London
Stock Exchange Group

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A global financial markets infrastructure business

Annual Report
31 December 2019

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LSEG

Who we are

London Stock Exchange Group is a global financial markets infrastructure business. We provide valuable services for a wide range of customers, focusing on Data and Analytics, on Risk, Collateral and Processing Solutions, and on Capital Formation and Trade Execution.

www.lseg.com

Our vision

To become the leading global financial markets infrastructure group.

Our purpose

We support global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs.

Contents

STRATEGIC REPORT

An overview of our business, our strategy and the markets and regulatory environment in which we operate, including statements from our Chair and CEO, followed by more detail on each of our divisions, our performance, how we consider our wider responsibilities and the principal risks that could affect our business. Sign-off for the Strategic Report is provided in the Directors' Report on page 132.

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GROUP FINANCIAL STATEMENTS

Detailed financial information setting out our performance for the reported 12 month period and financial position at year end.

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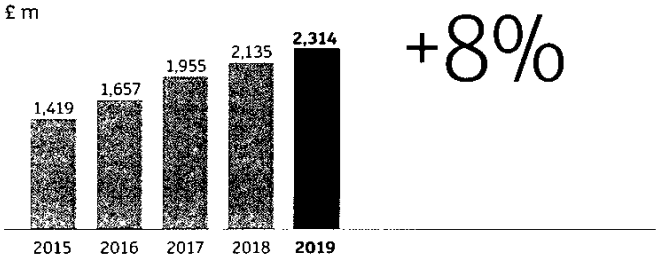
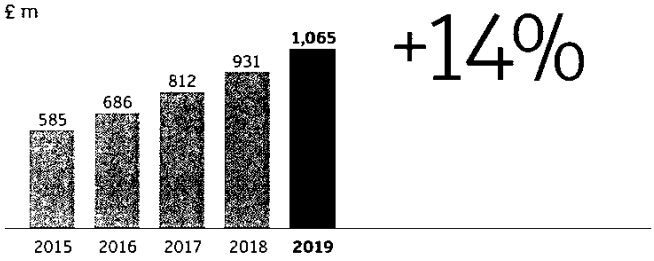
Highlights

The figures in the graphs below are for the Group on a continuing basis, so exclude businesses classified as discontinued during the periods shown. Percentages are based on 2019 compared with 2018.

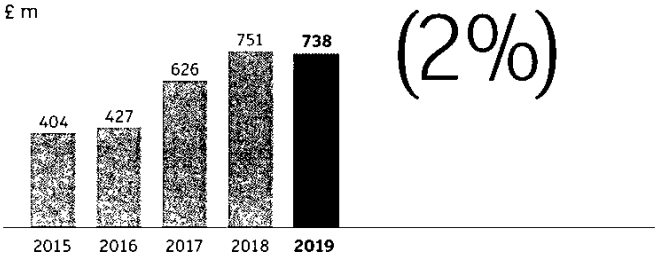
Total income
£ m



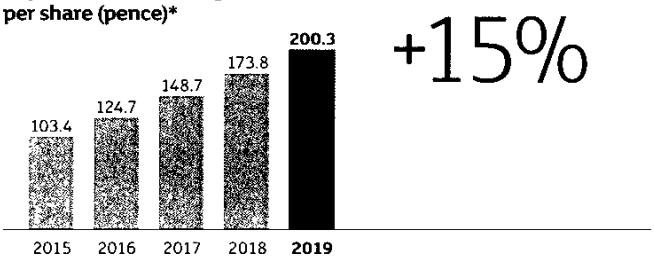
Adjusted operating profit*
£ m



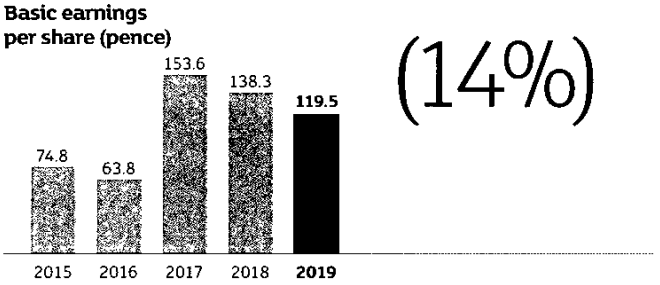
Operating profit
£ m



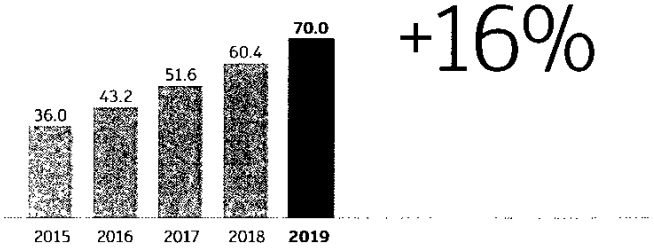
Adjusted basic earnings per share (pence)*



Basic earnings per share (pence)



Dividends per share (pence)

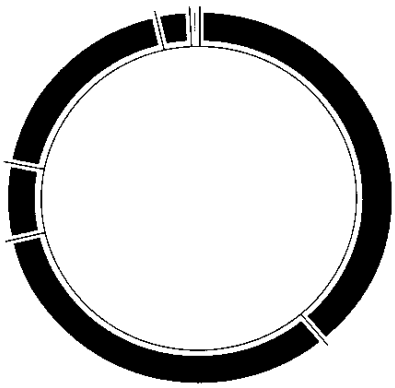


The graphs show full 12 month figures on a December year-end basis. There have been no businesses classified as discontinued during 2019 or 2018.

Year ended 31 December	12 months to 31 December 2019	12 months to 31 December 2018	Total Variance
Total income	**£2,314m**	£2,135m	**8%**
Adjusted operating profit[1]	**£1,065m**	£931m	**14%**
Operating profit	**£738m**	£751m	**(2%)**
Adjusted profit before tax[1]	**£994m**	£865m	**15%**
Profit before tax	**£651m**	£685m	**(5%)**
Basic earnings per share	**119.5p**	138.3p	**(14%)**
Adjusted basic earnings per share[1]	**200.3p**	173.8p	**15%**

1 London Stock Exchange Group uses non-GAAP performance measures as key financial indicators as the Board believes these better reflect the underlying performance of the business. As in previous years, adjusted operating profit, adjusted profit before tax and adjusted basic earnings per share all exclude amortisation and impairment of purchased intangible assets and goodwill and non-underlying items

Group Total Income by segment



	12 months to 31 December 2019 £m
Information Services	902
Post Trade Services LCH	756
Post Trade Services CC&G and Monte Titoli	152
Capital Markets	426
Technology Services	66
Other	12
	2,314

LSEG produced a good financial performance with revenue growth in all core business divisions as the Group continued the successful execution of its strategy. Key headlines are provided below:

Information Services

- Revenue up 7% to £902 million (2018: £841 million) on a reported basis, and up 5% on organic and a constant currency basis
- FTSE Russell revenues up 10% to £649 million (2018: £592 million), and up 6% on a constant currency basis
- 2017-2019 target for FTSE Russell double-digit revenue growth each year, achieved in 2019 with 10%
- ETF assets benchmarked to FTSE Russell indices at the end of 2019: US$765 billion (at end of 2018: US$606 billion)
- Launch of the Climate WGBI, based on risk modelling from Beyond Ratings, a business acquired in the year

Post Trade Services – LCH

- Income up 14% to £756 million (2018: £662 million)
- LCH 2017-2019 target for c.50% adjusted EBITDA margin achieved, with 54.9% margin for 2019
- 2017-2019 target for LCH OTC double-digit revenue growth each year, achieved in 2019 with 15%
- Net Treasury Income for LCH in 2019 increased by 18% to £206 million (2018: £175 million) on a reported basis and up 17% on a constant currency basis
- SwapClear total notional cleared surpassed US$1.2 quadrillion, up 14%, with client trades cleared up by 13% to 1.7 million and compression up by 19% to US$920 trillion
- ForexClear launched clearing for deliverable FX forwards. Membership increased to 34 (2018: 32)
- RepoClear saw record nominal cleared with €106 trillion cleared in 2019, an increase of 7% from 2018 and successfully consolidated a large majority of Euro debt clearing into LCH SA

Post Trade Services – CC&G and Monte Titoli

- Income up 5% to £152 million (2018: £145 million) on a reported basis and by 6% on a constant currency basis
- Net Treasury Income up 14% to £49 million (2018: £43 million), and up 15% on a constant currency basis
- Notional cleared for fixed income products rose 26% to €25 billion (2018: €20 billion)
- Number of equity and derivative contracts cleared 2019: 99.5 million (2018: 111.9 million)

Capital Markets

- Revenues up 5% to £426 million (2018: £407 million) on both a reported basis and constant currency basis
- Primary Markets revenue increased by c.£32 million in H1 2019 due to a one-off change in estimate relating to IFRS 15. Adjusting for this, Primary Markets revenue for the year rose 6%
- 109 new companies joined our markets in the year (2018: 176)
- Capital raised by new and further equity issues 2019: £23.4 billion (2018: £28.7 billion)
- UK cash equity average daily value traded decreased by 18% to £4.7 billion
- Borsa Italiana cash equity average daily number of trades decreased by 10% to 255,000
- Turquoise average daily value traded decreased by 36%, Turquoise Plato Block Discovery value traded increased 11% to €103 billion (2018: €93 billion)

Technology Services

- Technology revenue up 2% to £66 million (2018: £65 million) on a reported basis and up 1% on a constant currency basis
- Millennium's Post Trade product selected by the Securities Clearing Corporation of the Philippines to improve its post trade processes
- Successfully implemented Millennium Exchange and Millennium Surveillance platforms for the Johannesburg Stock Exchange

Note: Organic growth is calculated in respect of businesses owned for at least 12 months in either period and so excludes Beyond Ratings. The Group's principal foreign exchange revenue exposure arises from translating our European based Euro and US based USD reporting businesses into Sterling

Chair's statement

"The Group plays a significant role in financial markets globally"

Don Robert
Chair

Overview
It was a great honour to be asked to serve as Chair of London Stock Exchange Group, an iconic institution with a 300-year history at the heart of global financial markets. I would like to extend my appreciation to the previous Chair for handing over the reins to a Group that is well positioned strategically and financially. The Group continues to perform well with total income up 8%, adjusted earnings per share up 15% and a proposed dividend of 70.0 pence per share, up 16%.

2019 has been characterised by macroeconomic and political uncertainty. The challenges posed to all business leaders throughout the year have been numerous, but LSEG remains well positioned with a set of highly complementary businesses across the capital markets lifecycle. Our Open Access philosophy and customer partnership approach continues to be a true differentiator and fundamental to our business strategy. As a systemically important business, the Group plays a significant role in financial markets globally, contributing to financial stability and supporting sustainable economic growth.

Refinitiv
LSEG announced the proposed acquisition of Refinitiv on 1 August 2019. This was the culmination of many months of strategy development, deep consideration and discussion. It is a transformational transaction, strategically and financially. The combined global business will be headquartered and domiciled in the UK with a premium listing in London. The transaction received overwhelming shareholder approval in November, and we are currently engaged in the regulatory approvals process and integration planning. The transaction remains on track to close in the second half of 2020.

HKEX
In September, LSEG received an unsolicited approach from Hong Kong Exchanges and Clearing Limited (HKEX). LSEG's Board had fundamental concerns about the key aspects of the Conditional Proposal: strategy, deliverability, form of consideration and value, especially when compared to the significant value we expect to create through our planned acquisition of Refinitiv. Accordingly, the Board unanimously rejected the Conditional Proposal, which HKEX subsequently withdrew.

Governance
The Board seeks to operate to high governance and ethical standards. Further detail is available later in the Board's Corporate Governance report starting on page 78. Dominic Blakemore joined the Board as a Non-Executive Director, effective 1 January 2020, and we also welcomed Cressida Hogg to the Board as an Independent Non-Executive Director in March 2019. Following the conclusion of the Group's AGM in April 2020, Paul Heiden will step down from the LSEG Board and Dominic will assume the Chair of the Audit Committee from Paul, and Stephen O'Connor will become the Senior Independent Director. I would like to record the Board's gratitude to Paul Heiden for his significant contribution to LSEG over the last decade during which the Group has delivered significant growth and diversification. His counsel and experience have been invaluable during this period of transformational change.

In October, David Warren, Group Chief Financial Officer informed the Group of his intention to retire from the company and step down from the Board. The Board is grateful for the key role David has played in the successful growth, diversification and global expansion of our business over the last seven years as well as for his leadership when he served as Interim CEO. David will continue in his current role as Group CFO and a member of the Board through the close of the Refinitiv transaction to ensure a smooth transition to his successor. LSEG is undertaking a global search for his replacement, which is being led by the Board's Nomination Committee.

Full year dividend
Final dividend of 49.9 pence per share to be paid on 27 May 2020[1] (2018: 43.2 pence per share)

Dividend policy
We operate a sustainable, progressive dividend policy, aiming to operate in a target range of 2.5–3.0x dividend cover. LSEG has operated within the target dividend cover range since 2015.[2]

1. Subject to shareholder approval at our AGM
2. Ratio of earnings per share divided by dividend per share

Culture
The Board, along with the executive team, seeks to promote a culture of Group-wide collaboration and customer focus. LSEG has made good progress this year on these efforts, which you can read about further on page 44. The Board has also engaged directly with employees, with candid feedback provided to Directors through a series of informal meetings, as well as more formal interaction with employee forums, which will continue in the coming year.

