of €29.7 million and payment was authorised to shareholders on 18 April 2016. As at the year end, €2.4 million remains unclaimed by shareholders (2015: €nil).

On 1 March 2017, the directors of the Company recommended a final dividend for the year ended 31 December 2016 of €0.40 per ordinary share subject to appropriate regulatory agreement. The dividend will be approved at the AGM of the Company on 30 March 2017, and will be paid to shareholders soon after.

Financial instruments

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

Future developments

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

Going concern and liquidity risk

The directors have made an assessment of the Group'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 Group 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 Group's ability to continue as a going concern. Therefore the financial statements continue to be prepared on the going concern basis.

Government grants

The Group has applied for Government grants in the form of tax credits in both the UK and France for research and development work carried out. The amounts have been recognised in the results of the Group when it is deemed likely that the credits will be received (note 27). 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 Group'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 Group'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 2 March 2017

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Statement of directors' responsibilities

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.

Independent auditor's report to the members of LCH.Clearnet Group Limited for the year ended 31 December 2016

We have audited the financial statements of LCH.Clearnet Group Limited for the year ended 31 December 2016 which comprise the consolidated income statement, the consolidated statement of comprehensive income, the consolidated and company statement of financial position, the consolidated and company statement of cash flows, the consolidated and company statement of changes in equity and the related notes 1 to 35. 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 and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

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 9), 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 group's and the parent 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 group's and of the parent company's affairs as at 31 December 2016 and of the group's profit for the year then ended
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union
- the parent company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006

Independent auditor's report to the members of LCH.Clearnet Group Limited for the year ended 31 December 2016 (continued)

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; and
 - 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 by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company 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

Frost 4 Young W

Maurice McCormick (Senior Statutory Auditor) for and on behalf of Ernst & Young LLP, Statutory Auditor London 2 March 2017

Notes:

- 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.

				· ·			
			2016			2015	
	Note	Before impairment & non-recurring items €'m	Impairment & non- recurring items €'m	Total €'m	Before impairment & non-recurring items €'m	Impairment & non- recurring items €'m	Tota €'n
Clearing fees		376.2	-	376.2	374.1		374.1
Other fee income		90.1	-	90.1	70.6	-	70.6
Revenue sharing							
arrangements		(24.9)	-	(24.9)	(28.1)	-	(28.1)
Revenue		441.4	-	441.4	416.6	_	416.6
Treasury income	19	380.5	-	380.5	205.5	-	205.5
Treasury expense	19	(281.9)	-	(281.9)	(125.0)	-	(125.0)
Net treasury income		98.6	-	98.6	80.5	-	80.5
Settlement and other inco	me	32.7	-	32.7	21.7	-	21.7
Settlement fees payable		(25.4)	-	(25.4)	(22.7)	-	(22.7)
Net settlement and other in	come	7.3	-	7.3	(1.0)	-	(1.0)
Total income		547.3	-	547.3	496.1	-	496.1
Revenue share costs	-	(55.8)	-	(55.8)	(27.2)	-	(27.2)
Other cost of sales		(12.5)	-	(12.5)	(11.8)	-	(11.8)
Total cost of sales		(68.3)	-	(68.3)	(39.0)	-	(39.0)
Gross profit		479.0	-	479.0	457.1	-	457.1
Operating expenses	5	(331.3)	(11.7)	(343.0)	(334.6)	(0.6)	(335.2)
Operating profit		147.7	(11.7)	136.0	122.5	(0.6)	121.9
Finance income	7	1.3	-	1.3	0.8	_	0.8
Finance expense	7	(16.4)	-	(16.4)	(12.6)	-	(12.6)
Profit before taxation		132.6	(11.7)	120.9	110.7	(0.6)	110.1
Taxation expense	8	(35.8)	(1.5)	(37.3)	(31.1)	(0.3)	(31.4)
Profit for the year		96.8	(13.2)	83.6	79.6	(0.9)	78.7

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

The notes on pages 19 to 74 form an integral part of these consolidated financial statements.

	Note	2016 €′m	201! €′n
Profit for the year		83.6	78.7
Amounts that will subsequently be reclassified to profit for the year when specific conditions are met:			
Exchange differences on retranslation of foreign operations		0.3	3.7
Revaluation of available for sale assets		4.9	(1.8
Amounts reclassified to the income statement in the year		1.5	0
Amounts that will not subsequently be reclassified to profit for the year:			
Current tax relating to revaluation of available for sale assets	8	(0.2)	0.
Deferred tax relating to revaluation of available for sale assets	8	(0.9)	
Remeasurement (losses)/gains on UK defined benefit plan	18	(31.0)	11.
Deferred tax relating to remeasurement of the UK defined benefit plan	8	11.5	(4.1
Remeasurement (losses)/gains on overseas defined benefit plans	18	(0.6)	0.8
Deferred tax relating to the remeasurement of overseas defined benefit plans	8	0.2	(0.3
Other comprehensive income for the year, net of tax		(14.3)	10.6
Total comprehensive income for the year, net of tax		69.3	89.3

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

The notes on pages 19 to 74 form an integral part of these consolidated financial statements.

<u> </u>			
	Note	2016 €′m	2015 (re presented)' €'m
Non-current assets			
Intangible assets	9	298.7	265.8
Property, plant and equipment	11	19.7	15.6
Trade and other receivables	13	1.4	0.9
Employment benefits	18	2.1	34.2
Deferred tax asset	8	10.6	8.5
Total non-current assets		332.5	325.0
Current assets			
Balances with clearing members	12	376,298.0	366,206.4
Trade and other receivables	13	210.2	107.6
Income tax receivable		0.1	0.2
Clearing business cash and cash equivalents	14	59,861.3	38,493.5
Cash and cash equivalents	14	983.8	903.1
Clearing business other financial assets	19	21,623.3	18,163.0
Total current assets		458,976.7	423,873.8
Total assets		459,309.2	424,198.8
Command link like			
Current liabilities			4
Balances with clearing members	12	(446,678.8)	(415,254.5)
Trade and other payables	15	(278.5)	(238.6)
Income tax payable	4.5	(3.6)	(9.8)
Interest bearing loans and borrowings	16	(179.8)	(0.4)
Provision for liabilities	20	-	(0.4)
Default funds	17	(11,183.2)	(7,561.6)
Total current liabilities		(458,323.9)	(423,065.3)
Non-current liabilities			
Interest bearing loans and borrowings	16	-	(179.3)
Trade and other payables	15	(12.0)	(18.9)
Deferred tax liability	8	-	(4.0)
Employment benefits		(6.1)	(4.8)
Total non-current liabilities		(18.1)	(207.0)
Total liabilities		(458,342.0)	(423,272.3)
Net assets		967.2	926.5

Capital and reserves	Note	2016 €′m	2015 (re- presented)* €'m
Called up share capital	22	74.2	74.2
Share premium	22	316.1	316.1
Capital reserves	22	15.3	15.3
Capital redemption reserve	22	59.5	59.5
Franslation reserve	22	6.7	6.4
Retained earnings	22	495.4	455.0
Fotal equity		967.2	926.5

^{*} For details of the re-presentation see page 19.

Lex Hoogduin Chairman **Suneel Bakhshi** Chief Executive Officer

The notes on pages 19 to 74 form an integral part of these consolidated financial statements.

The consolidated financial statements were approved by the Board on 2 March 2017.

		2016	2015 (re- presented)*
		€'m	€′m
Cash flows arising from operating activities			
Profit for the year		83.6	78.7
Tax expense	8	37.3	31.4
Finance income	7	(1.3)	(0.8)
Finance expense	7	16.4	12.6
Depreciation and amortisation	5	47.0	39.7
Impairment of intangible assets	5	-	1.4
Research and development tax credit	27	(0.7)	-
Share-based payments expense		7. 5	5.9
Increase in trade and other receivables		(103.1)	(33.5)
Increase in trade and other payables		33.1	90.5
Provisions utilised or released during the year		(0.4)	(1.6)
Unrealised fair value losses/(gains) on financial instruments		2.0	(3.1)
Increase in clearing business cash and cash equivalents		(21,367.8)	(11,611.1)
(Increase)/decrease in fair value of member assets		(10,091.6)	6,429.3
Increase in fair value of member liabilities		31,424.3	7,363.6
Increase/(decrease) in default funds		3,621.6	(2,009.2)
Net cash inflow from operations		3,707.9	393.8
Tax paid		(36.0)	(5.8)
Net cash inflows from operating activities		3,671.9	388.0
Investing activities			
Investment in intangible assets		(74.8)	(62.0)
Purchase of property, plant and equipment		(9.6)	(9.6)
Purchase of clearing business other financial assets		(3,460.3)	(234.5)
Net cash outflow from investing activities		(3,544.7)	(306.1)
Financing activities			
Interest received		2.6	1.3
Interest paid		(17.2)	(13.5)
Dividends paid		(27.3)	-
Share-based payments contribution		(7.5)	(5.9)
Finance lease principal payments		(0.4)	(0.4)
Net cash used in financing activities		(49.8)	(18.5)

	2016 €′m	2015 (re- presented)* €'m
Increase in cash and cash equivalents	77.4	63.4
Cash and cash equivalents at 1 January	903.1	836.2
Effects of foreign exchange movements	3.3	3.5
Cash and cash equivalents at 31 December	983.8	903.1
Cash and cash equivalents at 31 December comprise:		
Investments in secured short-term deposits	477.5	589.3
Cash at bank and in hand	506.3	313.8
	983.8	903.1

^{*} For details of the re-presentation see page 19.

The notes on pages 19 to 74 form an integral part of these consolidated financial statements.

	Called up share capital €'m	Share premium €'m	Other reserves €'m	Translation reserve €'m	Retained earnings €'m	Total €'m
Shareholders' equity at 1 January 2015	74.2	316.1	74.8	2.7	368.9	836.7
Profit for the year ended 31 December 2015	-				78.7	78.7
Other comprehensive income	-	-	-	3.7	6.9	10.6
Total comprehensive income	-		-	3.7	85.6	89.3
Share-based payments contribution	-	-	-	-	5.9	5.9
Share-based payments expense net of tax	-	-	-	-	(5.4)	(5.4)
Shareholders' equity at 31 December 2015	74.2	316.1	74.8	6.4	455.0	926.5
Profit for the year ended 31 December 2016	-	-	-	-	83.6	83.6
Other comprehensive expense	-	-	-	0.3	(14.6)	(14.3)
Total comprehensive income	•	-	-	0.3	69.0	69.3
Dividend approved during the year	•	-	-	-	(29.7)	(29.7)
Share-based payments contribution	-	-	-	-	7.5	7.5
Share-based payments expense net of tax	-	-	-	-	(6.4)	(6.4)
Shareholders' equity at 31 December 2016	74.2	316.1	74.8	6.7	495.4	967.2

Other reserves comprise a capital redemption reserve of €59.5 million (2015: €59.5 million) and capital reserves of €15.3 million (2015: €15.3 million).

The notes on pages 19 to 74 form an integral part of these consolidated financial statements.

1. Summary of significant accounting policies and basis of preparation

Basis of preparation

These consolidated financial statements have been prepared in accordance with IFRSs and the 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 Group 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 impairments 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.

Consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries with all intercompany balances and transactions eliminated. As permitted by Section 408 of the Companies Act 2006, the Company's income statement has not been included in these financial statements. The Company's result for the year is disclosed on page 75.

Basis of consolidation

Subsidiaries are consolidated from the date on which the Group obtains control and continue to be consolidated until the date that such control ceases. Control comprises the power to direct the activities of the subsidiary so as to obtain a variable return from its activities. This is achieved in general through direct ownership of voting rights.

The financial statements of the subsidiaries are prepared for the same reporting year as the Company using consistent accounting policies. Adjustments are made to bring into line any dissimilar accounting policies that may exist. All significant intra-group balances and transactions have been eliminated on consolidation.

Changes in accounting presentation

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

The movement for 2015 has been re-presented. On 1 January 2015, the Group had total cash of €27,718.4 million, of which €836.2 million was own cash; at 31 December 2015 the Group had total cash of €39,396.6 million, of which €903.1 million was own cash. The remaining cash forms part of the Group'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 Group's consolidated financial statements are presented in euros, which is also the functional currency of the Company. Items included in the financial statements of each of the Group's entities are measured using their functional currency.

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.

Estimates

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 goodwill and other intangible assets: the Group determines whether
 indefinite life goodwill is impaired on an annual basis and this requires an estimation of the value in use of cash
 generating units to which the goodwill is allocated. 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 10)
- 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

Judgements

As at 31 December 2016, no potential business disposal met the highly probably criteria set out in the requirements of IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" and as such the Group has not classified any assets as held for sale or classified any business as discontinued.

Investments

In its separate financial statements, 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 individual entities are translated into the functional currency of the entity 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.

On consolidation, the results of non-euro denominated businesses are translated into euros at the average exchange rates for the period. The assets and liabilities of these businesses are translated into euros at the exchange rate prevailing at the reporting date; any exchange differences arising are recognised within other comprehensive income.

Goodwill arising on the acquisition of non-euro denominated entities is treated as an asset of that entity and translated into euros at the exchange rate prevailing at the reporting date.

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

Goodwill

Goodwill arising on an acquisition is the fair value of consideration less the fair value of the net assets acquired. Goodwill is capitalised in the statement of financial position within intangible assets. Following initial recognition goodwill is measured at initial value less any accumulated impairment losses.

Intangible assets other than goodwill

Intangible assets other than goodwill 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 Group'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 on a straight line basis 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 to five years
- office equipment and other fixed assets over three to 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 goodwill, intangible assets, and property, plant and equipment

Goodwill and 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 asset may not be fully recoverable.

For the purpose of impairment testing, goodwill and other assets are allocated to cash generating units monitored by management. The impairment review involves a comparison of the carrying amount of the goodwill or other 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 goodwill, 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.

The carrying amount of goodwill allocated to a cash generating unit is taken into account when determining the gain or loss on disposal of the unit.

Financial instruments

The Group 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 assets, loans and receivables, cash and short-term deposits, own cash, 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 instruments 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 instruments 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 instruments with fixed or determinable payments and fixed maturities which the Group has the intention and ability to hold to maturity. After initial measurement held to maturity financial assets 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. The Group no longer classifies any financial instruments as held to maturity.

Securities sold under agreements to repurchase at a specified future date are not derecognised from the statement of financial position as the Group retains substantially all the risks and rewards of ownership. The corresponding cash received is recognised in the consolidated 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 Group. 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 Group. 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 instruments 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). Own cash represents the cash and short-term deposits that form part of the Group's working capital. The remainder is held on behalf of members.

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, including preferred securities, 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 Group 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 Group 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 Group.

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 derecognition 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 where the effect of discounting would be immaterial.

Preference shares

Preferred securities are classified as liabilities where there is an obligation to transfer economic benefits to their holder and are recognised at amortised cost. Set up costs related to the instruments issued are initially capitalised and amortised over the expected life of the instrument. Finance costs are recognised as a finance expense in the period they become due. Preferred securities of the Group that have been re-acquired are recognised as a reduction of the liability.

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 income 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 Group. 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 Group 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 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 Group operates defined benefit and defined contribution pension schemes for its employees.

The cost of providing benefits under the defined benefit plans is determined using the projected unit method. Under this method each participant's benefits under the schemes 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 contribution payable to a defined contribution plan is in proportion to the services rendered by the employees and is recorded as an expense in the income statement within employee benefits as incurred.

Share-based compensation

The Group 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 Group and recognised over the relevant vesting period.

The share-based compensation plans are accounted for as equity settled. The Group does record a cost for these transactions, representative of the fact that the Group 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 Group is a lessee. Leases of property, plant and equipment where substantially all the risks and rewards of ownership have passed to the Group 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 consolidated 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 Group 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 Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data is 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 Group 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 Group 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 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.

Government grants

Grants receivable are recognised in the income statement over the period in which the expenses are incurred when there is an expectation that the amounts will be received.

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 Amendment to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets:	1 January 2016
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 Amendments to IFRS 10, IFRS 12 and IAS 28: Investment Entities – Applying the	1 January 2016
Consolidation Exception	1 January 2016
Amendments to IAS 1: Disclosure Initiative	1 January 2016

Notes to the consolidated financial statements (continued)

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	pe	riods
begiı	nning	on	or	after

	negiming 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 (and later clarifications)*	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 will be adopted for the 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 Group's 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 Group's control; and (iii) how performance obligations are satisfied in contracts providing several services to customers.

The Group 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 21.

2. Risk management

Introduction

The Group'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 Group is also exposed to other risks such as operational, legal, compliance and reputational risk. The Group 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 Group Board. Day to day responsibility is delegated to the Group Chief Risk Officer, who ensures effective delegation to the executives in the operating subsidiaries on the basis of risk policies which are calibrated to the Board's risk appetite and are discussed and agreed by the Group's risk committees and boards. The application of these policies is undertaken by the business functions as the first line of defence and by the group risk management team forming the second line of independent assurance, who control and manage the exposures arising from the various clearing activities. Risk policies are harmonised across the Group. The continued appropriateness of risk policies and key risk data are regularly reviewed by the Group and CCP Boards and the board Risk sub-Committees, and audits of processes within risk management are undertaken periodically.

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 Boards. The Framework describes the overall risk appetite of the Group and its CCPs, 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 CCP Chief Risk Officers.

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 Group operates can adversely affect its earnings and its ability to meet its business objectives. The Group CCPs run a balanced position in all cleared contracts and run no significant market risk unless a clearing member defaults. In such an event the Group 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 Group are reviewed and approved by its Risk Committees and Boards at least annually. A range 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 Group 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 over a 12 month time horizon.

Potential market risk is reduced by collecting variation margin on marked to market positions and by establishing initial margin requirements which are the Group'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 Group CCPs accept 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.

Fotal collateral held	2016 €′bn	2015 €'bn
Margin received in cash	72.1	52.8
Margin received in non-cash securities	79.0	56.8
Guarantees	1.1	1.0
Total margin liability	152.2	110.6

The maximum margin liability during the year was €163.3 billion (2015: €116.9 billion).

New applicants for clearing must meet strict credit, financial and operational criteria, which are regularly reviewed as part of the Group'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 operating subsidiaries also require 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 CCPs' own capital and further clearing member contributions to ensure the continuity of ongoing operations. The operating subsidiary 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 €11.2 billion (2015: €7.6 billion) (note 17). The maximum amount during the year was €11.6 billion (2015: €10.1 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, stress losses 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 Group'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, ensuring that the Group is able to measure, monitor and mitigate exposures to sovereign risk and respond quickly to actual or anticipated changes.

The Risk Committees and Boards continually monitor such risks and the sovereign risk framework continues to protect the Group against potentially severe market volatility in the sovereign debt markets. The Group has investments in the following Sovereigns (or equivalent issuer) as at 31 December 2016:

	20:	2015		
	Investment	Proportion	Investment	Proportion
	value	of portfolio	value	of portfolio
Sovereign (or equivalent)	€ billion	%	€ billion	%
France	18.3	40	17.9	57
USA	13.9	30	5.4	17
Netherlands	5.7	12	0.4	1
United Kingdom	4.4	10	3.6	12
European Union	1.0	2	1.3	4
Other	3.0	6	2.6	8
Total	46.3	100%	31.2	100%

The above total includes all other financial assets of €21,623.3 million (2015: €18,163.0 million) along with central bank cash deposits.

Credit risk

Risk description

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

Risk management approach

The Group'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 LCH Limited'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 applied in respect of losses that arise other than from a clearing member's default and which threaten the CCP's solvency. These rules were 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 €82.5 billion (2015: €57.6 billion), of which 99.9% (2015: 99.8%) was invested securely with an overall average maturity of 56 days (2015: 31 days). The maximum portfolio size during the year was €86.3 billion (2015: €65.3 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 CCP Boards 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 Group 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 Group 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.

As at 31 December 2016 the total interoperating margin placed with and received under reciprocal arrangements with other CCPs amounted to €4,514.2 million and €4,581.5 million (2015: €3,678.2 million and €3,323.8 million) respectively. 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 Group's clearing member balances and investment portfolio by reference to the credit rating (Fitch) of the counterparties. The treasury portfolio includes cash at bank and other financial assets.

	Note	2016 €′m	2015 €′m
Fair value of transactions with clearing members (ratings a		-	
Clearing members rated AAA		17,467.9	24,962.6
AA		2,582.9	4,816.8
AA-		7,781.6	21,354.0
A+		55,214.3	38,218.2
A		114,735.4	140,381.5
A-		38,045.8	12,582.5
BBB+		101,462.7	96,274.2
ВВВ		7,604.0	2,791.7
Other, < BBB		16,360.0	14,839.2
Unrated		7,723.8	4,181.7
	12	368,978.4	360,402.4
Group investment portfolio (ratings assigned with reference	e to major agencies)		
AAA/AA+/AA/AA- Government backed		46,375.4	31,184.7
AA/AA+/AAA Secured		3,502.0	2,724.9
AA/AA+/AAA Unsecured			67.0
A/A-/A+/A/A-/BBB+ Secured		32,463.3	23,507.8
A/A+/AA- Unsecured		127.7	75.2
		82,468.4	57,559.6

The total credit risk of the Group is represented by the total financial assets of the Group 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 Group CCPs' activities, and in order to avoid excessive concentrations of risk each 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 22.2% of the total investment portfolio to the French Government (2015: 31.1% to the French 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 group CCPs from a narrow risk management perspective as well as from a macro-economic and regulatory perspective.

Risk management approach

The LCH CCPs acknowledge that while some level of procyclicality may be unavoidable, as they must protect themselves 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 Group is exposed to interest rate risk arising from the cash and investment balances it maintains, and 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 Group's capital is managed within interest rate risk limits expressed as a percentage of each subsidiary's capital and calculated under stressed scenarios.