Corporate Sustainability
The global transition to a more sustainable economy continues to be a focus across our industry. LSEG has many touch points with stakeholders that put us in a strong position to engage in this discussion and we take our responsibility seriously. Our ability to help facilitate change is demonstrated through the diverse ecosystem of sustainable bonds listed on our markets with issuers from 18 different countries and bonds issued in 17 different currencies. FTSE Russell has also launched an innovative new index providing a forward-looking assessment of the climate risk faced by sovereigns allowing investors to reduce climate risk and greenhouse gas emissions in their portfolios.

As a global company, we are committed to playing our part, building on our engagement with UK Government initiatives such as the Green Finance Taskforce, which led to the creation of the Green Finance Institute, and the EU's High Level Expert Group and Technical Expert Group. Both of these groups included representatives from LSEG as part of their work to develop recommendations for the EU's Green Finance Taxonomy. Within LSEG, our Environmental Management Group continues to work on delivery of ambitious targets to improve our environmental efficiency year on year. Full details can be found later in this report on page 47.

Our LSEG Foundation donated £1.4 million in 2019 to various global and regional charities around the world. The Group also continues to encourage employees to donate their skills and time to support disadvantaged young people in the communities in which we operate.

Summary
Since becoming Chair in May 2019, I have been impressed by the calibre and focus of our employees. I'd like to thank them for their dedication and professionalism during what has been a very busy year. I would also like to thank my Board colleagues for their support, challenge and for their commitment. London Stock Exchange Group is in a position of strength, sitting at the heart of international financial markets, as we look ahead to the many opportunities within our industry. I look forward to working with the Board and the executive team to continue to develop the business for the future.

Don Robert
Chair
28 February 2020

CEO's statement

"The Group remains well positioned for future growth in this evolving environment."

David Schwimmer
CEO

Overview
2019 was another eventful year of macroeconomic and geo-political events directly influencing global financial markets. Despite this complex backdrop, it was also another strong year for London Stock Exchange Group – delivering a strong financial performance; making meaningful progress executing on our strategic objectives; and taking significant steps on a number of Group-wide initiatives. We announced the proposed acquisition of Refinitiv, which will accelerate our strategy, while continuing to progress financially, strategically and operationally across our core businesses of Information Services, Post Trade and Capital Markets. Our successful strategy is underpinned by the continuation of our Open Access and customer partnership approach to deliver innovative solutions across the financial markets value chain.

At the end of 2018, the Board and the executive team evaluated the Group's strategy in order to ensure that LSEG is well positioned for the decade ahead. We carried out this evaluation from a position of strength, building on the successful execution of the strategy and financial performance of recent years. Over the last 20 years, the financial market landscape has changed significantly – driven by technology, regulatory and macroeconomic factors – and change is happening at an even greater pace today. We are consistently hearing from our clients that they want to trade across different regions and asset classes, with fewer providers that are better positioned to do more for them across the financial markets value chain, while maintaining an open access model built on customer choice.

LSEG is looking to drive that evolution and position the Group for long-term sustainable growth. In August 2019 we announced the transformational acquisition of Refinitiv in an all-share transaction for an enterprise value of approximately US$27 billion, as at 1 August 2019. The proposed acquisition, which has been well received by the market and approved by shareholders, significantly accelerates our existing strategy to be a leading global financial markets infrastructure provider. Refinitiv brings highly complementary capabilities in data, analytics and capital markets as well as deep customer relationships across a truly global business. As a result, we will significantly expand our data and analytics offering to create a global multi-asset class capital markets business. Shortly after the announcement of the proposed Refinitiv transaction, we received an unsolicited approach from Hong Kong Exchanges and Clearing Limited (HKEX). As noted in the Chair's statement on page 4, the Board reflected fully on the conditional proposal and highlighted fundamental concerns about the deliverability, value and strategic benefit of the approach. HKEX later announced that it would not proceed with an offer. The Board remains convinced that the Refinitiv transaction provides superior benefits, and we continue to make good progress towards achieving regulatory approvals. We remain on target to close the transaction in the second half of 2020.

Information Services
In our Information Services division, FTSE Russell is a key contributor to Group revenues, delivering 10% revenue growth over the course of the year. This included strong growth in subscription revenues, up 12% in 2019, reflecting new sales across a number of indices.

The growth in passive investing continues and is now increasing at approximately 20% per year with assets expected to reach US$30 trillion by 2023. FTSE Russell is well placed to captitalise on these industry trends, with increased demand for its data and analytical tools. At the end of 2019, the value of ETF assets tracking its indices was US$765 billion, up 26% on the previous year.

LSEG's Information Services business is also responding to the rapidly growing demand among asset owners to integrate sustainability and Environmental, Social and Governance (ESG) considerations. In June, we announced the acquisition of Beyond Ratings, a highly regarded provider of ESG data for fixed income. Beyond Ratings is very complementary to FTSE Russell's existing ESG index and data offering as well as the analytics tools provided through The Yield Book.

In July, FTSE Russell launched the first climate risk-adjusted government bond index, which allows the market to access a quantitative climate risk assessment for sovereign debt. FTSE Russell has worked with institutions across the globe to develop indices that meet their sustainability criteria as well as the underlying benchmarks for exchange traded funds. FTSE Russell will continue to help develop and promote more global standards for measuring progress against ESG and sustainable development goals.

FTSE Russell successfully began inclusion of China A Shares and Saudi Arabia securities into its global equity benchmarks, marking significant developments for these emerging markets. We have received positive feedback from index users with many passive asset managers moving quickly to adjust portfolios. We estimate that the inclusion of these countries within the FTSE Emerging Index will equate to around US$15 billion in net passive inflows of assets under management.

Post Trade
The Group's post trade divisions continued to perform well. LCH delivered a strong performance with income up 14% to £756 million. Post Trade – Italy saw income increase by 5% to £152 million. In January 2019, LSEG also announced the purchase of a 4.92% minority stake in Euroclear, a leading provider of settlement, custody and collateral management services across Europe, which further strengthened LSEG's and Euroclear's existing operational and commercial relationship to the benefit of our respective customers.

LCH's OTC clearing services continued to set new records in 2019 and have seen good growth in member and client clearing. SwapClear remains the largest OTC rates liquidity pool in the world, processing over US$1.2 quadrillion in notional volume in 2019. Alongside this, the increased use of its compression services has enabled members and customers to save approximately US$35.1 billion in capital over the course of the year. In October, LCH became the first clearing house to offer clearing of Euro-denominated swaps benchmarked to the new reference rate €STR, as the industry adopts new interest rate benchmarks. The move follows its launch of clearing for SOFR swaps and SONIA Futures in 2018, and SARON swaps in 2017. Through SwapAgent, LCH has the opportunity to expand its offering in the non-cleared OTC derivatives space, which represents around 25% of the global OTC interest rate derivatives market. ForexClear has also expanded its product offering to include the clearing of deliverable FX forwards. In Italy, the Group's central securities depository (CSD), Monte Titoli, is implementing a digital transformation programme to deliver increased efficiency, risk reduction and simplification for clients.

In October, we announced that we would align our Post Trade businesses in one division from January 2020, under the leadership of Daniel Maguire. The new Post Trade division includes LCH Group, CC&G, Monte Titoli and UnaVista, our trade reporting business that previously sat within Information Services. The new division will ensure greater Group-wide collaboration and benefits for customers, while continuing to operate on an open access basis with no changes to local legal entity governance and regulatory oversight.

The withdrawal agreement in relation to the UK's departure from the European Union provides for a transition period until 31 December 2020 during which the UK will continue to apply European Union law. As such, LCH Ltd remains an EMIR 'Authorised' UK CCP and continues to offer clearing for all products and services to all members and clients. LCH Ltd also continues to engage in the application process under the revised supervisory framework for EU and third country CCPs (EMIR 2.2) to ensure a smooth transition to being a recognised, third country CCP.

12%
Rise in FTSE Russell subscription revenues

15%
Revenue increase in LCH OTC clearing

CEO's statement
(continued)

£23.4 billion

Total raised by new and further issues on our markets

31

New issues on AIM Italia

Capital Markets
Capital Markets continued to perform well despite macroeconomic headwinds with revenue up 5% to £426 million.

While IPO activity globally has been slower this year due to macroeconomic and political uncertainty, London Stock Exchange and Borsa Italiana attracted significant listings with a total of £23.4 billion raised by firms in new and further issues across the Group's markets. London Stock Exchange retained its status as the leading European exchange in terms of money raised and Borsa Italiana recorded the highest number of new listings in Europe.

AIM, which will celebrate its 25th anniversary in 2020, remains the world's largest growth market, helping firms to raise over £3.8 billion in new and further issues during 2019. As part of our ongoing commitment to broadening our services to help make markets more accessible, London Stock Exchange also signed an agreement with PrimaryBid to enable retail investors real time access to listings. AIM Italia welcomed 31 companies to its markets, the highest number since it launched in 2009. In fixed income, a number of companies and sovereign issuers chose London to raise capital, including Aramco's inaugural international US$12 billion bond in April.

After four years of development, including close work with the UK and Chinese Governments and regulators, we launched Shanghai-London Stock Connect, welcoming Huatai Securities as the first issuer of GDRs on the new segment in June. While we expect it will take a while to build, it is a significant achievement in our relationship with China.

LSEG continued to support issuers and investors in the transition to a sustainable, low-carbon economy throughout 2019. Over a third of the £6.9 billion total capital raised by investment funds through IPOs and further issues this year has been raised by green funds. Borsa Italiana's third Italian Sustainability Day welcomed a record number of participants amidst the growing focus on sustainable investment. In October, London Stock Exchange launched two green initiatives to recognise the increased interest from issuers and investors. The new Green Economy Mark recognises listed companies with 50% or more of their revenues derived from products and services that contribute to the global green economy. The Sustainable Bond Market builds on the success of the Green Bond Segment, launched in 2015, and includes new sustainability, social and issuer-level segments, based on independently verified frameworks and use of proceeds.

CurveGlobal, the interest rate derivatives business, continued to innovate and build momentum. CurveGlobal trading volumes rose by 78% in 2019, compared to 2018, as it continues to drive competition in the futures markets. CurveGlobal is supporting the transition away from LIBOR-based derivatives, enhancing price discovery and helping the market manage risk. It has also introduced a unique uncapped pre-paid trading scheme to encourage further use of CurveGlobal services.

"LSEG continued to support issuers and investors in the transition to a sustainable, low-carbon economy throughout 2019."

Leadership
During the course of the year, we announced some changes to strengthen further our executive management team. David Shalders joined the Group as Chief Integration Officer and Chief Operating Officer and Anthony McCarthy was appointed Chief Information Officer, following Chris Corrado's decision to leave the Group. As noted in last year's report, Waqas Samad was appointed Group Director, Information Services in January 2019, while Daniel Maguire, CEO LCH Group was appointed Group Director, Post Trade following the creation of a single Post Trade division. Tim Jones, Group Head of Human Resources, and Gavin Sullivan, Group Communications Director, both joined the executive management team from 1 January 2020, reflecting the importance of these roles as the Group continues to develop. From 1 April 2020, Murray Roos will join LSEG as Group Director, Capital Markets as Raffaele Jerusalmi steps down from that role, while continuing as CEO, Borsa Italiana.

Finally, in October we announced that David Warren, Group Chief Financial Officer had informed the Group of his intention to retire from the company. David will continue in his current role as Group CFO and a member of the Board through to the close of the Refinitiv transaction to ensure a smooth transition to his successor. However, I would like to express my thanks now for David's significant contribution to the Group's success.

"We have continued to invest across our businesses, working in partnership with customers."

Our purpose
LSEG supports global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs. As a global financial markets infrastructure business, LSEG provides critical services to clients around the world. We understand the vital role we play in supporting and enabling a financial ecosystem that fosters long-term sustainable economic growth, for the benefit of all participants in capital markets – issuers, investors and intermediaries. We run businesses that are of systemic importance and recognise that in doing so we hold an important position in the financial ecosystem with a broad set of responsibilities to our stakeholders.

We are also cognisant of our responsibilities to our people and to the wider communities in which we operate. We are committed to supporting a culture of collaboration and embracing the diversity of the Group. In 2019, we launched our Inclusion Network (IN) which will support networks embracing all forms of diversity. Colleagues in all locations have actively supported cultural initiatives from mentoring to organising activities that promote our values. It is also encouraging to see a rise in the number of colleagues participating in our paid volunteering days initiative to support various local charities around the world. You can read more in our separate Corporate Sustainability report available on our website and in the supporting sustainable growth section of this report from page 40.

Looking forward
We keep a close eye on the broader macroeconomic, technology and regulatory factors which continue to drive change in our industry. We have continued to invest across our businesses, working in partnership with customers to deliver innovative products and services, while also controlling costs. The Group remains well positioned for future growth in this evolving environment as a global financial markets infrastructure leader.

Finally, I would like to take the opportunity to thank all colleagues across the Group for their hard work in delivering another successful performance.

David Schwimmer
CEO
28 February 2020

What we do – our business model

LSEG is a global financial markets infrastructure business that operates a number of leading businesses serving a global customer base including:

- A global multi-asset index business with US$15 trillion in AUM and US$765 billion ETF AUM benchmarked to our indices
- A global OTC clearing house with over US$1.2 quadrillion of notional value cleared in 2019
- European trading venues with over £435 billion average daily value traded in 2019

The Group plays a vital economic and social role within the global economy by enabling companies to access funding for growth and development and allowing investors to make informed investment decisions and manage financial risk, supporting the generation of wealth and the creation of jobs.

Headquartered in the UK, the Group has significant operations around the world including France, Italy, North America, Romania and Sri Lanka employing approximately 5,000 people.

From January 2020, we aligned our Post Trade businesses in one division. The new Post Trade division includes LCH Group, CC&G, Monte Titoli and UnaVista, our trade reporting business that previously sat within Information Services. For the purposes of this report, reviewing 2019 performance, UnaVista's results are included within Information Services.

How we add value

LSEG operates through three main interconnected business divisions (i) Information Services (ii) Post Trade and (iii) Capital Markets, each supported by Technology Services which provides technology solutions to both the Group and customers around the world. Our presence across the financial markets value chain enables us to provide a platform for serving customers across multiple activities, meeting a wide range of their needs.

Information Services

Creates global and multi-asset class indices, analytics and data solutions, which support clients' investment and capital allocation decisions, trading and valuations

Post Trade

Provides clearing, settlement and regulatory reporting services to support clients' risk and balance sheet management, regulatory reporting and capital efficiency. Enables increased trading and investment activity

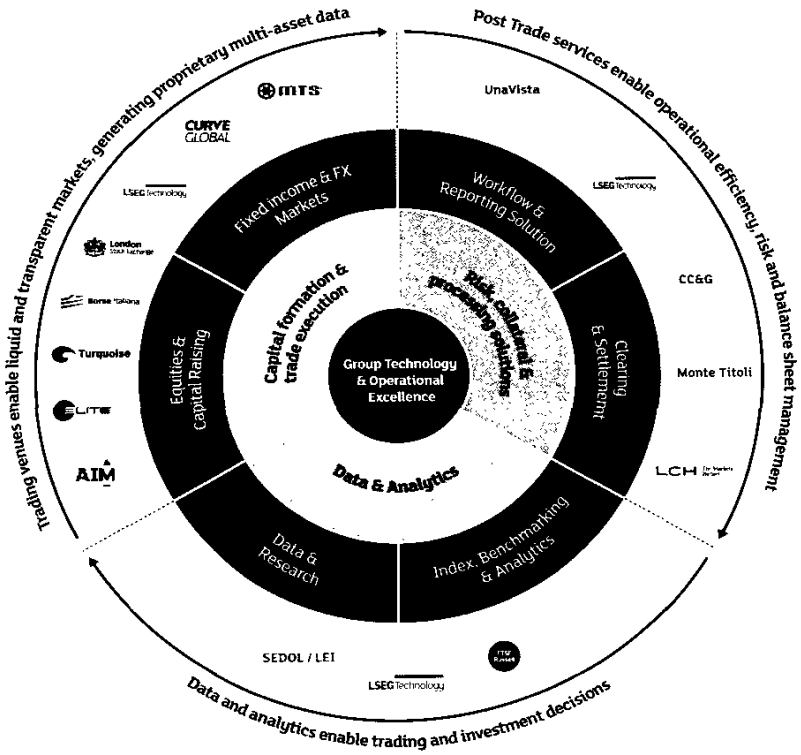
Capital Markets

Operates a broad range of international equity, ETF, fixed income and derivatives markets, which connect businesses and investors with access to capital markets and enables companies to grow and develop. Our secondary markets provide liquid and deep access to financial securities to enable improved price formation, transparency and trading efficiency

Technology Services

Delivers financial markets infrastructure IT to various businesses within the Group. This IT comprises resilient, secure, and high performing trading platforms, post trade platforms, real time market data, hosting and other infrastructure products and services. It also provides these services to third parties around the world.

Our activities across the financial markets value chain



What makes us different from our competitors

Our Open Access and customer partnership approach differentiates us from our competitors, allowing our customers to engage with LSEG in a way that best suits their needs.

Open Access

- Open Access is the principle that lies at the heart of free and fair markets, and is enshrined in MiFID II
- We believe that customers should have the choice of where they place their business and therefore we do not operate a vertically integrated model. In particular, we support non-discriminatory access to trading and clearing infrastructures as we believe this provides greater market efficiencies by reducing fragmentation and barriers to service uptake
- We provide access to all our markets and products for a wide range of users, including those institutions that offer competing services to the Group. Access to our markets and products is not conditional on taking other services from LSEG
- This helps to ensure that customers have the power and transparency they require to access services most suited to their needs such as best execution and settlement requirements

Examples:

Our Post Trade businesses provide clearing and settlement services for products traded on non-Group owned venues such as BrokerTec, Euronext and Cboe Europe Equities. Similarly, there are no requirements for products traded on our venues to be cleared through our post trade venues. For example, our fixed income platform, MTS, utilises clearing and settlement businesses outside the Group.

FTSE Russell licenses its indices to several other market infrastructure businesses across the globe, such as CME, Cboe and SGX, allowing these businesses to list products based on our indices.

Customer partnership

- We have a large network of customers from across the globe whose ongoing support, trust and input into our business is essential to the generation of long term value for all of our stakeholders, enabling innovation in products which can be rapidly adopted
- A number of our businesses are owned and governed in partnership with our customers and we believe that this leads to greater innovation and enhances our ability to add value to their businesses and operations

Examples:

Group businesses such as LCH, MTS, Turquoise and CurveGlobal have customers that are also minority shareholders allowing them to participate in the governance and development of the business, its services and products.

In our FTSE Russell business we work alongside our customers and other third parties to create bespoke indices enabling them to list and trade derivatives products based on our indices.

What we need to operate our businesses and deliver value

Key aspects of our business that we continue to invest in and develop to help deliver our services and create value for our customers.

Data and analytics

Our proprietary content, IP and our data and analytical capabilities enable us to create value-add products, and the data which we generate is used by customers to improve workflow and create insight to inform risk, trading and investment strategies.

Risk management

The management of risk is fundamental to maintaining our role as a diversified global financial markets infrastructure provider in order to maintain stakeholder confidence.

Technology & operational excellence

We are committed to investing in our technology and operational infrastructure in order to enhance our stability, resilience and effectiveness as a business such as our Group-wide investment in migrating our businesses to the Cloud. Through our Technology Services, customers are reliant on the quality and resilience of our technology platform.

Regulatory expertise

Many of the markets we operate are highly regulated and subject to ongoing regulatory change. We have proven expertise in operating transparent, efficient and well governed market infrastructure in regulated markets globally, providing services that are trusted, independent and resilient.

Trusted customer relationships

Our global reach, strong reputation in the industry and relationships with regulators, governments and market participants, positions the Group as a trusted partner to customers and their interests as financial markets evolve. Our businesses, including London Stock Exchange, LCH, FTSE Russell and Borsa Italiana play a leading role in the global financial markets. For example, we have convened industry responses to debates on key global industry trends and developments such as corporate social responsibility which have resulted in initiatives such as the Green Economy Mark.

People and culture

People are the foundation of our business with both our customers and stakeholders benefiting from the expertise, commitment and innovation LSEG employees bring. The retention and nurturing of high quality talent is fundamental to delivering our strategy, as is our strong Group culture which is based on our core values of Partnership, Integrity, Innovation and Excellence. See pages 43 to 46 for details on how we support employees and build the right culture to facilitate Group-wide collaboration and drive the Group's strategy.

Group-wide opportunities

The interconnected nature of our business and our Group operating model allows us to explore new ways of creating value outside of our individual businesses. We continue to drive a number of initiatives across our Group aimed at enhancing the level of collaboration between our businesses and our overall efficiency as an organisation.

Need help?

Like any industry, global financial markets infrastructure has its own unique language. For that reason, we have included a glossary on pages 204–206.

Capital allocation framework

A description of our capital allocation framework is available on page 59.

Overview of Group activities

This page covers our business areas and activities:

- Data and Analytics
- Risk, Collateral and Processing Solutions
- Capital Formation and Trade Execution

We take a look at what drives our customers, the revenue we earn and key performance indicators.

Data and Analytics

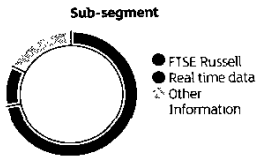
Information Services

Provides a wide range of information and data products including indices and benchmarks, analytics, real time pricing data, product identification and trade reporting and reconciliation services.

Group total income: 39%

Total Income Contribution

£902m
2018: £841m



Customer Profile

FTSE Russell
- Asset owners and managers, active and passive buy-side firms and trading venues

Real time data
- Direct to trading firms and via service providers, such as Bloomberg and Refinitiv, that incorporate our data with other information

Other information
- Our customers vary based on the service provided; they include banks, brokers and fund managers

Main Types of Revenue

FTSE Russell
- Licence fees for benchmarks and subscription fees for data and analytics services
- Asset-linked fees for ETFs, passive funds and derivatives tracking indices

Real time data
- Fees based on access charges to our data, on a display or non-display basis and licence fees from third party redistributors

Other information
- Fees vary based on the nature of service provided, mostly subscriptions and licence fees

FTSE Russell
Highlights
- Launch of the Climate WGBI, based on risk modelling from Beyond Ratings, a business acquired in the year
- Dutch pension fund, Pensioenfonds Detailhandel, selected a custom FTSE Russell ESG benchmark to align with the UN's Sustainable Development Goals (SDGs)

KPIs
- ETF assets benchmarked to FTSE Russell indices at the end of 2019: **US$765bn** (at end of 2018: US$606bn)

Real time data
KPIs
- Number of professional terminals taking Group data 2019: **167,000** (2018: 174,000)

Other Information
Highlights
- UnaVista processed 9.3bn reports across 2019 (2018: 8.6bn)

Risk, Collateral and Processing Solutions

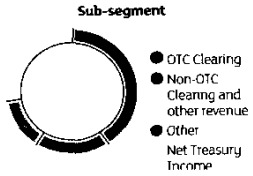
Post Trade Services LCH

Provides clearing services through which counterparty risk is mitigated across multiple asset classes for sell-side clearing members and buy-side clients in conjunction with trading venues globally.

Group total income: 33%

Total Income Contribution

£756m
2018: £662m



Customer Profile

Clearing services
- A wide base of banks, brokers and fund manager firms worldwide for OTC derivatives and listed equities, exchange traded derivatives, fixed income and commodities

Main Types of Revenue

Clearing and related services
- Fees for SwapClear interest rate swap service and other OTC derivative clearing primarily based on membership fees or client trades
- Fees based on trades or contracts cleared and CCP services provided
- Fees for managing non-cash collateral and compression services

Net Treasury Income
- Net Treasury Income on cash held as collateral for margin and default funds

Clearing services
Highlights
- SwapClear continues to grow with record clearing and compressed volumes
- ForexClear saw record volumes and launched clearing of deliverable FX forwards
- RepoClear saw record volumes cleared and successfully consolidated a large majority of Euro debt clearing into LCH SA

KPIs
- SwapClear notional cleared 2019: **US$1,229tn** (2018: US$1,077tn)
- SwapClear notional compressed 2019: **US$920tn** (2018: US$773tn)
- SwapClear Client trades cleared 2019: **1,681,000** (2018: 1,487,000)
- RepoClear nominal value cleared 2019: **€106.0tn** (2018: €98.7tn)
- Average cash collateral held 2019: **€98.4bn** (2018: €86.7bn)

Note

Risk, Collateral and Processing Solutions

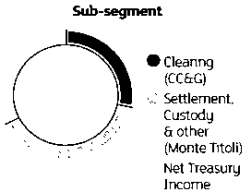
Post Trade Services CC&G and Monte Titoli

Offers efficient clearing, settlement and custody services for cash equity, derivative, commodity and fixed income markets, mostly in Italy.

Group total income: 7%

Total Income Contribution

£152m
2018: £145m



Customer Profile

CC&G
- 91 members, 38% of which are international

Monte Titoli
- Wide range of Italian and international banks and brokers for both on market and OTC trades. Issuers of equity and fixed income products (Italian and international)

Main Types of Revenue

Clearing – CC&G
- Fees based on trades or contracts cleared and CCP services provided
- Net Treasury Income on cash and securities held as collateral for margin and default funds

Settlement and Custody – Monte Titoli
- Revenue mostly from the settlement of equity and fixed income trades
- Custody fees are charged on the issuance of an equity or fixed income instrument, when dividend and interest payments are made and on any corporate action

CC&G

Highlights
- Notional cleared for fixed income products rose 26% to **€25bn** (2018: €20bn)

KPIS
- Number of equity trades and derivative contracts cleared 2019: **99.5m** (2018: 111.9m)
- Average initial margin held 2019: **€14.4bn** (2018: €11.0bn)

Monte Titoli

Highlights
- Settlement rate of 96% of trades

KPIS
- Settlement instructions handled 2019: **44.4m** (2018: 45.4m)
- Monte Titoli's assets under custody 2019: **€3.32tn** (2018: €3.29tn)

Capital Formation and Trade Execution

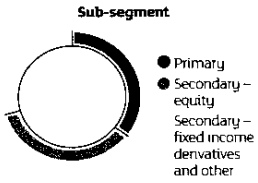
Capital Markets

Provides access to capital for domestic and international businesses and efficient electronic platforms for secondary market trading of equities, bonds and derivatives.

Group total income: 18%

Total Income Contribution

£426m
2018: £407m



Customer Profile

Primary Markets
- Companies from more than 60 countries around the world have come to our markets to raise money, together with issuers of bonds, ETFs and other instruments

Secondary Markets
- Sell-side banks and brokers and buy-side investors worldwide, trading on the Group's equities, derivatives and fixed income trading platforms

Main Types of Revenue

Primary Markets
- Admission fees for initial listing or raising further capital
- Annual fees for securities traded on our markets

Secondary Markets
- Fees based on value traded (UK equities) or number of trades or contracts (Italian equities, retail bonds and derivatives)

Primary Markets

Highlights
- **109** new companies joined our markets in the year (2018: 176)

KPIs
- Number of companies on our markets 2019: **2,400** (2018: 2,467)
- Capital raised by new and further equity issues 2019: **£23.4bn** (2018: £28.7bn)

Secondary Markets

Highlights
- UK cash equity value traded decreased by 18%
- Borsa Italiana cash equity average daily number of trades decreased 10%
- Turquoise average daily value traded decreased by 36%. Turquoise Plato Block Discovery value traded increased 11% to **€103bn** (2018: €93bn)

KPIs
- Average order book equity value traded per day in London 2019: **£4.7bn** (2018: £5.8bn)
- Average number of equity order book trades per day in Italy 2019: **255,000** (2018: 282,000)
- MTS Repo notional value traded in 2019: **€113.5tn** (2018: €87.4tn)

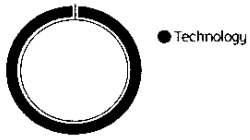
Group Technology

Our businesses and customers depend on our secure technology that performs to high levels of availability and throughput.