Interest rate sensitivity analysis

The Group aims to minimise its exposure to interest rate fluctuations. Any exposure is predominantly due to the mismatch between the Group'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 Group 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 the consolidated profit after tax and on retained earnings within shareholders' equity:

5	2016			2015		
	+25bp €'m	+50bp €′m	+100bp €′m	+25bp €′m	+50bp €'m	+100bp €′m
Net exposure of cash and member margin balances	(11.9)	(23.8)	(47.6)	(16.2)	(32.5)	(64.9)
Tax effect of above	2.5	5.0	9.9	4.5	9.0	17.9
Decrease in profit after tax	(9.4)	(18.8)	(37.7)	(11.7)	(23.5)	(47.0)
	-25bp €′m	-50bp €′m	-100bp €'m	-25bp €'m	-50bp €'m	-100bp €′m
Net exposure of cash and member margin balances	11.9	23.8	47.6	16.2	32.5	64.9
Tax effect of above	(2.5)	(5.0)	(9.9)	(4.5)	(9.0)	(17.9)
Increase in profit after tax	9.4	18.8	37.7	11.7	23.5	47.0

Liquidity risk

Risk description

Liquidity risk is the risk that the Group 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 Group 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 CCPs in the Group have sufficient cash to meet their payment obligations supported by facilities to meet short term imbalances between available cash and payment obligations. The CCPs maintain 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 CCPs can continue to meet their obligations to clearing members and other counterparties.

The Group'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 Committees and Boards. On a day to day basis CaLM is tasked with ensuring that each Group CCP 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, secured financing facilities and for LCH SA, which is a bank within the Eurozone, access to central bank liquidity. LCH 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 Group'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
Transactions with clearing members	-	(367,324.1)	(1,652.4)	(1.9)	(368,978.4)
Initial margin and other clearing member					
balances	-	(77,700.4)	-	-	(77,700.4)
Default funds	-	-	(11,183.2)	-	(11,183.2)
Trade and other payables	(83.1)	(31.9)	(134.2)	(2.3)	(251.5)
Preferred securities (net)	-	-	(191.8)	-	(191.8)
Interest bearing loans and borrowings	-	-	-	_	
			Three		
		Less than	months to	One to	
	On demand	three months	one year	five years	Total
As at 31 December 2015	€′m	€'m	<u>€′</u> m	€′m	€'m
Transactions with clearing members Initial margin and other clearing member	-	(358,724.3)	(1,677.7)	(0.4)	(360,402.4)
balances	-	(54,852.1)	-	_	(54,852.1)
Default funds	<u>-</u>	-	(7,561.6)		(7,561.6)
Trade and other payables	(6.6)	(121.0)	(92.4)	-	(220.0)
Preferred securities (net)	-	-	(11.8)	(191.8)	(203.6)
Interest bearing loans and borrowings	-	(0.1)	(0.3)		(0.4)

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 56 days (2015: 31 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

Foreign exchange risk arises because Group companies generally incur expenses in their respective local currencies while earning revenues and treasury income in several major currencies. Group companies translate net assets and liabilities arising in other currencies (principally UK sterling and US dollars within LCH Limited) to their functional currencies.

Risk management approach

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

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

Foreign exchange sensitivity

The Group reviews sensitivities to movements in exchange rates which are appropriate to market conditions. As at 31 December 2016, the Group has considered movements in LCH Limited 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 Group. 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 LCH Limited's 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.

In addition, the net assets of the Group are exposed to foreign exchange exposure on the retranslation of a foreign subsidiary's net assets at the balance sheet date in US dollars. This retranslation does not affect the net profit of the Group, but passes through other comprehensive income and affects equity.

The table below also includes the impact on equity if the euro had moved 10% against the US dollar.

	2016		2015		
	Post-tax profit €'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)	(1.9)	(0.5)	(2.9)	
US dollar – euro weaken	1.0	2.4	0.6	3.6	

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 Group'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 Group makes a payment or delivery without simultaneously receiving the delivery or payment from the counterparty.

LCH.Clearnet Group Limited

Consolidated financial statements for the year ended 31 December 2016

Notes to the consolidated financial statements (continued)

Risk management approach

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

Settlement bank risk

Risk description

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

Risk management approach

The Group 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 Group, the clearing members remain liable for the fulfilment of their payment obligations to the Group CCPs.

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 Group is low, the Group 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 Group's entities may not maintain sufficient capital to meet their 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 Group's approach to capital management and a review of the current regulatory requirements are detailed in note 24. In addition:

 the default waterfalls for each clearing service feature LCH 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 each CCP in the Group

- the non-default loss provision for LCH Limited (as detailed on page 30) 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 Group can manage its capital structure by varying returns to shareholders, issuing new shares or increasing or reducing borrowings

Pension risk

Pension risk arises from the potential deficit in the Group's defined benefit pension plans due to a number of factors such as mortality rates or changes in inflation assumptions. The schemes are 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 Group is exposed to equity market risk.

The main pension obligation in the Group relates to the LCH section of the London Stock Exchange Group pension scheme in the UK. It 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 LCH Limited 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 Group has adopted a framework, supported by tailored enterprise-wide software, to systematically 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 both to the Group Board and to the CCP Boards.

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 Group's senior management and Audit Committees. 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 Group'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 Committees and senior management. Any significant weaknesses are reported to the relevant Boards.

The Group 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 LCH operates.

It is the responsibility of the Heads of the Legal, Regulatory and Compliance functions to provide assurance to the Boards 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 Group 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 Group (and is measureable), a provision is made representing the expected cost of settling such claims.

Reputational risk

The maintenance of the Group's strong reputation is key to its continued profitability and is the responsibility of the Boards, management and staff. In particular the efficiency, reliability and effectiveness of the day to day operations of the Group 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 Boards when issues arise.

Brexit

LCH Limited 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 to the euro for the Group 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. Segment information

For management purposes the Group is organised into business units based on legal entities and has three reporting operating segments:

- LCH Limited based in the UK, with a presence in New York (USA), Sydney (Australia) and Tokyo (Japan). The LCH.Clearnet LLC operations (which last cleared a trade in June 2016) are also included within this segment (as the business lines that existed in LCH.Clearnet LLC also exist in LCH Limited and were operated on a consistent basis)
- LCH SA based in mainland Europe with its main operations in France, it also has branches in Belgium and the Netherlands and a representative office in Portugal
- Other, the remainder of the Group's activities. For 2016, this also includes the set-up costs of SwapAgent. The segmental treatment of this business will be assessed following its launch in 2017

These segments reflect the way in which the Group's chief operational decision makers monitor results and determine resource allocation within the Group.

The appropriate segment has directly attributable costs allocated to it. Where costs are not directly attributable, the relevant portion is allocated on a reasonable basis to each segment. Assets that are jointly used by two or more segments are allocated across segments.

Transfer pricing between segments is set on an arm's length basis in a manner similar to transactions with third parties.

LCH Limited and LCH SA derive revenues through their activities as clearing houses. They provide CCP services in respect of OTC markets, a broad range of cash and derivative products traded on or through various exchanges and trading platforms in the UK/Europe (LCH Limited), mainland Europe (LCH SA), the US, Australia, and Japan (LCH Limited).

Of other Group companies, LCH.Clearnet (Luxembourg) S.à.r.l. earned royalties from Group companies who used intellectual property in their operations owned by it during the year, but had ceased trading by the year end. LCH.Clearnet Group Limited earns revenue from the operating subsidiaries in the form of management fees and dividends.

Management monitors the operating results of its business units separately for the purposes of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on operating profit or loss and is measured consistently with operating profit or loss in the consolidated financial statements.

Segmental information					
Income statement	2016				
	Ltd €'m	SA €′m	Other €'m	Total €'m	
Revenue	333.2	108.2	-	441.4	
Net treasury income	71.8	26.8	-	98.6	
Net settlement and other revenue	1.7	5.6	-	7.3	
Inter-segment revenue	2.4	-	(2.4)	-	
Total income	409.2	140.5	(2.4)	547.3	
Operating profit before impairment and non-recurring items	94.4	47.1	6.2	147.7	
Non-recurring items	(7.6)	(2.8)	(1.3)	(11.7)	
Operating profit	86.8	44.3	4.9	136.0	
Finance income	1.3	-	-	1.3	
Finance expense	(2.8)	(1.0)	(12.6)	(16.4)	
Profit/(loss) before taxation	85.3	43.3	(7.7)	120.9	
Taxation expense	(21.4)	(14.4)	(1.5)	(37.3)	
Profit/(loss) for the year	63.9	28.9	(9.2)	83.6	
Non-cash items:					
Fair value loss on financial instruments	1.0	1.0	-	2.0	
Depreciation of property, plant and equipment	4.9	0.3	-	5.2	
Write down of intangible assets	1.4	-		1.4	
Amortisation of intangible assets	23.1	10.2	7.1	40.4	

		2015		
	Ltd	SA	Other	Tota
	€'m	€′m	€'m	€'m
Revenue	309.2	107.4	-	416.6
Net treasury income	54.7	25.8	-	80.5
Net settlement and other revenue	(5.8)	4.8	-	(1.0)
Inter-segment revenue	4.1	_	(4.1)	-
Total income	362.2	138.0	(4.1)	496.1
Operating profit before impairment and non-recurring items	69.8	45.4	7.3	122.5
Impairment and non-recurring items	(1.2)	0.6	-	(0.6)
Operating profit	68.6	46.0	7.3	121.9
Finance income	0.8	-	_	0.8
Finance expense	(0.1)	(0.2)	(12.3)	(12.6)
Profit/(loss) before taxation	69.3	45.8	(5.0)	110.1
Taxation expense	(18.9)	(15.1)	2.6	(31.4)
Profit for the year	50.4	30.7	(2.4)	78.7
Non-cash items:				
Fair value gain on financial instruments	(1.6)	(1.5)	-	(3.1)
Depreciation of property, plant and equipment	4.2	1.4	-	5.6
Impairment of intangible assets	1.4	-	-	1.4
Amortisation	17.5	8.1	8.5	34.1
Assets and liabilities		2016		
	Ltd €'m	SA €'m	Other €'m	Total €'m
Total assets	184,899.1	274,330.3	79.8	459,309.2
Total liabilities	(184,257.4)	(273,904.1)	(180.5)	(458,342.0)
Net assets	641.7	426.2	(100.7)	967.2
		2015		
	Ltd €'m	SA €'m	Other €'m	Total €'m
Total assets	164,357.9	259,776.9	64.0	424,198.8
Total liabilities	(163,710.2)	(259,392.6)	(169.5)	(423,272.3)
Net assets	647.7	384.3	(105.5)	926.5

Non-current assets by geographical location	2016 €m	2015 €m
ик	173.2	150.5
Other European	159.3	174.5
Total	332.5	325.0

Non-current assets are as defined in the statement of financial position.

5. Operating expenses

The following items are included in operating expenses (total operating expenses includes impairment and non-recurring items; a full analysis is given in note 6):

	2016 €′m	2015 (*re- presented) €'m
Staff costs (note 18)	196.2	225.1
Depreciation and amortisation (see below)	47.0	41.1
Other operating expenses	99.8	69.0
Operating expenses	343.0	335.2
Depreciation and amortisation		
Amortisation of intangible assets	40.4	34.1
Depreciation of property, plant and equipment	5.2	5.6
Write down of intangible assets (note 10)	1.4	-
Impairment of intangible assets (note 10)	•	1.4
	47.0	41.1
Other operating expenses include:		
Property lease rentals	4.2	7.8
Foreign exchange losses/(gains)	1.6	(2.7)
Auditors' remuneration:		
Fees payable for the audit of the Company	0.1	0.1
Fee's payable to the auditor of the Company for other services:		
Fees payable for the audit of the Company's subsidiaries	1.3	0.7
Other assurance services on behalf of the Company's subsidiaries	-	0.1
	1.4	0.9

^{*}Staff costs have been re-presented for 2015, see note 18.