Group total income: 3%

Total Income Contribution

£66m
2018: £65m



Customer Profile

LSEG Technology
- LSEG divisions, other exchange groups and capital market clients
- Banks, trading firms and depositories in Europe, North America, Africa and Asia-Pacific region

Main Types of Revenue

Technology
- Sales of capital markets software, including trading, market surveillance and post trade systems
- Fees for network connections, server hosting and systems supplied by Group businesses

Highlights
- The Securities Clearing Corporation of the Philippines selected Millennium's Post Trade product to improve its post trade processes
- Successfully implemented Millennium Exchange and Millennium Surveillance platforms for the Johannesburg Stock Exchange for its Equity, Equity Derivatives and FX Derivatives market

KPIs
- Availability of UK equity market during the year 2019: 99.99% uptime (2018: 99.99%)

Market trends and our response

Through its three core businesses: Information Services, Post Trade, and Capital Markets, the Group supports global economic growth by providing financial markets infrastructure to facilitate safe, effective and transparent global capital allocation, trading and investment decisions, and associated risk and capital management.

The financial markets infrastructure landscape is fast moving and dynamic and has evolved significantly in recent years. Our customers and market participants operate globally and range from the world's largest financial institutions to retail investors and SMEs. The Group continues to adapt to meet these changing dynamics in order to maintain its position as a leading Financial Markets Infrastructure (FMI) provider.

The key themes and trends which we have observed are as follows:

1. Continued globalisation
2. Growth in ESG and climate awareness
3. Changing investor preferences and operating dynamics
4. Innovations in digitisation, AI and automation
5. Ongoing regulatory change

1. Continued globalisation

Global wealth and redistribution
While the rate of growth in global wealth appears to be slowing, the shift between various geographies and demographics is expected to continue beyond 2019, with global wealth now expected to reach around US$459 trillion by 2024[1]. As a result, this will drive increased number of market participants, volumes of financial transactions, and quantity of data, as well as demand for data from around the world.

Growth of Emerging markets
Emerging markets have become increasingly important to the world economy having accounted for two-thirds of the real growth in worldwide wealth since 2008. Over the same period, their contribution represents double that of North America (the largest financial market in the world). The increasing importance of emerging markets continues to be a key trend for the FMI industry[2].

Implications for LSEG

In line with the growth and redistribution of global wealth, customers increasingly require the ability to trade across different regions, asset classes and currencies and are, therefore, seeking FMI providers who can provide seamless access and solutions on a global scale.

LSEG is a global FMI provider with a growing global footprint, that provides a wide range of services to an increasingly global customer base.

We continue to invest in serving our global customers and in developing a broad and balanced global footprint through establishing partnerships in strategically important regions. One of our ongoing priorities is to deepen the Group's relationship with key stakeholders across Asia and emerging markets. In pursuing this goal, we launched the Shanghai-London Stock Connect initiative in 2019 allowing global investors to access China's growth through London. We also now include China A Shares and Saudi Arabia into FTSE's Global Equity Index Series.

Operationally, the Group maintains and continues to expand its centres of excellence around the world including specialised capability centres to support global operational hubs. This includes offices in Colombo, Sri Lanka and Bucharest, Romania.

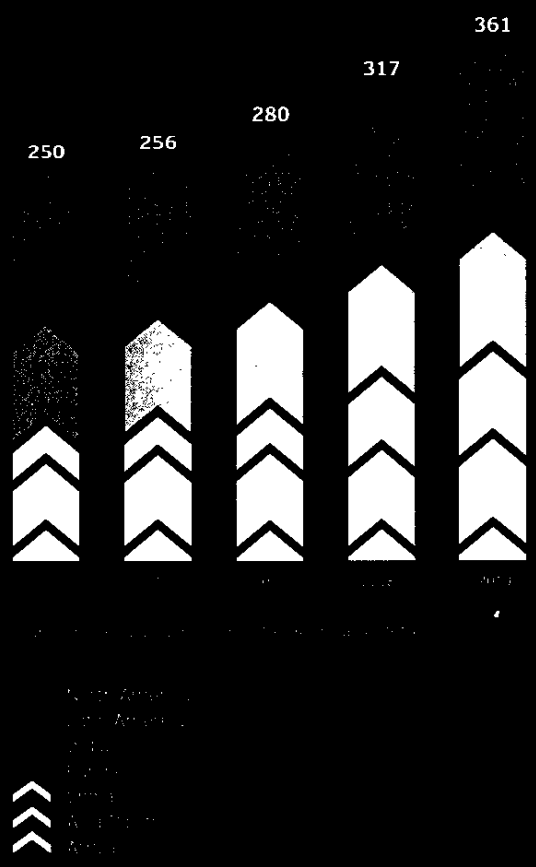
2. Growth in ESG and climate awareness

ESG and climate factors are becoming a mainstream consideration in investment decision-making with over US$30 trillion of assets now being professionally managed under responsible investment strategies[3]. Businesses are also increasingly disclosing climate-related risk metrics in their external reporting with approximately two-thirds of UK corporates reporting on this topic in their 2019 annual reports. Governments are helping to drive this increasing focus on climate change through initiatives such as the G20 Financial Stability Board's Task Force on Climate-related Financial Disclosures.

Implications for LSEG

The increasing awareness of and focus on ESG and climate change for investors brings a growing demand for relevant benchmarks, data and analytics to support investment mandates and decision making. Recognising these shifts in demand, LSEG has continued to invest in building out its data sets, capabilities and products in these areas, such as the acquisition of Beyond Ratings in 2019 (an ESG data and analytics company specialising in the application of ESG principles to fixed income products) and the launch of the Climate Risk-Adjusted World Government Bond Index (Climate WGBI) which is the first of its kind in our industry, ranking sovereign bonds across 22 developed nations. Climate considerations, ESG, and sustainable development goals also continue to be integrated into our equity index capabilities for our client passive mandates, for example in 2019 for Detailhandel and Local Government Pension Scheme Central (LGPS Central). See page 19 of our separate Corporate Sustainability report for more details.

Credit Suisse Global Wealth reports 2015-2019
Total wealth by region US$ tn



1. The Global Wealth Report 2019, Credit Suisse (2019)
2. Global Wealth 2019, Reigniting Radical Growth, Boston Consulting Group (2019)
3. The ESG Global Survey 2019, Asset Owners and Managers Determine their ESG Integration Strategies, BNP Paribas (2019)

Market trends and our response (continued)

3. Changing investor preferences and operating dynamics

Changing investor preferences

Investor preferences are continuing to shift in response to a changing market landscape characterised by demographic changes, evolving models of state support, global wealth patterns and a continuing low yield environment. This has led to a range of new and innovative investment strategies being adopted by investors across the globe which are moving beyond traditional equity based strategies towards multi-asset class solutions (as evidenced by the continued growth in trading of fixed income and alternative asset classes) as well as the evolution of investment processes in incorporating new technologies and making increased use of alternative data[4]. The growth in passive strategies also continues to shape the investment industry. In 2019 assets in passive US Equity funds outweighed actively managed assets for the first time[5]. ETFs continue to grow in popularity as a low-cost passive investment vehicle and global ETF assets are expected to reach nearly US$25 trillion by the end of 2025[6]. In parallel, the increased accessibility of private capital and historically low interest rates are driving Private Equity, Venture Capital and peer investing to new highs. By the close of 2019, global Private Equity firms had record amounts of unused funds ready to deploy totalling US$1.5 trillion[7].

Implications for LSEG

Across our business divisions, we are focused on expanding our capabilities and service offerings across asset classes. In Information Services, we continue to realise value from the integration of The Yield Book, which has expanded LSEG's capabilities in fixed income analytics and Beyond Ratings, which has contributed to LSEG's ESG analytics capabilities. In Post Trade, LCH offers trading across OTC and Non-OTC asset classes including interest rate swaps, FX, CDS, Repo and equities. Within these asset classes, LCH has extended its clearing offering to new sub-asset classes such as non-deliverable options and deliverable forward products within ForexClear. Finally, in our Capital Markets division, we have made further strategic investments and created partnerships to accelerate our response to emerging customer needs. Our minority investment in Nivaura in 2019 for instance, will help investors to streamline private capital processes through its digital platform for issuing and administering corporate bonds, loans and equity.

Evolving customer operating dynamics

Buy and sell-side customers continue to focus on operating model reforms and cost efficiencies in response to continued fee pressures, expanding client demands and regulatory-driven changes. Customers are increasingly looking across their operations to realise efficiencies and are looking for more innovative and effective ways of accessing the products and services they require. This trend is supported by the progress being made by financial technology companies and 'Big Tech' providers in digital technology such as automation, cloud computing and AI. The electronification of trading in fixed income and derivatives is one such example of the impact of these innovations on trading systems and customer operating models.

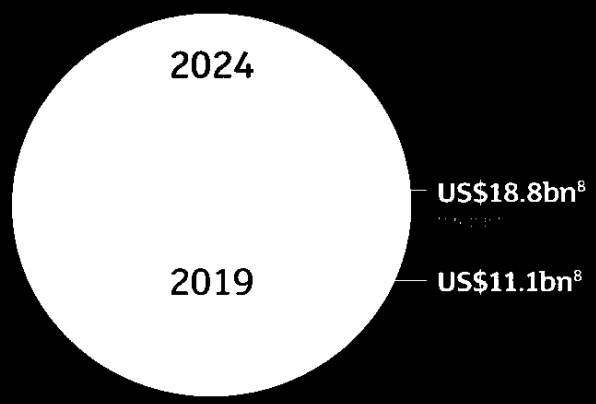
Implications for LSEG

Our partnership approach ensures we stay close to our customers and enables us to play a leading role in understanding and addressing their challenges. In our Post Trade division for example, where operating models are evolving rapidly, UnaVista is delivering a new service to assist clients in monitoring the accuracy of their regulatory reporting to help clients mitigate operational and regulatory risks and also reduce reconciliation overheads and SwapAgent is working on the simplification of margin processes and the settlement of non-cleared derivatives. In our Capital Markets division, MTS provides trading infrastructure for international markets to facilitate the electronic trading of fixed income products.

4. 2019 Investment Management Outlook, A mix of opportunity and challenge, Deloitte (2019)
5. News Article, 2019, End of Era: Passive Equity Funds Surpass Active in Epic Shift, Bloomberg (2019)
6. ETF Strategy, 2018, A look ahead: The ETF industry's next 25 years, ETF Strategy (2018)
7. Private equity firms are sitting on US$1.5 trillion in unspent cash, and looking to raise more, Fortune (2019) (www.fortune.com/2020/01/25/private-equity-trillion-cash-2020/)

The AI Market

Size of the global algorithmic trading market



Estimated % of market trading activity conducted by AI

4. Innovations in digitisation, AI and automation

Advances in technology, including cloud computing, machine learning and AI, have enhanced data analytics and storage capabilities across the FMI industry. Further, technological developments have increasingly digitised trading, generating vast quantities of new data. For example, the US capital markets watchdog FINRA reported a daily average of 66.7 billion electronic records being created in 2018, representing an 87% increase from the previous year[11]. This brings an increased need for data categorisation and management. Data is increasingly viewed as a core component in investment decision-making, with customers demanding data-driven solutions in order to realise value. As a result, customers require enhanced data management, more sophisticated analytics, and data solutions and effective data distribution to keep up with the fast-paced nature of today's markets.

Implications for LSEG

LSEG's data and analytics capabilities have grown significantly over the last 10 years. Developing these capabilities has been a key strategic priority for our Group and remains a core part of our strategy and plans for the future. We have grown our capabilities in this space through a combination of organic initiatives, partnerships and acquisitions over the last 10 years. Going forward, our proposed acquisition of Refinitiv will transform our data and analytics capabilities and will create new opportunities for us to deliver enhanced value for our customers. Supporting our development in this space, we are also engaging with 57 technology companies in our Cloud migration programme, a key focus of technology investment in 2019 and beyond.