6. Impairment and non-recurring items		
	2016 €'m	2015 €′m
SA social plan provision	-	0.8
Restructuring programme	(11.7)	-
Impairment of intangible assets	-	(1.4)
Total impairment and non-recurring items	(11.7)	(0.6)
Tax effect of non-recurring items	(1.5)	(0.3)
Net impairment and non-recurring items	(13.2)	(0.9)

In December 2013, the Group initiated a restructuring plan for LCH SA, the Group's French CCP ("SA social plan"), and a net amount of €18.9 million was provided for on the statement of financial position. Since 2014, unused amounts previously provided have been released back through the income statement. The provision is now fully utilised.

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

7. Finance income and expense

	2016 €′m	2015 €'m
Interest and other costs charged in respect of:		
Preferred securities (net)	(12.3)	(12.3)
Net finance expense on pension liabilities	(0.1)	
Interest paid on cash and cash equivalents and finance leases	(4.0)	(0.3)
	(16.4)	(12.6)
Interest received in respect of:		
Net finance income on pension assets	1.2	0.8
Interest received on cash and cash equivalents	0.1	_
Net finance expense	(15.1)	(11.8)

Finance expense includes amounts where the Group earns negative interest on its cash deposits of €3.9 million (2015: €0.3 million).

8. Taxation		
The major components of taxation expense are:		
	2016	2015
Current tax	€'m	€'m
United Kingdom current tax charge	(15.9)	(13.5)
Adjustments in respect of current taxation in previous years	0.2	(3.2)
Overseas current tax charge	(15.9)	(14.1)
Adjustments in respect of current taxation in previous years	0.5	-
Total current taxation	(31.1)	(30.8)
Deferred tax		
Deferred tax relating to the origination and reversal of temporary differences	(5.4)	(2.9)
Adjustments in respect of prior years	(0.5)	2.9
Re-measurement of deferred tax – change in corporation tax rate	(0.3)	(0.6)
Tax expense reported in the consolidated income statement	(37.3)	(31.4)
Consolidated statement of comprehensive income		
Tax relating to remeasurement of overseas defined benefit pension plans	0.2	(0.3)
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)	0.3
Tax credit/(expense) reported in the statement of comprehensive income	10.6	(4.1)
Consolidated statement of changes in equity		
Tax allowance on share awards in excess of expense recognised	1.1	0.5
Tax credit reported directly in equity	1.1	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	120.9	110.1
Tax at UK statutory corporation tax rate of 20.0% (2015: 20.25%)	(24.2)	(22.3)
Effect of:		
Deferred tax not recognised in the US	(3.5)	(2.2)
Adjustments in respect of prior periods	0.2	(0.3)
Impairment of deferred tax asset in Luxembourg	(4.5)	-
Disallowed expenses	(0.5)	
Re-measurement of deferred tax - change in corporation tax rate	(0.9)	(0.6)
Net effect of higher rates of overseas taxation	(7.3)	(6.0)
Non-taxable income	3.9	0.3
Provision for diverted profits tax	(1.0)	_
Foreign exchange adjustment	0.5	(0.3)
Total tax charge	(37.3)	(31.4)
Effective corporate tax rate	30.9%	28.5%

The UK Finance Bill 2015 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% or 17% dependent on when the timing differences are expected to reverse.

The increase in the effective tax rate (ETR) for the Group of 2.4%, from 28.5% in 2015 to 30.9% in 2016 primarily reflects the release of the deferred tax asset held in the Luxembourg entity. The Luxembourg entity is in the process of being wound up and the intellectual property it held on behalf of the Group has been transferred to the UK and French entities. Longer term it is expected that the company's ETR will decline back to the 2015 level of 28.5%.

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 diverted profits tax.

Exchange differences have arisen on the translation of the closing sterling tax balances which are due to HMRC in the UK.

Deferred tax		ated statement nancial position		income itement
>	201 €′		2016 €′m	2015 €'m
Post-employment benefits	(0.			(0.5)
Reduced depreciation for tax purposes	•	. 3 5.4	(0.5)	0.3
Tax losses recoverable against future profits		- 4.4	•	0.5
Tax on provisions and other temporary differences	6	. 7 6.7	(4.2)	(0.9)
Deferred tax charge		F	(6.2)	(0.6)
Net deferred tax asset	10	.6 4.5		
	UK €'m	Luxembourg €'m	France €'m	Total €'m
Net deferred tax asset/(liability) at 1 January 2016	(4.0)	4.5	4.0	4.5
Deferred tax in income statement	(2.0)	-	0.3	(1.7)
Deferred tax asset derecognised in the year	-	(4.5)		(4.5)
Deferred tax relating to provisions and other timing differences	0.2	-	-	0.2
Deferred tax relating remeasurement gains on defined benefit pension plans	11.5	-	0.2	11.7
Foreign exchange movements	0.4	-	-	0.4
Net deferred tax asset at 31 December 2016	6.1		4.5	10.6
	UK €′m	Luxembourg €′m	Other overseas €'m	Total €'m
Net deferred tax asset/(liability) at 1 January 2015	(1.1)	3.9	6.2	9.0
Deferred tax in income statement	0.7	0.6	(1.9)	(0.6)
Deferred tax relating to provisions and other timing differences	0.5	-	-	0.5
Deferred tax relating to remeasurement gains on defined benefit pension plans	(4.1)	-	(0.3)	(4.4)
Net deferred tax asset/(liability) at 31 December 2015	(4.0)	4.5	4.0	4.5

Deferred tax assets of €3.3 million (2015: €9.9 million) arising from tax losses of €7.9 million in the year (2015: €22.1 million) in certain subsidiaries are not recognised as they are not considered recoverable in the foreseeable future.

9. Intangible assets

		2016			2015	
	Self- developed software €'m	Goodwill €'m	Total €'m	Self- developed software €'m	Goodwill €'m	Total €'m
Cost			· . <u>-</u>			
At 1 January	352.9	534.1	887.0	290.8	534.1	824.9
Additions	74.8	-	74.8	62.0	-	62.0
Write down (note 10)	(1.4)	-	(1.4)	-	-	
Disposals	(6.9)	-	(6.9)	(0.2)	-	(0.2)
Exchange differences	(0.1)	-	(0.1)	0.3	-	0.3
At 31 December	419.3	534.1	953.4	352.9	534.1	887.0
Accumulated amortisation and impairment						
At 1 January	197.5	423.7	621.2	162.2	423.7	585.9
Amortisation charge for the year	40.4	-	40.4	34.1	-	34.1
Impairment in the year	-	-	-	1.4	-	1.4
Disposals	(6.9)	-	(6.9)	(0.2)	-	(0.2)
At 31 December	231.0	423.7	654.7	197.5	423.7	621.2
Net book value at 31 December	188.3	110.4	298.7	155.4	110.4	265.8

The portion of capitalised self-developed software costs disclosed above that relates to software not currently brought into use amounted to €71.0 million (2015: €48.2 million). No amortisation has been charged during the year against these assets (2015: €nil), but instead they are tested for impairment (see note 10) and a write down of €1.4 million was recognised in the year.

Goodwill consists of the amount arising from the acquisition of LCH SA in 2003 (see note 10).

10. Impairment testing of intangible assets

The Group carries out annual impairment testing on goodwill and other intangible assets in December of each year, or more often if circumstances show that an impairment may be likely.

Goodwill is carried in relation to LCH SA, a wholly owned subsidiary, which is also the cash generating unit (CGU) to which the goodwill is allocated. The recoverable amount associated with this subsidiary is determined based on value in use calculations. The calculations have been checked against the announced value agreed for the potential sale of LCH SA to ensure consistency.

For other 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 Group'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 Group's long-term strategic objectives to determine appropriate short and medium 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, the Group's estimated market risk premium and a premium to reflect inherent risks

In early 2017, a market value for LCH SA was ascertained, and this has been incorporated into the impairment testing results. The impairment tests have been completed on the two possible outcomes – that LCH SA is disposed of for consideration of €510 million or that LCH SA is retained by the Group and earns future cash flows.

Impairment results

Having completed the tests as described above:

- Two independent tests were carried out on the value of the goodwill, which was found not to be impaired in both cases:
 - o Firstly, the discounted cash flow approach where LCH SA is retained by the Group. The excess of value in use over carrying value was found to be €873.5 million (2015: €431.1 million) at 31 December 2016
 - o Secondly, the fair value approach, using the known fair value of LCH SA in the event of a disposal. In this case the excess over the carrying value was found to be €76.0 million at 31 December 2016
- Self-developed software not yet in use of value €1.4 million (2015: nil) was found to be impaired. This is due to the uncertainty of the future cash flows that relate to this asset. The cost of this asset was written down. Other intangible assets were found not to be impaired (2015: not impaired).

Sensitivity analysis

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

Goodwill

As at 31 December 2016	Base case	Adjusted	Increase in impairment
			€′m
Reduction in clearing revenues	various	-10.0%	-
Cash flow growth beyond the five year period	2.0%	0%	-
Pre-tax discount rate	11.6%	14.6%	-
As at 31 December 2015	Base case	Adjusted	Increase in impairment €'m
Reduction in clearing revenues	various	-10.0%	-
Cash flow growth beyond the five year period	2.0%	0%	_
Pre-tax discount rate	10.5%	13.5%	
Self-developed software			
As at 31 December 2016	Base case	Adjusted	Increase in impairment
			€′m
Reduction in clearing revenues	various	-10.0%	-
Pre-tax discount rate	11.6%	14.6%	•
As at 31 December 2015	Base case	Adjusted	Increase in impairment €'m
Reduction in clearing revenues	various	-10.0%	-
Pre-tax discount rate	10.5%	13.5%	_

11. Property, plant and equipment

			Office	
	1		equipment and	
	Leasehold	Computer	other fixed	
As at 31 December 2016	refurbishment €'m	equipment	assets	Tota
Cost	€m	€′m	€'m	€'n
At 1 January	11.9	45.5	6.7	64.:
Additions	0.3	9.3	0.7	-
Disposals	(0.4)	(10.4)	- /4 4\	9.0
At 31 December	11.8	44.4	(1.1) 5.6	(11.9 61.8
	2210		3.0	UI.
Accumulated depreciation				
At 1 January	6.0	36.3	6.2	48.5
Depreciation charge for the year	0.9	4.1	0.2	5.2
Disposals	(0.3)	(10.4)	(0.9)	(11.6
At 31 December	6.6	30.0	5.5	42.1
Net book value at 31 December	5.2	14.4	0.1	19.7
			Office	
		_	equipment and	
	Leasehold	Computer	other fixed	
As at 31 December 2015	refurbishment	equipment	assets	Tota
Cost	€'m	€'m	€′m	€'m
At 1 January	12.0	36.3	6.6	54.9
Additions	0.3	9.2	0.1	9.6
Disposals	(0.4)	J.2 -	-	(0.4)
At 31 December	11.9	45.5	6.7	64.1
Accumulated depreciation				
At 1 January	5.5	31.9	6.0	43.4
Depreciation charge for the year	0.8	4.4	0.2	5.4
Disposals	(0.3)		-	(0.3)
At 31 December	6.0	36.3	6.2	48.5
Net book value at 31 December	5.9	9.2	0.5	15.6

2016 2015 €'m €'m Assets Fair value of transactions with clearing members 368 978 4 360 402 4

Assets		
Fair value of transactions with clearing members	368,978.4	360,402.4
Other clearing member balances	7,319.6	5,804.0
	376,298.0	366,206.4
Liabilities		
Fair value of transactions with clearing members	(368,978.4)	(360,402.4)
Initial margin and other clearing member balances	(77,700.4)	(54,852.1)

The balances due from clearing members recorded in the consolidated statement of financial position of €368,978.4 million (2015: €360,402.4 million) are fully secured by collateral held by the Group. At 31 December 2016 the total of fully collateralised loans in respect of fixed income transactions was €366,203.4 million (2015: €391,740.0 million). This collateral has in turn, been passed on to fixed income counterparties to secure the Group's liabilities in respect of fixed income contracts.