11. News Release, 2019, US regulator reports record surge in trade data, Financial Times (2019)

Market trends and our response (continued)

5. Ongoing regulatory change

Regulatory change	Implications for LSEG
Brexit update The withdrawal agreement provides for a transition period until 31 December 2020 during which the UK will continue to apply European Union law but it will no longer be represented in the EU institutions. As such, the negotiations on the future partnership between the EU and the UK is intended to take place during the transition period. Both the UK and the EU will endeavour to conclude assessments of future regulatory equivalence by the end of June 2020 as set out in the revised political declaration. These equivalence decisions will impact LSEG activities, including equivalence for the EU CCPs operation in the UK and UK CCPs operating in the EU, as well as the equivalence for the purpose of the so-called 'Share Trading Obligation' which requires investment firms to ensure that the trades they undertake in shares admitted to trading on a regulated market, or traded on a trading venue, take place on a regulated market, Multilateral Trading Facility, systematic internaliser, or an equivalent third-country trading venue.	The absence of equivalence decision by the end of the transitional period may impact LSEG's Post Trade divisions revenue due to EU clients not being able to access LCH Limited and UK clients not being able to access LCH S.A and CC&G. It may also impact the trading revenue generated by LSEG's Capital Markets business due to the implications of the Share Trading Obligation. As part of a structured Brexit programme formed by LSEG, it continues to engage with UK and EU Brexit policy leaders to advise on financial market infrastructure considerations. Our key objectives are: (i) maintaining London's position as a global financial hub; (ii) providing continuity of cross-border financial services; and (iii) protecting against policies which may result in fragmentation of financial markets. We continue to maintain an ongoing dialogue with UK, EU and other international authorities with respect both to the need for contingency measures and to our contingency plans for LSEG businesses.
Cross-border market access As G20 mandates continue to be implemented and revised, focus has increased across jurisdictions on cross-border market access to financial market infrastructure products and services. In the EU, EMIR 2.2, the EU Benchmark Regulation (the "Benchmark Regulation"), MiFID II/MiFIR and other financial services files contain third country provisions that could impact EU participant access across non-EU clearing, trading, benchmarks and other global products and services. The Benchmark Regulation third country transitional period now ends on 31 December 2021. In the US, the CFTC has proposed several revisions to expand cross-border derivatives markets access. The UK will continue to evaluate its market access rules pending Brexit developments.	As a leading global financial market infrastructure business, market access rules impact how customers across jurisdictions access LSEG's products and services. We promote harmonisation and cross-border rules that support open and global markets. We remain closely engaged with authorities at national and multilateral levels to promote open, cross-border access to its global offerings.
Benchmark Regulation and LIBOR transitions The Benchmark Regulation came into effect in January 2018. Building on the International Organisation of Securities Commissions (IOSCO) Principles, the regulation impacts benchmark users, contributors and administrators. There are initiatives in other jurisdictions to review the regulatory framework governing benchmarks. Regulators have established a clear priority to move away from inter-bank rates including LIBOR and EURIBOR to introduce alternative reference rates in several major jurisdictions.	FTSE Russell is a leading global benchmarks provider. FTSE International Limited has been authorised by the FCA as a Benchmark Administrator, under the Benchmark Regulation. We view the Benchmark Regulation positively, as it raises standards across the industry. Regarding the inter-bank reference rate transitions, LCH is closely engaged with the relevant government authorities and industry participants to fully support a smooth transition to selected alternative reference rates.

Regulatory change	Implications for LSEG
Uncleared margin rules (UMR) Under the UMR, certain non-centrally cleared OTC derivatives will be subject to initial and variation margin requirements. The UMR are currently being phased in. The Basel Committee on Banking Supervision and the IOSCO have agreed to extend by a year the final implementation of the margin requirements to September 2021 for some smaller counterparties, although as at the date of this document, the deadline within the EU is September 2020. Cleared instruments such as exchange traded derivatives and centrally-cleared OTC swaps are not within the scope of UMR.	The new phase of the UMR to be introduced may drive market participants to clear more trades centrally and, therefore, may increase the overall number of derivatives which are centrally cleared across the sector.
CCP recovery and resolution Authorities across Europe, North America and other major jurisdictions, as well as international standard setters, are working on further developing the regulatory frameworks for the recovery and resolution of CCPs. In an extreme scenario where CCPs face severe distress or failure, this global framework will ensure that the critical functions of CCPs are preserved while maintaining financial stability. The EU framework is expected to be finalised in 2020. Discussions are now ongoing around a potential increase of CCP resources.	Harmonisation of the requirements for CCP recovery plans, and the introduction of resolution plans prepared by the resolution authorities should provide clarity on the impact on CCPs and identify the critical functions they must maintain in the unlikely event of their failure. We will continue to assist the authorities and provide input for the development of this framework including in respect of the potential increase of CCP resources.
Market Structure Reviews MiFID II/MiFIR is the widest ranging of the EU's legislative initiatives in terms of its impact on LSEG and its customers. In the US, there is growing focus on both equity and fixed income market structure topics with a view to implementing changes, whilst there is a global regulatory scrutiny process led by IOSCO into the rapidly growing ETF space. The European Commission and ESMA have started the MiFID II Review process by series of consultations – first one was conducted in Q4 2019, on Market Data pricing and introduction of a Consolidated Tape. It is likely that the European Commission will propose legislative amendments in this area in 2020. In parallel, the European Commission is running an independent feasibility study on Consolidated Tape.	The impact on LSEG includes rules on market transparency, trading protocols and microstructures, provision of market data, transaction reporting, SME Growth Markets, and Open Access for CCPs and benchmark providers. The impact of MiFID II/MiFIR has been broadly neutral, with the ability to offer customer solutions in areas such as Turquoise block trading and Open Access potentially providing opportunities across all of our segments (see the paragraph headed Open Access, on the next page). We continue to follow the US debates closely given the potential impact on LSEG's growing US operations, as well as the global focus on ETFs. LSEG keeps monitoring and engaging on the Market Data pricing and introduction of Consolidated Tape debates, supporting among others the Reasonable Commercial Basis principle.
Capital Markets Union (CMU) CMU is a plan introduced by the European Commission that aims to create deeper and more integrated European capital markets, enhance competition and remove barriers to retail investment.	CMU may increase activity across LSEG's capital markets and post trade businesses. We are closely following development of the relevant regulatory files such as the Prospectus Regulation and the Investment Firm Review.

Market trends and our response (continued)

Regulatory change	Implications for LSEG
Sustainable finance The Global Commission on the Economy and Climate stated, in 2018, that the next two-three years are a critical window when many of the policy and investment decisions that shape the next 10-15 years in relation to climate finance will need to be implemented. Given the desire of some investors to integrate ESG factors into investment strategies, asset managers and intermediaries throughout the value chain across the world are responding.	We continue to actively contribute to this global and regional debate, in particular the European Commission Sustainable Finance Action Plan and the Technical Expert Group, and the UK Green Finance Taskforce and Institute. In Italy, Borsa Italiana joined the Italian Observatory on Sustainable Finance. As our customers integrate climate change and sustainability into their plans, we are supporting issuers to access capital and investors' choice in developing and implementing investment strategies.
Open Access Open Access underpins provisions within MiFID II/MiFIR that change the way some clearing houses, trading venues and index providers will need to provide their products and services. The changes, which will fully apply from July 2020, require access to be provided to potential users of trading, clearing and indices on a non-discriminatory basis.	Open Access remains a key principle that underpins our strategy and business model and is fully aligned with the way we currently operate. Our clearing services already accept clearing trades that originate from venues outside of our Group; some of our trading venues already provide choice of clearing through alternative CCPs outside of our Group; and FTSE Russell provides index licences to several exchange businesses that are competitors to our trading venues. Open Access increases competition across a range of services, to the benefit of investors and market participants, and potentially provides our relevant businesses and partnerships with opportunities to launch new products and attract new trading and clearing flows.
Emerging technology For the financial services industry, regulators in major jurisdictions are closely monitoring and developing regulatory frameworks on emerging financial technology ("Fintech"), specifically the potential uses of distributed ledger technology, cloud computing, machine learning and AI. Regulators are also exploring opportunities for regulatory technology to help develop new strategies for the hosting and use of regulatory data. There is continuous focus from regulators on the operational resilience of FMIs to ensure continuity of critical business services and the overall resilience of the financial sector.	Emerging technology related regulatory initiatives have implications in various degrees to all of our functions and services, either as compliance obligations or constituents of the services that we provide to our customers. We continue to monitor and engage with regulators and leading industry working groups on these issues for the development of regulatory frameworks.
Operational resilience and cyber security Regulators (both at EU, national level and through the G7 cyber experts working group and other multilateral bodies) and the industry are working to keep pace with the growing cyber threats facing markets through enhancements and further development of resilience standards.	One of our top priorities is to continue to invest in ensuring cyber resilience and compliance with regulations. In addition to complying with current cyber and data protection requirements, we comply with significant data and cyber operational controls and standards required under regulations. We continue to monitor and engage with regulators and leading industry working groups on the development of regulatory frameworks and appropriate harmonisation of standards across jurisdictions.

Strategy in action

Strategy

We recognise the vital role which our Group plays in the global economy and therefore our responsibility in promoting sustainable economic growth and financial stability for our stakeholders. We monitor the evolving landscape in which we operate and the positioning of our businesses to ensure that we can best fulfil our purpose and achieve our ambition of being the leading global financial markets infrastructure business. Underpinning our strategy is a commitment to our core principles of Open Access and customer partnership.

Our Purpose

We support global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs

Our Vision

To become the leading global financial markets infrastructure group

Our Business Divisions

Information Services | **Capital Markets** | **Post Trade**

Our Strategy

Data and analytics | **Capital formation and trade execution** | **Risk, collateral and processing solutions**

Group operating model and culture supported by operational and technological excellence

Our Core Principles

Open access | **Customer partnership**

Refinitiv

The proposed acquisition of Refinitiv will accelerate our strategy and transform LSEG's position as a global financial markets infrastructure leader of the future. In particular, Refinitiv will enhance our customer proposition in data and analytics, will create a global multi-asset class capital markets business and will strengthen our global footprint. As LSEG and Refinitiv share the core principles of open access and customer partnership, these will continue to differentiate our offering and ability to deliver world-leading financial infrastructure services.

Strategy in action
(continued)

Strategic pillars

Data and analytics

The increasing importance of data in the investment and trading process is shaping what customers require from financial markets infrastructure businesses. Our Information Services division is driving the development of our data and analytical capabilities. At a Group-wide level, we also aim to develop and refine the datasets we source and the capabilities that we have in all of our businesses to support our objective to become a global leader in data and analytics.

Examples

- We continue to invest and grow our product offering with over 340 new equity indices launched in 2019 and developed new Fixed Income indices including the Climate Risk-Adjusted World Government Bond Index
- We have continued to drive organic initiatives across our Group to further explore how we can utilise our proprietary datasets and capabilities, alongside targeted inorganic initiatives such as the acquisition of Beyond Ratings in June and the proposed acquisition of Refinitiv

Capital formation and trade execution

Building on our existing capital markets capabilities, we aim to further grow our global footprint and ability to offer cross-border trading and investment opportunities, in addition to developing our multi-asset class capabilities and increasing our participation in the private markets capital raising process. This is supported by a strong focus on developing our technology capabilities to enable us to build and run high performing and resilient platforms.

Examples

- This year we launched the Shanghai-London Stock Connect initiative which provides investors with access to investment opportunities in China through the London markets
- In February, we announced an investment in Nivaura, a digital platform for issuing and administering corporate bonds, loans and equity, which will help us in developing innovative solutions to assist companies in the capital raising process. We also increased our investment in CurveGlobal, the interest rate derivatives venture formed between LSEG and a consortium of dealer banks
- In October we launched the Global Equity Segment which allows investors to trade some US blue chip and US-listed Asian ADRs during London hours. This helps to advance the London Stock Exchange's ability to operate as a truly international exchange

Risk, collateral and processing solutions

Providing stable, transparent and efficient post trade solutions globally where risk is appropriately managed is a key priority for our business. We continue to invest in the stability and resilience of our clearing and settlement businesses and in growing our regulatory reporting and post trade capabilities to increase transparency for our customers and help them meet their regulatory reporting requirements.

Examples

- In October we announced the creation of a Post Trade division, in effect from 1 January 2020, which brings together our leading clearing and settlement businesses: LCH Group, CC&G and Monte Titoli and our regulatory reporting business, UnaVista. The LSEG Post Trade division will allow us to deliver greater customer value by pooling expertise, resources and servicing capabilities in Post Trade
- We further grew our ForexClear offering by linking ForexClear with FX Connect TradeNeXus, enabling simpler buy-side access to clearing

Group operating model and culture

Creating a strong and diverse culture built around our values and nurturing a Group mindset is a key enabler in building a Group operating model focused on delivering our business strategy. Additionally, we are committed to developing new ways of facilitating Group-wide collaboration across our business divisions. The drive towards creating an effective Group operating model is underpinned by our efforts in developing a stable, resilient and efficient technology infrastructure for our customers and businesses.

Examples

- We have continued to refine our organisational structure across the Group. Our Group COO is focused on building the operating model required to support our next phases of growth and proposed integration of Refinitiv. Key progress made in 2019 included, the appointment of a new Chief Information Officer who will be a member of LSEG's Executive Committee, the creation of a single Post Trade division bringing together our post trade assets across the UK and Europe and the creation of a Group wide compliance function
- We have continued to upgrade our underlying technology infrastructure to address the evolving needs of the business whilst simultaneously integrating a strong cyber security competency within our operational processes
- We have made improvements in employee mobility and diversity within the Group, enabled by the introduction of a Group-wide career framework and the creation of inclusion networks

Executive management team

The Executive Committee manages the business on a day-to-day basis. The team meets regularly to review a wide range of business matters, including financial performance, development of strategy, setting and monitoring performance targets, reviewing projects, corporate culture and other initiatives. Profiles of the Executive team are provided as at January 2020 (for further information on David Schwimmer, David Warren and Raffaele Jerusalmi, who are also members of the Board of Directors, see their biographies on page 75).

Changes to the Executive Management team
Chris Corrado was Group Chief Operating Officer and Chief Information Officer during 2019. He will leave LSEG at the end of the first quarter 2020 and is succeeded by Anthony McCarthy as Group Chief Information Officer, effective 1 January 2020 and by David Shalders as Group Chief Operating Officer effective 1 January 2020.

Murray Roos will join as Group Director, Capital Markets on 1 April 2020. Raffaele Jerusalmi will continue as Group Director of Capital Markets until Murray joins the Group.

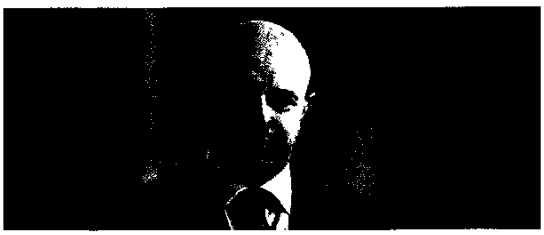
Tim Jones, Group Head of Human Resources, and Gavin Sullivan, Group Communications Director, both joined the Executive Committee with effect from 1 January 2020, reflecting the importance of these roles as the Group continues to develop.

David Schwimmer
Group Chief Executive Officer.
Joined the Group in August 2018.

David Warren
Group Chief Financial Officer.
Joined the Group in July 2012.

David Shalders
Group Chief Operating Officer and Chief Integration Officer.
Joined the Group in 2019.

David joined LSEG as Chief Integration Officer and subsequently also assumed the role of COO. He brings more than thirty years' experience in Integration, Technology and Operations in the financial services sector. Most recently, he was Group Operations and Technology Director at Willis Towers Watson.



Raffaele Jerusalmi
Chief Executive Officer of Borsa Italiana S.p.A.
Joined the Group in October 2007.

Diane Côté
Group Chief Risk Officer.
Joined the Group in 2012.

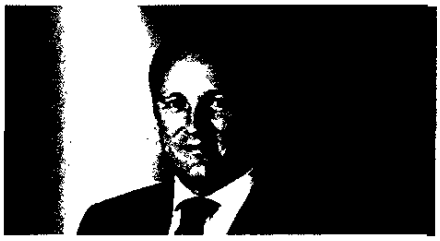
Diane was previously Aviva Plc's Chief Finance Operations Officer. Prior to this, she held the position of Aviva's Chief Audit Officer. Diane has many years' experience holding senior positions within Aviva and other leading organisations, including Standard Life Assurance.

Catherine Johnson
Group General Counsel and Head of Compliance.
Joined the Group in 1996.

Catherine Johnson joined LSEG in 1996 and was appointed to the LSEG Executive Committee in 2016. She advises the Board and senior executives on key legal matters and strategic initiatives, as well as being responsible for LSEG's Compliance function. Catherine qualified as a lawyer at Herbert Smith in 1993.

Tim Jones
Group Head of Human Resources.
Joined the Group in 2010.

Tim was appointed Group Head of Human Resources in May 2011 and is responsible for attracting, developing and retaining talent for the Group's global business. Tim was previously HR Director at Aegis Media, most recently for the EMEA region, and spent 15 years at Marks & Spencer in a variety of roles.



Daniel Maguire
Group Director of Post Trade.
Joined LCH in 2008.

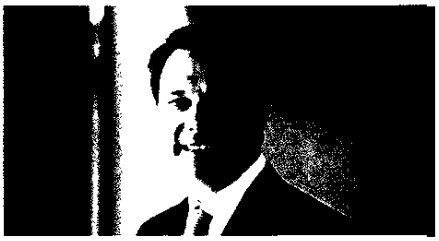
Daniel has wide experience in risk management, regulatory strategy, product management and development, programme delivery and sales and operations management. He was previously Global Head of SwapClear and also ForexClear and Listed Rates at LCH, and most recently LCH Group CEO.

Anthony McCarthy
Group Chief Information Officer.
Joined the Group in 2017.

Anthony (Tony) was appointed Group CIO in January 2020. He was CIO for LCH Group and Ltd from October 2017 until December 2019 where he was accountable for the provision of IT services in each CCP. Previously Tony was a Managing Director in IT at Deutsche Bank and was the Group CIO for the bank from March 2011 to November 2013.

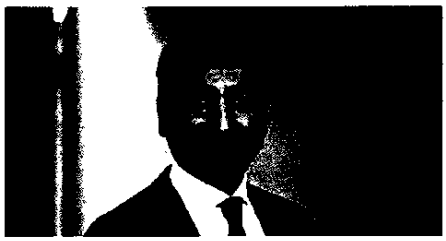
Nikhil Rathi
Chief Executive Officer of London Stock Exchange plc and Director of International Development.
Joined the Group in 2014.

Nikhil joined from the UK Treasury, where he held a number of senior positions, including Director of the Financial Services Group, representing the UK Government's financial services interests internationally, and Private Secretary to the UK Prime Minister for three years from 2005 to 2008.



Murray Roos
Group Director of Capital Markets.
To join the Group in April 2020.

Murray will join the Group in April 2020. Murray was previously at Citigroup as Global Co-Head of Equities and Securities Services, having previously led Global Equity Sales and Trading, as well as the Multi-Asset Structuring Group. Prior to joining Citigroup in 2015, he spent a decade at Deutsche Bank in various senior capital markets roles.



Waqas Samad
Group Director of Information Services and Chief Executive Officer of FTSE Russell.
Joined the Group in 2016.

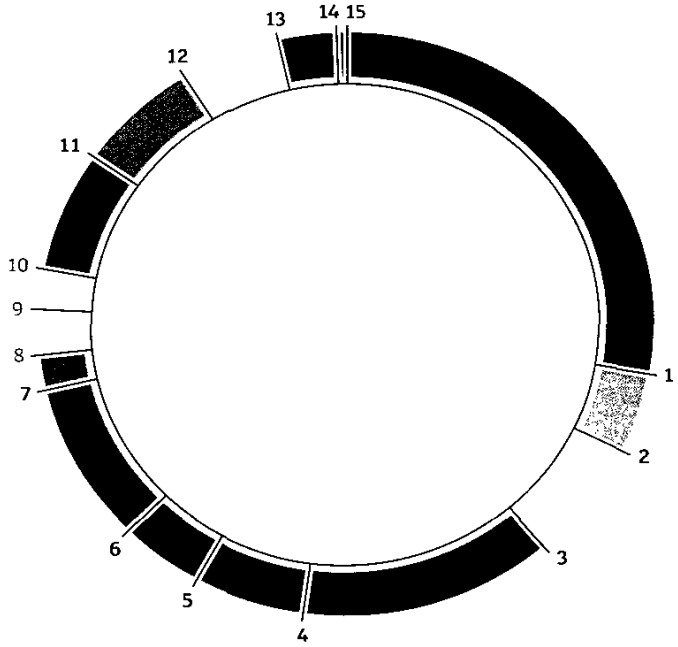
Waqas has spent more than 20 years in financial services. Previously he was CEO of Barclays Risk Analytics & Index Solutions, and before that at Deutsche Bank and at Credit Suisse in a variety of index research, quantitative and technology roles. He is the current Chairman of Index Industry Association.

Gavin Sullivan
Group Communications Director.
Joined the Group in 2013.

Previously held senior roles at Credit Suisse from 1998–2012, latterly as Acting Global Co-Head of Branding & Communications, responsible for the global Investment Banking and Asset Management divisions. Prior to Credit Suisse, she worked in Russia as an advisor on USAID-funded privatisation programmes.

Segmental review

Total Income



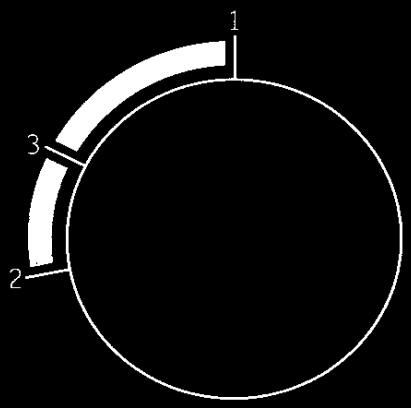
		12 months to 31 December 2019 £m	12 months to 31 December 2018 £m
●	**Information Services**		
1	FTSE Russell	**649**	592
2	Real time data	**97**	94
3	Other information	**156**	155
		902	841
●	**Post Trade Services LCH**		
4	OTC	**307**	268
5	Non-OTC	**140**	136
6	Other	**103**	83
7	Net Treasury Income	**206**	175
		756	662
●	**Post Trade Services CC&G and Monte Titoli**		
8	Clearing (CC&G)	**43**	41
9	Settlement, Custody & other (Monte Titoli)	**60**	61
10	Net Treasury Income	**49**	43
		152	145
●	**Capital Markets**		
11	Primary Markets	**151**	113
12	Secondary Markets – Equities	**151**	169
13	Secondary Markets – Fixed income, derivatives and other	**124**	125
		426	407
●	**Technology Services**		
14	Technology	**66**	65
●	**Other**		
15	Other	**12**	15
	Total Continuing Income	**2,314**	2,135

Further information
Sustainable initiatives can be identified by the following symbols with more detail available in the supporting sustainable growth section of this report and in our Corporate Sustainability report:

M Our Markets
S Our Services

Information Services

2019: £841m



1
FTSE Russell

2
Real time data

3
Other

Information Services is a leading global multi-asset class provider of indices, analytics and data solutions. The division also provides customers with a range of real time and reference data, news, software, regulatory reporting and reconciliation services. These are offered through FTSE Russell and other businesses that include Mergent, SEDOL, UnaVista and RNS.

FTSE Russell revenues originate from: Subscription based fees, which include recurring fees for index benchmark licences, data subscriptions and analytics services, and Asset Based fees, which are linked to assets under management (AUM) for ETFs and passive funds benchmarked to FTSE Russell indices, and from index derivatives contracts.

Real Time Data revenues are driven by access charges to our real time price and trading data, on either a display or non-display basis, as well as fees charged to vendors who re-distribute this data.

Other Information Services revenue comes from fees for the services offered by businesses including Mergent, SEDOL, UnaVista and RNS. These are a mixture of subscription and licence fees.

As of 1 January 2020, UnaVista, our trade reporting and reconciliation business that previously reported as part of the Information Services division, reports as part of our Post Trade division. For more information on Information Services, see: **www.lseg.com** and **www.ftserussell.com**

Market trends and our response for Information Services can be found on pages 14–20. Profitability of each segment can be found in the Financial Review on pages 53–59. A glossary of terms can be found on pages 204–206.

Highlights

Over 340 new equity indices launched in the year

ETF AUM benchmarked to FTSE Russell indices at year end
(2018: US$606bn)

RNS announcements issued
(2018: 342 thousand)

FTSE Russell ESG benchmark selectved for new passive equity fund designed to align with aspects of the UN SDGs

Segmental review
(continued)

US$15
trillion

AUM benchmarked to FTSE Russell indices

Information Services

– Information Services revenue up 7% to £902 million on a reported basis, and up 5% on a constant currency basis

FTSE Russell

– FTSE Russell revenues up 10% to £649 million (2018: £592 million), and up 6% on a constant currency basis

– 2017–2019 target for FTSE Russell double-digit revenue growth each year, achieved in 2019 with 10%

FTSE Russell is a leading global provider of benchmarks, analytics, and data solutions with approximately US$15 trillion assets under management (AUM) benchmarked to its indices.

FTSE Russell also provides a range of data and analytics solutions to assist customers in their risk management, investment strategy analysis and in asset allocation, as well as the analytics tools provided through The Yield Book.

Sustainability is an increasingly important component of investment decisions for domestic and international investors, with growing demand among asset owners and asset managers to integrate climate risk and ESG considerations into their equity and fixed income investment strategies. With nearly two decades of sustainable investment experience, FTSE Russell provides clients with sustainable investment data models, ratings, analytics, and indices covering thousands of companies across developed and emerging markets globally.

In June, LSEG completed the acquisition of Beyond Ratings, a highly regarded provider of ESG data for fixed income investors, enabling the Group to further support clients and grow capabilities around sustainable finance and investment.

Index – Subscription

– Index – Subscription revenues up 12% to £418 million (2018: £373 million), and up 8% on a constant currency basis

FTSE Russell calculates widely used indices across both equity and fixed income asset classes, including the FTSE 100, FTSE All-share, Russell 2000 and World Government Bond Index (WGBI), alongside multi-asset indices and custom indices created in response to client demand. In addition, indices increasingly focus on alternative investment strategies such as incorporating ESG considerations, smart beta, and factor-based metrics.

2019 saw the launch of the Climate WGBI, which utilises climate risk modelling developed by Beyond Ratings. This index allows sovereign debt investors to incorporate climate change risk considerations into their portfolios. S

Dutch pension fund, Pensioenfonds Detailhandel, selected a custom FTSE Russell ESG benchmark designed to align with aspects of the UN's Sustainable Development Goals (SDGs), as the basis of a new passive equity fund managed by BlackRock. S

Other index achievements during the year include the launch of a FTSE UK 100 ESG Select index which was selected by HSBC as the underlying benchmark for a series of new ESG-related structured products, a new Chinese Green Bond index series, the first factor-based indices linked to the WGBI in partnership with Nomura, and a Multi-Asset Composite index series. S

In March, FTSE Russell announced its intention to launch an indicative FTSE Digital Assets index, to evaluate and test a benchmark for the most actively traded digital assets. This will also help assist in the establishment of new industry standards for the digital assets market in consultation with market participants.

Demonstrating FTSE Russell's continued engagement with China and in response to the reclassification of China A Shares to secondary emerging market status, China A Shares were included for the first time into FTSE Russell's flagship FTSE Global Equity Index Series (GEIS). The first phase of inclusion is expected to be completed in March 2020, alongside the transition of Saudi Arabia to secondary emerging market status.

A country classification framework for FTSE Russell global fixed income benchmarks was launched in early 2019 to enhance the transparency of the process used to govern benchmark inclusion. Across the year, Israel met the necessary criteria for inclusion in the WGBI and its addition has been announced for April 2020. China has been added to the Watch List for a potential upgrade towards the level required for inclusion. Several other fixed income markets are being considered for the introduction of standalone indices, such as Saudi Arabia, Nigeria, Vietnam, Argentina and Croatia.