(446,678.8)

(415,254.5)

The total net amount of non-cash collateral, including that in respect of initial margin, relating to other balances due from clearing members was €78,958.6 million (2015: €56,785.2 million) and the total amount of guarantees held was €1,088.0 million (2015: €1,007.8 million).

Other clearing member balances include €4,514.2 million (2015: €3,678.2 million) due from and €4,581.5 million (2015: €3,323.8 million) due to Cassa di Compensazione Garanzia S.p.A (CC&G), a fellow LSEG subsidiary company. Net treasury income also includes interest paid of €11.0 million and interest received of €10.2 million on these balances.

13. Trade and other receivables

12. Balances with clearing members

	2016	2015
	€′m	€'m
Non-current		
Other receivables	1.4	0.9
Current		
Trade receivables	48.9	46.4
Other receivables	41.2	50.5
Provision for bad debts	(0.1)	(0.4)
Prepayments	10.2	10.5
Margin receivable on reverse repurchase contracts	110.0	-
Accrued income	-	0.6
	210.2	107.6

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	506.3	313.8
Short-term deposits	477.5	589.3
Cash and cash equivalents	983.8	903.1
Clearing business cash at bank	23,932.7	12,532.6
Clearing business short-term deposits	35,928.6	25,960.9
Clearing business cash and cash equivalents	59,861.3	38,493.5
	60,845.1	39,396.6

The short-term deposits are fully collateralised by sovereign and investment grade corporate securities in accordance with eligibility criteria approved by the Group's Risk Committees.

€121.4 million (2015: €117.7 million) of the own cash amount is restricted as the Group's CCP-level own resources to be used in the default waterfalls. This is allocated by default fund on a pro rata basis for LCH Limited and LCH SA.

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	2.6	-
Other payables	9.4	18.9
	12.0	18.9
Current		
Trade payables	5.6	9.7
Other taxation and social security	16.6	9.1
Other payables	136.0	87.8
Margin payable on reverse repurchase contracts	56.3	71.5
Accruals and deferred income	64.0	60.5
	278.5	238.6

Other payables (current and non-current) include liabilities of €18.9 million (2015: €28.4 million) that were created in 2014 on the recognition of intangible assets as a result of the renegotiated operating agreements in respect of SwapClear, CDSClear 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 related to a change in accounting estimates of prior year net receivable balances. 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 amount of €7.0 million was recorded.

16. Interest bearing loans and borrowings

	2016 €'m	2015 €′m
Current		
Finance leases	-	0.4
Preferred securities	179.8	-
	179.8	0.4
Non-current		
Preferred securities	-	179.3
	-	179.3

Preferred securities

The Group issued €200 million non-voting, non-cumulative preferred securities on 18 May 2007. Interest is payable annually in arrears at a fixed rate of 6.576% until 18 May 2017 and then at 2.1% above three month EURIBOR. The preferred securities are redeemable in whole at the option of the Group on 18 May 2017 or any distribution date thereafter. The preferred securities are listed on the Dublin Stock Exchange through Freshwater Finance PLC.

In January 2009 the Group repurchased preferred securities with a nominal value of €20.0 million at a cost of €10.5 million. The fair value of these securities as at 31 December 2016 was €20.0 million (2015: €20.5 million).

Bank overdrafts

In order to assist with day to day liquidity management the Group maintains a number of uncommitted money market and overdraft facilities with a number of major banks. Effective interest rates on these facilities vary depending on market conditions.

17. Default funds

The purpose of the default funds is to absorb any losses incurred by the Group 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 held separately by each CCP entity to cover the risks that each company faces, and are split into several different funds in each company to cover the different business lines of that company. The total default funds held by the Group at 31 December 2016 were €11,183.2 million (2015: €7,561.6 million).

18. Employee benefits

i) Staff costs

All staff and directors	2016 €'m	2015 (re- presented) €'m
Salaries and other benefits	151.3	188.3
Social security costs	20.5	21.7
Share-based payment costs	7.5	5.9
Pension costs	8.5	9.5
Staff costs before non-recurring items	187.8	225.4
Staff costs included in non-recurring items (note 6)	8.4	(0.3)
Total staff costs	196.2	225.1

The average number of staff on a full-time equivalent basis during the year was 926 (2015 (re-presented): 956). The average number of actual staff during the year was 936 (2015 (re-presented): 959). The Company has no employees.

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 employee benefits	5.8	6.4
Share-based payment costs	2.2	4.0
Pension contributions	0.3	0.3
Deferred bonus and other long-term employee benefits	0.9	2.4
Aggregate emoluments of for key management personnel	9.2	13.1

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 director and certain senior staff who are regarded as running the business on a day to day basis.

Directors' remuneration

	2016 €′m	2015 €'m
Remuneration	3.4	2.5
Total remuneration	3.4	2.5

Where directors left the Board at the same time as they were compensated for loss of employment, the full value of such

costs has been included. 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 €1,935,041 in the year (2015: €1,427,581).

No directors are in the LCH section of LSEG's defined benefit pension schemes. Contributions of €100,449 (2015: €71,150) have been made on behalf of one director to the UK defined contribution scheme.

One director (the highest paid director) participates 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

LCH Group 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:

- a) The LSEG Long Term Incentive Plan 2014 (LSEG LTIP)
- b) The LCH Group Long Term Incentive Plan (LCH LTIP)
- c) The LSEG SAYE Option Scheme and LSEG International Sharesave Plan (together SAYE schemes)
- d) 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 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 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 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 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 qualifying 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 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 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, US and France (and approved by HMRC in the UK). The options vest in full after three years, providing the employee remains employed by the LCH.Clearnet 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 are as follows:

	LSEG LTIP	LCH LTIP	SAYE sch	emes Weighted average exercise	Restricted Plans
	Number	Number	Number	price (£)	Number
1 January 2015	123,555	298,089	204,120	12.79	72,271
Granted in year	48,820	345,609	35,870	20.42	32,470
Exercised in year	-	-	-	-	(27,050)
Lapsed/forfeited in year		(12,796)	(9,867)	13.06	-
31 December 2015	172,375	630,902	230,123	13.90	77,691
Granted in year	31,935	368,144	41,961	22.38	22,404
Exercised in year	-	-	(6,189)	13.61	(47,347)
Lapsed/forfeited in year	(1,392)	(154,361)	(54,621)	14.12	(15,398)
31 December 2016	202,918	844,685	211,274	15.54	37,350

18,542 of the options were exercisable as at 31 December 2016 (2015: nil). The 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
As at 31 December 2010	outstanding	Tears
LSEG LTIP - nil	202,918	0.80
LCH LTIP - nil	844,685	1.61
SAYE - over £11.00	211,274	0.88
Restricted Plans - nil	37,350	1.16
Total	1,296,227	

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 I	.TIP	LCH L	TIP
	Performance	Matching	Performance	Matching
	shares	shares	shares	shares
Grant date	17/03/2016	18/03/2016	17/03/2016	18/03/2016
Grant date share price	£28.90	£28.92	£28.90	£28.92
Options granted	8,876	23,059	291,200	50,570
Expected life (years)	3 years	3 years	3 years	3 years
Dividend yield	1.00%	1.00%	1.00%	1.00%
Risk-free interest rate	0.60%	0.50%	0.60%	0.50%
Volatility	25%	25%	25%	25%
Fair value TSR	£10.22	£10.15	-	_
Fair value EPS	£28.04	£28.06	-	-
Fair value non-market conditions	<u>-</u>	-	£28.04	£28.06

	LCH LTIP		LCH LTIP SAYE		Restrict	ed Plans
	Performance shares	Matching shares				
Grant date	23/06/2016	23/06/2016	05/05/2016	17/03/2016	14/10/2016	
Grant date share price	£27.35	£27.35	£26.14	£28.90	£28.43	
Options granted	13,187	13,187	41,961	12,677	9,727	
Expected life (years)	3 years	3 years	3.16 years	0.8 – 3 years	0.38 – 3.54 years	
Exercise price	-	_	£22.38	-	-	
Dividend yield	0.80%	0.80%	0.90%	1.00%	1.31%	
Risk-free interest rate	0.60%	0.60%	0.60%	0.3% - 0.6%	0.12% - 0.29%	
Volatility	26%	26%	25%	25%	25.2% - 29.4%	
Fair value non-market conditions	£26.70	£26.70	£6.11	£28.04 - £28.61	£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 LCH Group pays fixed contributions to a defined contribution pension scheme in the UK and there is no legal or constructive obligation to pay further contributions. The assets of the plan are held separately from those of the LCH Group in a fund under the control of the trustees. The total expense charged in the income statement of €6.9 million (2015: €7.8 million) represents contributions payable to the plan by the LCH Group at rates specified in the rules of the plan.

Defined benefit schemes

The Group 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 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 LCH Limited 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 December 2016, but will only be completed later in 2017.

The Group has obligations in respect of retirement indemnity and long-service award schemes in Paris. The provisions have been calculated by a qualified independent actuary as at 31 December 2016.

The obligations in respect of certain staff in an independent defined benefit scheme in Porto were assumed in 2006. An updated valuation of these funds was carried out at 31 December 2016 by a qualified independent actuary.

Details of the regulatory environment and risks can be found in note 2.

The valuations of the UK scheme conducted for financial reporting purposes are based on the triennial actuarial valuation as at 30 June 2013. The other schemes were subject to a full valuation at 31 December 2016. A summary of the principal assumptions used is detailed below. The Group 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					
	UK	France	Porto	UK	France	Porto
Discount rate	2.7%	1.5%	1.5%	4.0%	2.0%	2.0%
Rate of salary increase	n/a	2.5%	2.5%	n/a	3.0%	3.0%
Rate of price inflation	3.3%	2.0%	1.5%	3.2%	2.0%	2.0%
Rate of pension increases	2.3%	n/a	1.5%	2.2%	n/a	1.5%

Implied life expectancy at age 60

	2016			2015		
	UK	France	Porto	UK	France	Porto
Male currently aged 60	28.1	23.3	20.6	28.3	23.3	20.6
Male currently aged 45	29.7	23.3	20.6	29.9	23.3	20.6
Female currently aged 60	30.4	27.5	20.6	30.5	27.5	20.6
Female currently aged 45	32.2	27.5	20.6	32.4	27.5	20.6

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.