Index – Asset Based

– Index – Asset Based revenues up 6% to £231 million (2018: £219 million), and up 2% on a constant currency basis

FTSE Russell indices are used by ETF issuers for a range of investable products. At the end of 2019, US$765 billion AUM was benchmarked across 63 issuers of ETFs licensed by FTSE Russell.

FTSE4Good TIP Taiwan ESG Index was licensed by Yuanta SITC for the first ESG-focused ETF to be on the Taiwan Stock Exchange. Other ETF achievements in the year included FTSE Russell indices being chosen by Franklin Templeton for an additional eight equity ETFs, VanEck Australia selected FTSE Russell for a global real estate ETF, BetaShares launched Australia's first FTSE 100 ETF and a FTSE Russell green real estate index was licensed by BNP Paribas Asset Management for a new ETF listing.

FTSE Russell indices are licensed globally for derivatives trading across Europe, North America and Asia, demonstrating the Group's open access approach. During the year, 231 million derivative contracts based on FTSE Russell indices were traded, down 1% on the previous year, with lower volumes in the US and Italy, partially offset by strength in Asia led by the SGX traded FTSE China A50 Index Futures.

Real Time Data

– Real time data revenues up 3% to £97 million (2018: £94 million), also up 3% on a constant currency basis

Real time data revenue rose due to growth in redistribution licences while being partially offset by lower professional terminal usage across the Group which declined to 167,000 (2018: 174,000), with the UK at 65,000 (2018: 69,000) and Italy at 102,000 (2018: 105,000). Enterprise arrangements also offer longer-term revenue stability for LSEG. In accordance with MiFID II, real time data continued to be offered as disaggregated data packages giving customers more choice and flexibility. Real time data has also continued to focus on expanding its user base in Asia and has seen strong growth in the number of retail customers accessing the service in 2019.

Other Information Services

– Other revenues up 1% to £156 million (2018: £155 million) and down 1% on an organic and constant currency basis

UnaVista

UnaVista helps firms to reduce operational and regulatory risk through regulatory reporting, reference data and analytics solutions. UnaVista processed 9.3 billion reports across year (2018: 8.6 billion) and supported a range of clients to prepare for the next set of reporting obligations that are due to come into effect in 2020 under Securities Financing Transactions Regulation (SFTR). From 1 January 2020, UnaVista reports under the new Post Trade division.

Reference data

The Group's range of reference data offerings include SEDOL, Mergent and LEI. The SEDOL Masterfile Service database provides clients with access to reference data on over 100 million securities, Mergent provides extensive data on private and public companies, while LEI allocates unique codes to identify legal entities with 178,000 assigned across six continents.

Regulatory News Service

Regulatory News Service (RNS) is the leading provider of regulatory disclosure services to UK listed and AIM companies. In 2019, more than 345,000 regulatory announcements were published by RNS (2018: 342,000), covering the majority of UK regulatory announcements. RNS is approved by the FCA to operate as a Primary Information Provider in the UK.

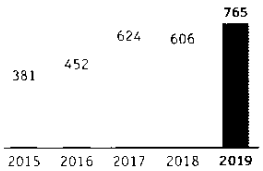
231 million

Derivative contracts based on FTSE Russell indices traded
(2018: 234 million)

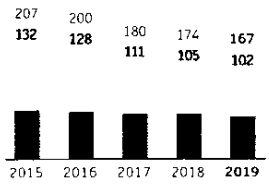
9.3 billion

Reports processed by UnaVista in the year
(2018: 8.6 billion)

ETF assets under management benchmarked to FTSE Russell indices
US$ bn (year end)



LSE and Borsa Italiana terminals
thousands (year end)

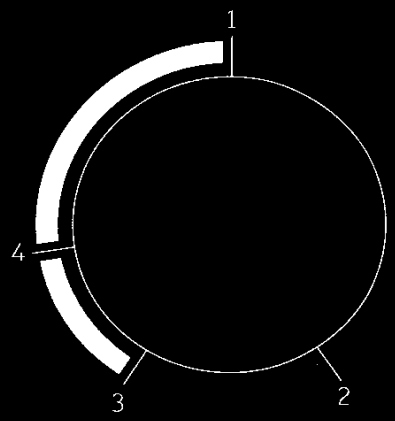


● LSE terminals
Borsa Italiana terminals

Segmental review (continued)

Post Trade Services LCH

2018: £662m



1 OTC

2 Non-OTC

3 Other

4 Net Treasury Income

LCH is a leading global clearing house, with clearing operations in the UK, Eurozone, US and an expanding presence in the Asia-Pacific region. LCH 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 the Group's markets and other major exchanges and platforms as well as a range of OTC markets. As well as clearing LCH also offers a growing service in the non-cleared market for OTC interest rate swaps.

In OTC derivatives markets, members are charged an annual fee for 'all you can eat' clearing or a lower annual fee with variable fees based on cleared volume, while clients pay a fee per trade or based on notional cleared. In non-OTC markets, all users pay a fee based on volumes or value cleared. Additional fees are levied for value added services such as compression, which are recognised as Other LCH revenue alongside fees for non-cash collateral. Net Treasury Income is the result of interest earned on cash collateral lodged with the clearing house, for margin and default funds.

As of 1 January 2020, the Group's Post Trade businesses, that were previously reported separately as LCH and Post Trade Italy, were aligned, in a manner consistent with the necessary regulatory oversight, into one Post Trade division. Post Trade now includes LCH Group, our Italian post trade businesses CC&G and Monte Titoli, and UnaVista, our trade reporting and reconciliation business that previously reported as part of Information Services.

For more information on LCH, see: **www.lseg.com** and **www.lch.com**

Market trends and our response for Post Trade Services, LCH can be found on pages 14–20. Profitability of each segment can be found in the Financial Review on pages 53–59. A glossary of terms can be found on pages 204–206.

Highlights

Target for c.50% adjusted EBITDA margin by 2019 achieved, with 54.9% margin for the year

Notional cleared by SwapClear
(2018: US$1.1 quadrillion)

Nominal value cleared at RepoClear
(2018: €98.7 trillion)

Notional compressed at SwapClear
(2018: US$7.7 trillion)

Post Trade Services LCH

- LCH income for 2019 was £756 million (2018: £662 million), up 14% on a reported basis and on a constant currency basis
- LCH 2017-2019 target for c.50% adjusted EBITDA margin by 2019 achieved, with 54.9% margin

The UK's withdrawal agreement from the EU provides a transition period until 31 December 2020. Both the UK and EU hope to conclude assessments of future regulatory equivalence by June 2020. These decisions will impact equivalence for EU central counterparties (CCPs) operating in the UK and UK CCPs operating in the EU. The absence of an equivalence decision by the end of the transitional period may impact LSEG's Post Trade division due to EU clients being unable to access LCH Ltd and UK clients being unable to access LCH SA and CC&G.

OTC Clearing

- OTC derivatives clearing revenue was up 15% to £307 million, an increase of 13% on a constant currency basis (2018: £268 million)
- 2017-2019 target for LCH OTC double-digit revenue growth each year, achieved in 2019 with 15%

SwapClear

SwapClear is the largest OTC Interest Rate Swap clearing house in the world, offering access to a deep pool of liquidity across 26 currencies to its 123 sell-side members and growing buy-side client base. In 2019, The Bank of China Ltd joined SwapClear, representing LCH's first clearing member from a Chinese banking group and demonstrating LCH's global reach as well as our growing business in, and commitment to, the Asia-Pacific region.

2019 was a record year for SwapClear, total notional cleared reached US$1.2 quadrillion (2018: US$1.1 quadrillion). Client clearing also saw record levels, with notional cleared increasing 16% to US$301 trillion (2018: US$259 trillion) and client trades increasing by 13% to 1,681,000 (2018: 1,487,000).

Inflation swap clearing saw volumes cleared increased by 43% with a total of US$6.0 trillion in notional cleared in 2019 (2018: US$4.2 trillion). Changing global interest rates and associated volatility in the swaps markets as well as continued expansion of the product suite, for example the launch of further non-deliverable interest rate swaps in new currencies, have contributed to these strong volumes in 2019. Going forward we expect these factors to be the main growth drivers for SwapClear as regulatory tailwinds are largely behind us.

LCH continues to innovate and work in partnership with its customers to meet strong market demand for the clearing of alternative reference rate products. In 2019 LCH became the first clearing house to offer clearing of Euro-denominated swaps benchmarked to the new reference rate, €STR. We have seen good levels of traction in our alternative reference rate products with over US$2 trillion of notional cleared across swaps benchmarked to SARON, SOFR and €STR in 2019, as well as over £32 trillion of notional cleared in swaps benchmarked to SONIA (2018: £34 trillion).

SwapClear is further able to present opportunities for capital and other efficiencies by offering both its own and third-party compression services which reduce the number of trades and overall notional value of portfolios by netting down compatible positions. SwapClear further expanded its own compression capabilities in 2019 and notional compressed continued to increase, rising 19% to US$920 trillion in 2019 (2018: US$773 trillion).

SwapAgent

SwapAgent, LCH's service which aims to provide processing, margining and settlement capabilities to the non-cleared space, has seen continued growth in volumes for its cross-currency swaps offering, with US$726 billion processed during 2019. SwapAgent now has 16 members using the service.

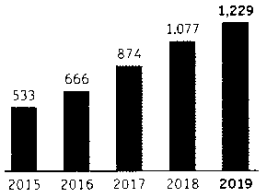
ForexClear

ForexClear offers clearing across 17 currency pairs for non-deliverable forwards and, in collaboration with CLS settlement service, offers clearing of spot, forwards and FX options in eight currency pairs. In October 2019, ForexClear became the first CCP to launch clearing for outright FX forwards, which expanded the range of FX derivatives now available for clearing and incorporates the first physical settlement service for cleared FX products.

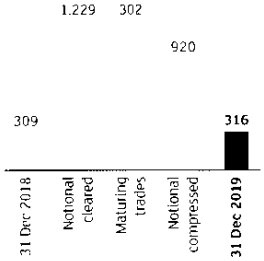
US$35.1 billion

Capital saved for our members and customers through the use of compression services

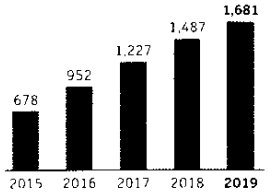
SwapClear – Total notional cleared
US$ tn



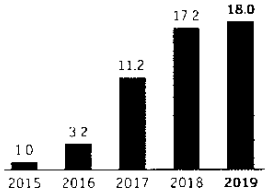
SwapClear – Compression volumes
US$ tn



SwapClear – Client: no. of cleared trades
thousands



ForexClear – Notional cleared
US$ tn



Segmental review (continued)

US$18.0 trillion

Notional cleared at ForexClear
(2018: US$17.2 trillion)

698 million

Trades cleared at EquityClear
(2018: 810 million)

In 2019, ForexClear membership increased to 34 members (2018: 32) while notional cleared grew by 5% to US$18.0 trillion (2018: US$17.2 trillion). Of this, US$61 billion was client cleared notional, up significantly from the previous year (2018: US$8 billion).

LCH also became the first clearing house to integrate with FX Connect TradeNeXus, State Street's FX trading platform. Users can now benefit from direct access to LCH's clearing service, via workflows integrated into TradeNeXus.

ForexClear's compression service volumes gathered momentum with US$48.1 billion in notional compressed over the year (2018: US$4.8 billion).

The Uncleared Margin Rules (UMR) continue to provide economic incentives for institutions when they clear their FX trades and we expect to add more members, and especially clients to this service as counterparties come into scope of the UMR requirements. In 2020, we expect to add Non-Deliverable Options to our list of cleared FX products, as well as connecting with more execution platforms.

CDSClear
CDSClear is the fastest-growing global CDS clearing service and continues to offer its users opportunities to gain capital efficiencies through clearing across the widest range of CDS products; with almost 100 index series and more than 500 single name CDS contracts eligible for clearing. CDSClear is also the only CCP worldwide which offers clearing of Credit Index Options with over 80 contracts eligible for clearing.

In 2019, total notional cleared increased to €759 billion (2018: €612 billion) supported by the introduction of mandatory clearing for Category 3 counter parties. Membership rose in 2019, with new members joining and some members adding supplementary memberships for additional entities, which do not attract an additional membership fee, bringing the total number of members up to 26 (2018: 16) and providing increased liquidity to the service. Further members are expected to join in 2020. Client clearing at CDSClear also grew in 2019, with more than 250 client entities live on the service and €42.9 billion of notional cleared by clients, an increase of 51% from 2018.

Credit Index Options notional cleared increased to €8.5 billion (2018: €1.8 billion). This performance is reflected in the use of CDSClear's electronic exercise platform for Credit Index Options, launched in November 2018.

Non-OTC Clearing
- Non-OTC derivatives clearing revenue was up 3% to £140 million, an increase of 4% on a constant currency basis (2018: £136 million)

RepoClear
In 2019, RepoClear reached a record nominal value cleared of €106 trillion (2018: €98.7 trillion). Volumes in RepoClear rose 7%, largely as a result of strong growth in the underlying Repo market, particularly in Europe as a result of excess liquidity, and members seeing netting and other benefits from the newly consolidated Euro debt pool in LCH SA.

In early 2019, LCH successfully consolidated a large majority of Euro debt clearing into LCH SA. This consolidation was implemented following long-standing requests from members as it offers them significant netting efficiencies, facilitated by settlement in Euroclear, Clearstream or in a CSD of their choice through TARGET2-Securities (T2S), the pan-European platform for securities settlement in central bank funds.