	Chanaes	in	benefit	obligation
--	---------	----	---------	------------

		2016	
	UK	France	Porto
8.	€′m	€′m	€'m
Benefit obligation as at 1 January	236.0	4.9	0.4
Pension expense:			
Current service cost	20 10	0.4	
Past service loss		-	_ ■.
Net interest	8.1	0.1	
Re-measurement losses/(gains):			
Effect of changes in demographic assumptions	(3.3)	0.5	
Effect of changes in financial assumptions	94.3	0.3	0.1
Effect of experience adjustments	-	(0.1)	
Reduction in obligation due to settlement	-	-	
Benefits paid	(5.7)	-	
Foreign exchange	(32.6)	-	
Benefit obligation as at 31 December	296.8	6.1	0.5
		2015	
	UK	France	
	UK €′m		Porto €'m
Benefit obligation as at 1 January		France	€′m
Benefit obligation as at 1 January Pension (income)/expense:	€'m	France €'m	€'m
	€'m	France €'m	€′m
Pension (income)/expense:	€'m	France €'m 5.4	€′m
Pension (income)/expense: Current service cost	€'m 238.5	France €'m 5.4	Porto €'m 0.5
Pension (income)/expense: Current service cost Past service loss	€'m 238.5 - 0.1	France €'m 5.4 0.4	€′m
Pension (income)/expense: Current service cost Past service loss Net interest	€'m 238.5 - 0.1	France €'m 5.4 0.4	€′m
Pension (income)/expense: Current service cost Past service loss Net interest Re-measurement losses:	€'m 238.5 - 0.1	France €'m 5.4 0.4	€'m 0.5
Pension (income)/expense: Current service cost Past service loss Net interest Re-measurement losses: Effect of changes in demographic assumptions	€'m 238.5 - 0.1 9.4	France €'m 5.4 0.4 - 0.1	€'m 0.5
Pension (income)/expense: Current service cost Past service loss Net interest Re-measurement losses: Effect of changes in demographic assumptions Effect of changes in financial assumptions	€'m 238.5 - 0.1 9.4	France €'m 5.4 0.4 - 0.1	€'m 0.5
Pension (income)/expense: Current service cost Past service loss Net interest Re-measurement losses: Effect of changes in demographic assumptions Effect of changes in financial assumptions Effect of experience adjustments	€'m 238.5 - 0.1 9.4	France €'m 5.4 0.4 - 0.1	€'m 0.5
Pension (income)/expense: Current service cost Past service loss Net interest Re-measurement losses: Effect of changes in demographic assumptions Effect of changes in financial assumptions Effect of experience adjustments Reduction in obligation due to settlement	€'m 238.5 - 0.1 9.4 - (21.5)	France €'m 5.4 0.4 - 0.1 - (0.6) (0.3)	€′m

			2016	
		UK	France	Porto
		€′m	€′m	€'m
Fair value of scheme assets as at 1 January		270.2	-	0.5
Pension income:				
Net interest		9.3	•	
Re-measurement gains:				
Return on plan assets (excluding interest income)		60.0	-	-
Employer contributions		3.0	0 	-
Benefits paid		(5.7)	•	
Foreign exchange		(37.9)	-	-
Fair value of scheme assets as at 31 December		298.9	-	0.5
			2015	
		UK	France	Porto
		€′m	€'m	€'m
Fair value of scheme assets as at 1 January	2	259.2	-	0.5
Pension income:		233.2		0.5
Net interest		10.2	-	_
Re-measurement gains:				
Return on plan assets (excluding interest income)		(9.8)	_	_
Employer contributions		0.1	0.1	
Benefits paid		(3.8)	(0.1)	_
Foreign exchange		14.3	-	-
Fair value of scheme assets as at 31 December		270.2	-	0.5
Fair value of scheme assets with a quoted market price				
an value of self-inc assets with a quoted market price				
	2016		2015	
	UK	Porto	UK	Porto
	€'m	€'m	€′m	€'m
Cash and cash equivalents	2.7	0.1	3.9	0.1
Equity instruments	122.3	0.1	127.0	0.1
Debt / LDI instruments	173.9	0.3	139.3	0.3
Total fair value of assets	298.9	0.5	270.2	0.5
	(20C 0)	(O E)	(236.0)	(0.4)
Present value of funded obligations	(296.8)	(0.5)	(230.0)	(0.4)

LCH.Clearnet Group Limited

Consolidated financial statements for the year ended 31 December 2016

Notes to the consolidated financial statements (continued)

Sensitivity analysis

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

	2016			2015		
	UK €′m	France €'m	Porto €'m	UK €′m	France €'m	Porto €'m
Discount rate - increase by 0.5%	(38.6)	(0.5)	(0.1)	(28.7)	(0.3)	(0.1)
Revaluation in deferment (CPI) and salary increases -						
increase by 0,5%	12.1	0.4	-	11.7	0.2	-
Pension increases in payment - increase by 0.5%	19.6	-	-	13.9	-	_
Life expectancy - increase by 1 year	8.1	-	-	5.2	-	-

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

Payments from the defined benefit schemes

The following payments are expected to be made in future years out of the defined benefit plans' obligations:

	UK	France	Porto	
	€′m	€′m	€'m	
Within the next 12 months	2.7	-	-	
Between 2 and 5 years	11.3	0.6	-	
Following 5 years	15.9	2.3		
Total	29.9	2.9	-	

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 UK 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

Financia	assets and	i liabilities

Financial assets and liabilities			2015 /20
	Note	2016 €'m	2015 (re- presented) €'m
Financial assets at fair value through profit or loss		<u> </u>	
Fair value of transactions with clearing members	12	368,978.4	360,402.4
Government issued bonds		11,045.8	13,365.5
Available for sale assets			
Government issued bonds		10,577.5	4,658.4
Held to maturity assets			
Government issued bonds		-	139.1
Other financial assets in the statement of financial position		21,623.3	18,163.0
Loans and receivables			
Trade and other receivables	13	200.7	93.1
Other clearing member balances	12	7,319.6	5,804.0
Clearing business cash and cash equivalents including short-term deposits	14	59,861.3	38,493.5
Cash and short-term deposits	14	983.8	903.1
Financial liabilities at fair value through profit or loss			
Fair value of transactions with clearing members	12	(368,978.4)	(360,402.4)
Financial liabilities at amortised cost			
Trade and other payables	15	(251.5)	(220.0)
Initial margin and other clearing member balances	12	(77,700.4)	(54,852.1)
Default funds	17	(11,183.2)	(7,561.6)
Interest bearing loans and borrowings	16	(179.8)	(179.7)

Prepayments and other taxes within trade and other receivables are not classified as financial assets. Other taxes, provisions 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.

Based on market prices at 31 December 2016 the fair value of the Group's preferred securities is €180.3 million (2015: €184.1 million) at the year-end compared to the amortised cost carrying value of €179.8 million (2015: €179.3 million) as shown in note 16.

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

Fair value hierarchy

The Group 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 Group has no financial instruments in this category

The Group 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	368,962.3	368,974.4	6.8	360,395.6	360,402.4	
Government issued bonds at fair value through the profit or loss	11,045.8	-	11,045.8	13,365.5	8 -	13,365.5	
Government issued bonds available for sale	10,577.5	-	10,577.5	4,658.4	-	4,658.4	
Liabilities measured at fair value					1AT-		
Fair value of transactions with clearing members	(12.1)	(368,962.3)	(368,974.4)	(6.8)	(360,395.6)	(360,402.4)	
Other items where fair value is known							
Government issued bonds held at amortised cost	•		-	139.1	-	139.1	
Preferred securities	(180.3)	-	(180.3)	(184.1)	-	(184.1)	

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	38.1	8.8
Treasury income on other financial assets	111.1	54.4
Treasury income on liabilities held at amortised cost	233.3	139.2
Net fair value gain/(loss) on revaluation of other financial assets held at fair value included in net interest income	(2.0)	3.1
Treasury income	380.5	205.5
Treasury expense on assets held at fair value	(47.1)	(27.5)
Treasury expense on assets held at amortised cost	(102.9)	(21.5)
Treasury expense on liabilities held at amortised cost	(131.9)	(76.0)
Treasury expense	(281.9)	(125.0)
Net treasury income	98.6	80.5
Net finance income on pension fund assets	1.1	0.8
Finance income on assets held at amortised cost	0.1	_
Finance expense on assets held at amortised cost	(4.0)	(0.2)
Finance expense on overdrafts and finance leases held at amortised cost	-	(0.1)
Finance expense on loans and borrowings held at amortised cost	(12.3)	(12.3)
Net finance expense	(15.1)	(11.8)

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 Group incurs negative interest on its cash deposits.

Offsetting financial assets and financial liabilities

The Group 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	Amount offset	Net amount as reported
	€'m	€'m	€'m
Derivative financial assets	2,491,349	(2,488,574)	2,775
Reverse repurchase agreements	588,401	(222,198)	366,203
Total assets	3,079,750	(2,710,772)	368,978
Derivative financial liabilities	(2,492,528)	2,489,753	(2,775)
Reverse repurchase agreements	(588,401)	222,198	(366,203)
Total liabilities	(3,080,929)	2,711,951	(368,978)
As at 31 December 2015	Gross	Amount	Net amount as
	amounts € ′m	offset €'m	reported €'m
Derivative financial assets	2,198,126	(2,195,260)	2,866
Reverse repurchase agreements	589,961	(232,425)	357,536
Total assets	2,788,087	(2,427,685)	360,402
Derivative financial liabilities	(2,190,289)	2,187,423	(2,866)
Reverse repurchase agreements	(589,961)	232,425	(357,536)
Total liabilities	(2,780,250)	2,419,848	(360,402)

As CCPs, the Group's operating companies sit in the middle of clearing members' transactions and hold default funds and margin amounts as a contingency against the default of a member and so further amounts are available to offset in the event of a default reducing the asset and liability of €368,978 million (2015: €360,402 million) to nil. Default funds for derivatives of €8,734 million (2015: €5,283 million), repurchase agreements of €2,335 million (2015: €2,011 million) and other transactions of €114 million (2015: €268 million) are held by the Group. In addition, the Group holds margin of €107,027 million (2015: €71,158 million) for derivatives, €32,762 million (2015: €29,424 million) for repurchase agreements and €3,086 million (2015: €3,080 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. Provisions

In December 2013, the Group initiated a restructuring plan for LCH SA, the Group's French CCP, and a net amount of €18.9 million was provided for on the statement of financial position. The provision was not discounted as it was expected that the provision would be substantially utilised during 2014. A small balance has carried forward beyond that date, but has been fully utilised in the year.

	Restructuring provision SA €'m
As at 1 January 2015	
Released in the year	2.0 (0.5)
Utilised in the year	(1.1)
As at 31 December 2015	0.4
Utilised in the year	(0.4)
As at 31 December 2016	

21. Commitments and contingencies

Operating leases

The Group leases offices under non-cancellable operating leases. The total future minimum lease payments due are as follows:

Property	2016 €′m	2015 €′m
Within one year	6.4	6.6
More than one year, but less than five	24.2	25.7
More than five years	17.2	26.0
	47.8	58.3

The main London office lease expires in 2026, the Paris office lease in 2023 and the main New York office lease in 2023. Other leases are on rolling 12 month contracts or are immaterial.

Finance leases

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

	20	2015		
Amounts due:	Minimum payments €'m	Present value of 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

LCH.Clearnet Group Limited

Consolidated financial statements for the year ended 31 December 2016

Notes to the consolidated financial statements (continued)

Supplier agreements

LCH SA and the ATOS group have a five year IT service contract, effective from 1 January 2014. The estimated maximum value of the commitment to December 2018 is up to €25.3 million (2015: €37.2 million), assuming no early termination.

Treasury assets supporting operational facilities

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

	2016 €′m	2015 €′m
Central bank activity ¹	12,349.5	5,296.8
Concentration bank services	191.5	353.0
Fixed income settlement ²	21,647.3	15,157.1
	34,188.3	20,806.9

¹LCH SA pledges securities that have been provided as collateral for clearing activity with Banque de France for the purpose of securing overnight borrowing.

²LCH Limited 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.

22. Issued capital and reserves

Share capital

Ordinary shares

The company has 74,193,814 fully paid-up ordinary shares of €1.00 each in issue as at 31 December 2016 (2015: 74,193,814).

No ordinary shares were issued in the year (2015: nil).

Non-cumulative callable preference shares (NCPS)

The company is authorised to issue 200,000 NCPS of €1.00 each in the event that the Group's capital ratios fall below the minimum required by the relevant regulatory authority for a period of six months. As at 31 December 2016, none of these shares have been issued (2015: nil).

Other reserves

Share premium

The share premium reserve is €316.1 million (2015: €316.1 million).

Capital reserves

The capital reserve of €15.3 million (2015: €15.3 million) represents the difference between the called-up share capital of the Company and the called-up share capital, share premium account and capital redemption reserve of LCH Limited at 19 December 2003, when the Group was formed, less the amount transferred to retained earnings in 2007 as part of a court approved capital restructuring.

Capital redemption reserve

The balance of €59.5 million (2015: €59.5 million) represents the nominal value of the ordinary shares that were repurchased and cancelled in 2007, 2008, and 2009.

Translation reserve

The balance €6.7 million (2015: €6.4 million) represents the movement when retranslating the net assets of the Group's non-euro denominated subsidiaries.

Retained earnings

Retained earnings of €495.4 million (2015: €455.0 million) include €19.9 million of non-distributable reserves reflecting the nominal value of the redeemable convertible preference shares redeemed in 2007. €81.2 million (2015: €26.9 million) of the Company's reserves are regarded as distributable. Included within retained earnings is a revaluation reserve of €4.9 million (2015: negative €1.4 million) in relation to the Group's available for sale assets.

23. Dividends

	2016	2015
	€′m	€′m_
Final dividend for 31 December 2015, approved 31 March 2016: €0.40 per ordina	ry share 29.7	-

A final dividend for 2016 of €0.40 per ordinary share was recommended by the board on 2 March 2017 and is expected to be approved at the AGM on 30 March 2017.

24. Capital management

The Group's approach to capital management is to maintain a strong capital base that will support the development of the business, meet regulatory capital requirements at all times and maintain good credit ratings. This is managed with reference to external capital requirements, including a consideration of future impacts to the Group. Capital plans are included within the Group'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 Group's business. The Group monitors capital resources in relation to its capital requirements.

LCH Limited and LCH SA are considered as Qualifying Central Counterparties (QCCPs) under the European Capital Requirements Regulations (CRR) as they have received authorisation under European Markets Infrastructure Regulations (EMIR). Both companies are registered as DCOs in the USA affording them QCCP status for USA members.

Compliance with capital adequacy regulations

The Group is lead-regulated by the Autorité de Contrôle Prudentiel et de Resolution (ACPR) in France as a Compagnie Financiere under French law and is subject to capital adequacy rules under Basel III.

LCH SA is regulated as a credit institution by the ACPR and as a CCP and an investment service provider by L'Authorité des marchés financiers (AMF) in Québec, Canada. It is subject to standard capital adequacy rules under EMIR and Basel III. It is also regulated by the CFTC as a DCO in the USA.

LCH Limited 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 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). LCH Limited is also subject to oversight by other market regulators and central banks in jurisdictions in which business is carries out.

LCH.Clearnet LLC (LLC) is regulated by the CFTC as a DCO. On 30 June 2016 LLC became inactive for CFTC regulatory purposes. On 16 August 2016 notice was given to the CFTC to rescind the QCCP status with effect from 13 February 2017 (after a 180 day notice period).

The Group and its subsidiaries have been fully compliant with the respective capital adequacy regulations throughout 2016.

Basel III capital calculation

In accordance with the Basel III Pillar I framework the Group is required to maintain ratios of capital to risk weighted assets that cannot fall under a threshold of 5.125% (including capital conservation buffer phase in) of common equity, 6.0% of tier 1 capital, and 8% of total capital. At 31 December 2016 the common equity ratio was 35.3% (2015: 24.7%), and the Tier 1 and total capital ratio was 43.9% (2015: 32.6%).

As at 31 December 2016, the Group's total regulatory capital was €550.3 million (2015: €517.9 million); this is composed of shareholders' funds and, to the extent that they are allowable, the Group's preferred securities which are being gradually phased out over 10 years as a result of the Capital Requirement Directive IV.

25. Subsidiary companies

The Company's subsidiaries are detailed in note 29, all are owned 100%. This note also details the overseas branches and representative offices of LCH Limited and LCH SA.

The partners of LCH.Clearnet Funding LP have taken advantage of the exemption in Regulation 7 of The Partnerships (Accounts) Regulations 2008 from preparing the equivalent Annual Report and Annual Financial Statements as would be required under the Companies Act 2006.

26. 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 Group, with a total shareholding of 57.78% and is the largest group that prepares consolidated accounts. The immediate parent company is London Stock Exchange (C) Limited, which does not prepare consolidated accounts. LCH.Clearnet Group Limited is the head of the smallest group which prepares consolidated accounts.

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

Details of Group companies are set out in note 29. Transactions or balances with Group entities that have been eliminated in these consolidated financial statements are not reported.

Throughout 2016, the Group had a number of transactions with various companies within LSEG which are detailed below. All transactions were on an arm's length basis.

	2016	2015
	€m	2013 €m
Transactions with parent companies		
Income statement		
Services recharged to parent companies	4.5	0.8
Services recharged from parent companies	(8.7)	(3.9)
	(4.2)	(3.1)
Statement of financial position		
Amount due to parent companies at 31 December	(5.3)	(3.7)
Transactions with fellow subsidiaries		
Income statement		
Services recharged to fellow subsidiaries	4.4	3.7
Services recharged from fellow subsidiaries	(51.1)	(8.0)
	(46.7)	(4.3)
Statement of financial position		
Amount due to fellow subsidiaries at 31 December	(15.9)	(2.3)

The Group's interoperability balances with other companies within LSEG are not included above, but are disclosed separately in note 12.

27. Government grants

The Group qualifies for government assistance in the form of research and development tax credits.

In LCH SA, the grant is received as a reduction of the tax expense in the year following that in which the expenditure was incurred. A reduction to the tax charge for the year ended 31 December 2016 of €0.5 million (2015: €0.9 million) has been recognised as the amount due under this initiative from 2015. The amount receivable of €0.3 million for 2016 is included within other receivables (2015: €0.5 million) and will be recognised in 2017.

In LCH Ltd, 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 grants are 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.

28. Post balance sheet events

The potential sale of LCH SA and merger of LSEG with Deutsche Börse is discussed in the directors' report.

29. Capital Requirements Directive (CRD) IV disclosures

The LCH Group comprises the following entities (all companies are 100% owned):

Company name	Principal activity	Address	Country of incorporation
LCH.Clearnet Group Limited	Parent company	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH Limited – UK (formerly LCH.Clearnet Limited)	CCP	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH Limited – US	Representative office	17, State Street, New York City, NY, 10004, USA	•
LCH Limited – Australia	Representative office	Governor Philipp Tower, 1 Farrer Place, Sydney, NSW 2000, Australia	-
LCH Limited – Japan	Branch	NBF Hibiya Building 10F, 1-1-7 Uchisaiwaicho, Chiyoda-ku, Tokyo, Japan	-
LCH SA - France	ССР	18, Rue de Quatre Septembre, Paris, 75002, France	France
LCH SA — Netherlands	Branch	Keizersgracht 679-689, 1017 DV Amsterdam, The Netherlands	
LCH SA – Belgium	Branch	Place Stephanie 6, Bruxelles, 1050, Belgium	-
LCH SA – Portugal	Representative office	Avenue da Boavista 3433, Porto, 4194-017, Portugal	•
SwapAgent Limited	Clearing agent	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH.Clearnet LLC ²	ССР	17, State Street, New York City, NY, 10004, USA	USA
LCH.Clearnet (Luxembourg) S.à.r.l ³	Investment	52, rue Charles Martel, L-2134 Luxembourg	Luxembourg
LCH.Clearnet Funding LP ¹	Financing	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH GP Limited (formerly LCH.Clearnet GP Limited)	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH PLP Limited (formerly LCH.Clearnet PLP Limited)	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
BondClear Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
SwapClear Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH Pensions Limited ¹	Trustee company	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
RepoClear Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
CommodityClear limited (formerly Bondnet Limited) ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
EquityClear Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
The London Clearing House Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
LCH Group Holdings Limited (formerly Reponet Limited) ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
ForexClear Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
International Commodities Clearing House Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
The London Produce Clearing House Limited ¹	Dormant	33, Aldgate High Street, London, EC3N 1EA, UK	England & Wales
to decrease to a later a set or contrate a few of contrate and the set of the			

Indirect holding through the Company's other subsidiaries

² Last cleared a trade as a CCP in June 2016

³ Indirect holding through the Company's other subsidiaries until 16 December 2016 when LCH.Clearnet Group Limited acquired the entity. The entity ceased its trading activities on 30 November 2016

The required CRD IV disclosures are as follows:

Year ended 31 December 2016	Head- count	Banking income €'m	Profit before tax €'m	Current tax charged €'m	Deferred tax charged €'m	Profit after tax € ′m
LCH.Clearnet Group Limited	-	102.1	80.4	3.5	0.1	84.0
LCH Limited – UK	618	420.2	103.3	(18.0)	(2.0)	83.3
LCH Limited – US	55	16.0	1.5	(1.2)	-	0.3
LCH Limited Australia	11	1.6	0.2	-	-	0.2
LCH Limited – Japan	3	1.1	0.1	(0.1)	-	-
LCH SA - France	217	151.3	49.1	(12.7)	-	36.4
LCH SA – Netherlands	6	-	5.6	(1.4)	-	4.2
LCH SA – Belgium	3	-	1.0	(0.3)	-	0.7
LCH SA – Portugal	3	-	(0.8)	-	-	(0.8)
SwapAgent Limited	-	-	2.7	(0.5)	-	2.2
LCH.Clearnet LLC	9	(0.3)	(7.7)	(0.1)	-	(7.8)
LCH.Clearnet Funding LP		-	-	-	-	-
LCH.Clearnet (Luxembourg) S.à.r.l	1	19.3	20.4	(0.3)	(4.2)	15.9
LCH GP Limited	-	-	-	-	-	-
LCH PLP Limited	9	(A)	-	7.	(#)	-
BondClear Limited	2	-	-	5	-	-
SwapClear Limited	-	-	-	-	-	-
LCH Pensions Limited	-	i -	5	-	-	S:=
RepoClear Limited	-	-	-	ă		-
CommodityClear Limited	=	12	-	2:	-	-
EquityClear Limited	-	-	-	-	-	-
The London Clearing House Limited	=	-		-	(3)	
LCH Group Holdings Limited	-	12	2	÷	-	-
ForexClear Limited	-	-	-	-	-	-
International Commodities Clearing House Limited	-	-	-	-	-	3-
The London Produce Clearing House Limited	-	-	-	-	-	-
Eliminations on consolidation	-	(179.1)	(134.9)	-	(0.1)	(135.0)
Total	926	532.2	120.9	(31.1)	(6.2)	83.6

Total income of €547.3 million (2015: €496.1 million) less finance expense of €15.1 million (2015: €11.8 million) is equivalent to both banking income and turnover per the CRD IV definition.

Year ended 31 December 2015	Head- count (re- presented)	Banking income €'m	Profit before tax €'m	Current tax charged €'m	Deferred tax charged €'m	Profit after tax €'m
LCH.Clearnet Group Limited	-	(1.8)	4.1	2.1	-	6.2
LCH Limited – UK	659	342.6	81.9	(18.8)	0.7	63.8
LCH Limited US	54	15.9	1.5	(0.7)	-	0.8
LCH Limited – Australia	8	1.7	0.1	(0.1)		-
LCH Limited – Japan	1	0.5	-	-	-	=
LCH.Clearnet SA - France	208	137.6	42.0	(11.4)	(1.8)	28.8
LCH.Clearnet SA – Netherlands	7	-	6.2	(1.5)	an -	4.7
LCH.Clearnet SA – Belgium	3	-	1.0	(0.3)	-	0.7
LCH.Clearnet SA – Portugal	3	-	-	-	(7)	-
LCH.Clearnet LLC	12	2.5	(10.6)	(0.1)	7.2	(10.7)
LCH.Clearnet Funding LP	-	-	-	-	-	-
LCH.Clearnet (Luxembourg) S.à.r.l	1	21.7	8.6		0.5	9.1
LCH GP Limited	2	-	-	8		
LCH PLP Limited	-	121	-	-	-	-
BondClear Limited	+	-	-	-	·	s -
SwapClear Limited	-	-	ē	-	Let	-
LCH Pensions Limited	-	-	-	8	-	-
RepoClear Limited	-	-	-	2	-	-
Bondnet Limited		100	-	-	-	-
EquityClear Limited	-	_		1.51	(2)	: •
The London Clearing House Limited	-	-	-	-	-	-
LCH Group Holdings Limited	-	-	*	1.0		828
ForexClear Limited	-	ā	-	-	-	-
International Commodities Clearing House Limited	-	-	H	-	(7)	2. 7. 5
The London Produce Clearing House Limited	-	-	-	-	-	-
Eliminations on consolidation		(36.4)	(24.7)	-	-	(24.7)
Total	956	484.3	110.1	(30.8)	(0.6)	78.7

Headcount has been re-presented. For details of the changes to presentation, see note 18 i).

The Group qualifies for a Government assistance in the form of crédit d'impôt recherche (CIR) (a research and development tax credit) in LCH SA. A reduction to the tax charge for the year ended 31 December 2016 of €0.5 million (2015: €0.9 million) has been recognised as the amount due under this initiative. During 2016, LCH Ltd submitted a claim for a research and development tax credit from HMRC for €0.7 million. Although this is received as a reduction to the tax charge, the amount claimed is recognised as a credit against staff costs in the year.

	Note	2016 €′m	2015 €′m	
		V III		
Non-current assets				
Investments	30	640.9	649.7	
Deferred taxation asset		0.4	0.3	
Total non-current assets		641.3	650.0	
Current assets				
Trade and other receivables	31	1.1	2.0	
Cash at bank and in hand		6.9	4.0	
Other financial assets	34	116.1	45.4	
Income tax receivable		6.0	6.5	
Total current assets		130.1	57.9	
Total assets		771.4	707.9	
Current liabilities				
Trade and other payables	33	(20.7)	(12.0)	
Interest bearing loans and borrowings	32	(199.8)	-	
Total current liabilities		(220.5)	(12.0)	
Non-current liabilities				
Interest bearing loans and borrowings	32	-	(199.3)	
Total non-current liabilities		-	(199.3)	
Total liabilities		(220.5)	(211.3)	
Net assets		550.9	496.6	
Equity				
Called up share capital	22	74.2	74.2	
Share premium	22	316.1	316.1	
Capital redemption reserve	22	59.5	59.5	
Retained earnings		101.1	46.8	
otal equity		550.9	496.6	

Lex Hoogduin Chairman Suneel Bakhshi Chief Executive Officer

Notes 30 to 35 form an integral part of these financial statements. The profit after tax for the year for the Company was €84.0 million (2015: €6.2 million).

The financial statements were approved by the Board on 2 March 2017.

	2016 €'m	2015 €'m
Cash flows arising from operating activities		
Profit for the year	84.0	6.2
Taxation	(3.6)	2.1
Finance income	(1.3)	(1.3)
Finance cost	13.9	13.6
Decrease/(increase) in trade and other receivables	0.9	(0.9)
Increase/(decrease) in trade and other payables	8.7	(5.7)
Dividend income	(107.0)	(26.0)
Impairment of investments	9.2	7.8
Foreign exchange loss	2.8	-
Unrealised fair value gains on financial instruments	0.4	0.7
Net cash inflow/(outflow) from operations	8.0	(3.5)
Tax received	-	4.2
Net cash inflow from operating activities	8.0	0.7
Investing activities		
Dividend income from subsidiary companies	107.0	26.0
(Acquisition)/dissolution of subsidiary	(0.4)	1.0
Redemption/(acquisition) of other financial assets	25.0	(14.8)
Interest received	1.3	1.3
Net cash inflow from investing activities	132.9	13.5
Financing activities		
Dividends paid to shareholders	(27.3)	-
Loan amount given	(96.1)	-
Interest paid	(13.2)	(13.3)
Cash outflow from financing activities	(136.6)	(13.3)
Increase in cash and cash equivalents	4.3	0.9
Foreign exchange on cash balances	(1.4)	0.5
Cash and cash equivalents at 1 January	4.0	3.1
Cash and cash equivalents at 31 December (all cash at bank)	6.9	4.0
	0.5	4.0

Notes 30 to 35 form an integral part of these financial statements.

LCH.Clearnet Group Limited
Consolidated financial statements for the year ended 31 December 2016
Company statement of changes in equity

	Called-up share capital €'m	Share premium €'m	Capital redemption reserve €'m	Retained earnings €'m	Total €'m
Shareholders' equity at 1 January 2015	74.2	316.1	59.5	40.6	490.4
Profit for the year	-	-	-	6.2	6.2
Shareholders' equity at 31 December 2015	74.2	316.1	59.5	46.8	496.6
Profit for the year	-	-	-	84.0	84.0
Dividends approved in year	-	-	-	(29.7)	(29.7)
Shareholders' equity at 31 December 2016	74.2	316.1	59.5	101.1	550.9

Notes 30 to 35 form an integral part of these financial statements.

30. Investments			
30. Investments	Investment in subsidiaries 2016 €'m	Investment in subsidiaries 2015 €'m	
Cost			
As at 1 January	1,027.8	1,028.8	
Additions/(disposals)	0.4	(1.0)	
As at 31 December	1,028.2	1,027.8	
Accumulated impairment			
As at 1 January	(378.1)	(370.3)	
Impairment in year	(9.2)	(7.8)	
As at 1 January and 31 December	(387.3)	(378.1)	
Net book value	640.9	649.7	

Investments in subsidiary companies are stated at cost less impairment. See note 29 for details of subsidiary companies.

During 2016 the Company impaired its investment in LCH.Clearnet LLC by €9.2 million (2015: €7.8 million) to its net asset value as at 31 December 2016.

On 16 October 2016, the Company made an initial investment of £1 in a new subsidiary company, SwapAgent Limited. The Company owns 100% of the issued share capital of the new subsidiary.

LCH.Clearnet Service Company Limited was dissolved in 2015 and the Company's investment of €1.0 million returned.

On 16 December 2016, the Company acquired LCH.Clearnet (Luxembourg) S.à.r.l. from subsidiary companies for consideration of €0.4 million.

31. Trade and other receivables

	2016 €′m	2015 €′m
Current		
Amounts owed by subsidiary companies	0.3	1.2
Other receivables	0.8	0.8
	1.1	2.0

Trading balances owed by Group companies are interest free and payable on demand.

	2016	2015
	€′m	€′m
urrent		
bordinated loan notes owed to LCH.Clearnet Funding LP	199.8	
on-current		
ubordinated loan notes owed to LCH.Clearnet Funding LP	_	199.3

The interest rate on the subordinated loan notes is fixed at 6.576% until 18 May 2017 and then moves to three month EURIBOR plus 2.1%. The balance is shown net of the capitalised transactions costs of €0.2 million (2015: €0.7 million) which are being amortised over the life of the loan notes. The loan notes are not repayable before 18 May 2017. The loan will be repaid when the Group redeems its preference shares (note 16).

33. Trade and other payables

	2016 €′m	
Amounts owed to Group companies	9.8	3 .7
Other payables	2.4	-
Accruals	8.	8.3
	20.7	7 12.0

Amounts owed to Group companies are interest free and payable on demand.

34. Financial instruments

The Company's financial assets and liabilities are as follows:

	2016	2015
	€'m	€'m
Financial assets at fair value through profit or loss		
Investment in preferred securities	20.0	20.4
Loans and receivables		
Short-term loan due from subsidiary	96.1	25.0
Other financial assets in statement of financial position	116.1	45.4
Other receivables	1.1	2.0
Cash and short-term deposits in the statement of financial position	6.9	4.0
Financial liabilities at amortised cost		
Trade and other payables	(20.7)	(12.0)
Subordinated loan owed to subsidiary	(199.8)	(199.3)

LCH.Clearnet Group Limited Consolidated financial statements for the year ended 31 December 2016 Notes to the Company accounts (continued)

The Company purchased some of the Group's preferred securities in the market with a nominal value of €20.0 million in January 2009. These preferred securities had been issued initially by Freshwater Finance plc. These were repurchased at a cost of €10.5 million and have been revalued at the 31 December 2016 price of €1.00193 (2015: €1.02284) in the Company's statement of financial position.

New loan agreements between the Company and its subsidiaries were signed on 1 December 2016. The loans are revolving credit facilities valid for five years and are repayable with three months notice. Interest is charged on the accounts at LIBOR or EURIBOR as appropriate.

35. Related party transactions

During the year the Company charged €7.7 million (2015: €10.5 million) in management charges to subsidiary companies and incurred recharges of €9.4 million (2015: €11.8 million). The Company paid interest of €13.5 million (2015: €13.2 million) to subsidiaries and received interest of €1.3 million (2015: €1.3 million).

Balances at the year end with subsidiaries are shown in notes 31, 32 and 33.