Sponsored Clearing continues to extend the full benefits of clearing to buy-side users in LCH Ltd, with roll out to LCH SA a focus in 2020.

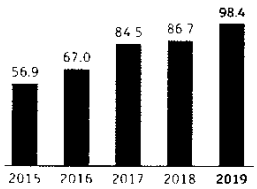
EquityClear and Listed Derivatives
EquityClear clears for more than 20 different trading venues, demonstrating our commitment to an Open Access approach. The number of trades cleared in 2019 fell by 14% to 698 million (2018: 810 million), due to a challenging global equity market in the year. In Q1 2019, EquityClear SA successfully extended its service to offer the clearing of main market Euronext stocks traded on Turquoise and hopes to further its reach by offering clearing for additional trading venues in 2020.

The Listed Derivatives venues cleared by LCH include CurveGlobal and Euronext Derivatives Markets and expects to begin clearing for Oslo Bors Derivatives markets in 2020. In 2019, the number of contracts cleared decreased by 5% to 144.7 million (2018: 152.9 million). Clearing of London Stock Exchange Derivatives Market (LSEDM) contracts ceased in 2019, as they were withdrawn from the trading platform.

Net Treasury Income
- Net Treasury Income for LCH in 2019 increased by 18% to £206 million (2018: £175 million) on a reported basis and up 17% on a constant currency basis

The increase in Net Treasury Income in 2019 was largely driven by the increase in average cash collateral held, which rose by 13% to €98.4 billion (2018: €86.7 billion), which in turn is primarily driven by volumes cleared and market volatility, and in 2019, a change in risk methodology for SwapClear to ensure the client clearing service was adequately protected from defaults resulted in increased initial margin requirements. In 2019, LCH has worked to increase its capacity with investment counterparties as well as expand the range of products they can invest in to allow for continued asset allocation optimisation.

Cash collateral held – daily average
€ bn

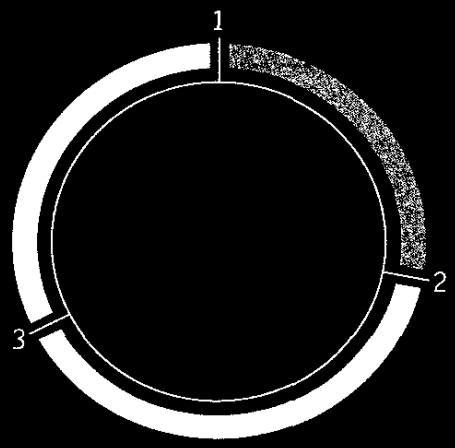


18%

increase in Net Treasury Income in 2019

Post Trade Services CC&G and Monte Titoli

2018: £145m



1 Clearing (CC&G)

2 Settlement, Custody & other (Monte Titoli)

3 Net Treasury Income

Post Trade Services in Italy are crucial to the securities trading industry. Our post trade businesses, CC&G and Monte Titoli, provide the markets with settlement, depository, custody, risk, clearing and central counterparty (CCP) services to mitigate risk and ensure the efficient running of capital markets. These services become increasingly important in volatile market conditions and our continued strong service emphasises the high quality of our risk management and post trade processes.

CC&G clearing earns revenue by charging a fee per equity trade or derivative contract cleared, with fees based on notional for fixed income. Net Treasury Income is earned on cash collateral held for margin and default funds.

Monte Titoli settlement revenue is earned by charging a fee per trade settled and lodged for registration into the buyer's name. Its custody fees are paid by companies based on market capitalisation and issuance, with fees paid by intermediaries including banks and CCPs based on balance of assets held in custody.

As of 1 January 2020, the Group's Post Trade businesses, that were previously reported separately as LCH and Post Trade Italy, were aligned, in a manner consistent with the necessary regulatory oversight, into one Post Trade division. Post Trade now includes LCH Group, our Italian post trade businesses CC&G and Monte Titoli, and UnaVista, our trade reporting and reconciliation business that previously reported as part of Information Services.

For more information on Post Trade Italy, see: **www.lseg.com**

Market trends and our response for Post Trade Italy can be found on pages 14–20. Profitability of each segment can be found in the Financial Review on pages 53–59. A glossary of terms can be found on pages 204–206.

Highlights

Notional cleared
(2018: €20 billion)

Annual average assets under custody
(2018: €3.29 trillion)

Average initial margin up to €14.4 billion
(2018: €11.1 billion)

Segmental review (continued)

91

Number of clearing members in CC&G

Post Trade Services Italy

– Post Trade - Italy income up 5% to £152 million (2018: £145 million) on a reported basis and up 6% on a constant currency basis

Clearing (CC&G)

– Clearing revenue up 3% to £43 million (2018: £41 million) and up 4% on a constant currency basis

CC&G's revenue in 2019 grew, in part, due to an increased notional for fixed income products cleared, which rose by 26% to €25 billion (2018: €20 billion). This offset lower volumes of equity trades and derivative contracts cleared, which were down 11% to 99.5 million (2018: 111.9 million).

CC&G continues to engage with both domestic and international clients with 38% of its 91 clearing members being international, demonstrating global reach. In previous years the number of clearing members reported has included clients, on a consistent basis in 2018 there were 83 members.

The UK's withdrawal agreement from the EU provides a transition period until 31 December 2020. Both the UK and EU hope to conclude assessments of future regulatory equivalence by June 2020. These decisions will impact equivalence for EU CCPs operating in the UK and UK CCPs operating in the EU. The absence of an equivalence decision by the end of the transitional period may impact LSEG's Post Trade division due to EU clients being unable to access LCH Ltd and UK clients being unable to access LCH SA and CC&G.

Net Treasury Income

– *Net Treasury Income up 14% to £49 million (2018: £43 million), and up 15% on a constant currency basis*

Net Treasury Income is the income generated by CC&G investing the cash collateral it holds. In 2019, average daily initial margin increased by 31% to €14.4 billion (2018: €11.0 billion).

Settlement, Custody and other (Monte Titoli)

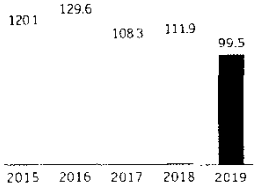
– Settlement, Custody and other revenue was broadly flat at £60 million (2018: £61 million) and up 1% on a constant currency basis

Monte Titoli manages a wide range of financial instruments, with €3.32 trillion assets under custody (2018: €3.29 trillion). In 2019, 44.4 million settlement instructions were processed down 2% on the previous year (2018: 45.4 million). Monte Titoli continues to provide an efficient settlement system, with a year-end settlement rate of approximately 96% of settled transactions (2018: 97%).

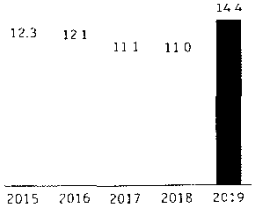
Monte Titoli was granted a licence to operate under European CSD Regulation (CSD-R) as of 18 December 2019. CSD-R aims to harmonise certain aspects of the settlement process and provide a set of common requirements for CSDs operating securities settlement systems across the EU.

Monte Titoli continues to make good progress on its Agility and Growth 2020 programme. The three-year plan, which began in 2018, has two pillars: the automation of core processes and innovation. The second phase of this programme has seen Monte Titoli leverage some of the big data solutions implemented in 2018 and begin exploring opportunities in areas such as machine learning.

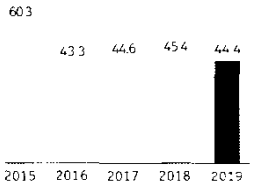
CC&G – Equity trades and derivative contracts cleared
m



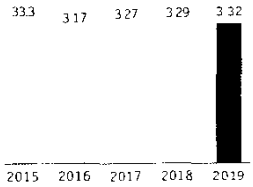
CC&G – Initial margin held
€ bn (average daily)



Monte Titoli – Settlement instructions
m

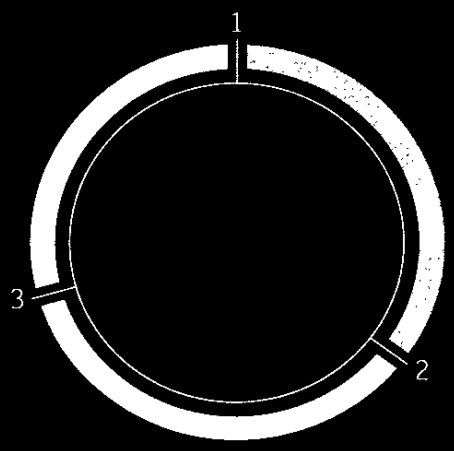


Monte Titoli – Assets under custody
€ tn (annual average)



Capital Markets

2018: £407m



1 Primary Markets

2 Secondary Markets – Equities

3 Secondary Markets – Fixed Income, Derivatives and Other

Note: Percentages may not equal 100% due to rounding

The Group's capital markets businesses facilitate a wide range of domestic and international companies' capital raising by providing well-regulated and highly liquid markets across our London, Milan and pan-European trading platforms.

Our range of primary markets provides choice for issuers and investors, enabling companies to raise equity capital or issue debt efficiently and increase their visibility with a wide group of customers and investors.

Our secondary markets create a deep pool of liquidity and allow active and efficient trading of equity, fixed income and derivative products through our high-performance trading platforms.

Revenues from Primary Markets are derived from fees charged to equity issuers seeking admission to London Stock Exchange and Borsa Italiana. The fees are charged based on the market value of securities listed. Issuers of equity securities are subsequently subject to annual fees. On London Stock Exchange, fees are also charged for companies carrying out further equity fund raisings once they are listed. For fixed income securities, a flat fee is charged for each new bond issued onto our markets.

In Secondary Markets a fee is charged based on value traded for UK equities, Turquoise and MTS fixed income markets. On other markets, Italian equities, derivatives and retail fixed income, a fee is charged per trade or contract traded. Revenues are also generated from membership fees, reporting fees for trades carried out away from the order book and market maker security registration fees.

For more information on our Capital Markets division, see: **www.lseg.com, www.londonstockexchange.com** and **www.borsaitaliana.it**

Market trends and our response for Capital Markets can be found on pages 14–20. Profitability of each segment can be found in the Financial Review on pages 53–59. A glossary of terms can be found on pages 204–206.

Highlights

Total raised by new and further issues
(2018: £28.7 billion)

UK average daily value traded
(2018: £5.8 billion)

MTS Repo value traded
(2018: €87 trillion)

Total amount raised from green, social and sustainable bonds on our markets

Segmental review (continued)

£4.0 billion

New capital raised on our AIM growth markets
(2018: £6.7 billion)

£405 billion

Total raised on our bond markets
(2018: £410 billion)

Capital Markets

– Capital Markets revenue up 5% to £426 million (2018: £407 million) on both a reported and constant currency basis

Primary Markets Summary

– Primary Markets revenue up 34% to £151 million (2018: £113 million), also up 34% on a constant currency basis

– Primary Markets revenue increased by c.£32 million in H1 2019 due to a one-off change in estimate relating to IFRS 15. Adjusting for this, Primary Markets revenue for the year rose 6%

Despite a challenging global equity market in 2019, our Primary Markets saw strength in international companies listing in London, making up almost a quarter of new issuances for the year, and with a record number of admissions to AIM Italia, our Italian growth market. In total, 109 companies were admitted across our markets in 2019 (2018: 176), raising a total of £6.8 billion (2018: £8.4 billion). Further offerings amounted to £16.6 billion (2018: £20.3 billion) as listed companies continued to access the deep pools of capital available through our venues.

AIM and AIM Italia continue to perform well with 54 companies admitted to these venues over the course of 2019 (2018: 91). Total capital raised on our AIM markets in 2019 amounted to £4.0 billion (2018: £6.7 billion) of which 83% was through further equity issuance, demonstrating the long-term relationships that exist between AIM companies and their investors. 60% of capital raised in European growth markets in 2019 was conducted via AIM.

In June, we launched the Shanghai-London Stock Connect with Huatai Securities raising US$1.5 billion of new capital on the Shanghai Segment. After many years of collaboration between the London and Shanghai stock exchanges, this is the first fungible cross-listing mechanism enabling international investors to access China A-shares from outside Greater China and represents the first time foreign companies have the opportunity to list in mainland China.

In November, LSEG announced a strategic partnership with PrimaryBid, a service that connects publicly listed companies with retail investors, offering equal access to capital markets transactions including IPOs to both institutional and retail clients.

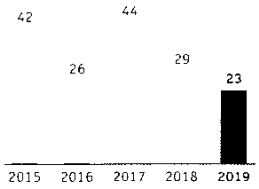
In October, London Stock Exchange launched the Green Economy Mark, recognising equity issuers on the Main Market and AIM with green revenues of 50% or more, identified by the Green Revenues data model developed by FTSE Russell. As at the end of 2019, a total of 75 issuers had received the Green Economy Mark. For more information on the Green Economy Mark see page 14 of our Corporate Sustainability report.

Our ETP platform in London saw a softer market in 2019 with 191 new ETPs listed (2018: 323) whereas our Italian ETFPlus market set a new record of 217 new ETPs (2018: 191). The total number of ETPs across our markets at the end of 2019 stood at 2,822 (2018: 2,831) with Goldman Sachs, the Kuwait & Middle-East Financial Investment Company and GraniteShare issuing their first ETPs in London, and Vanguard and Goldman Sachs as new issuers on ETFPlus.

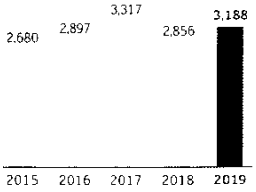
ELITE, LSEG's international programme to facilitate access to capital for SMEs, saw its community of companies reach 1,400 companies across 45 countries (2018: 1,000 companies across 40 countries). ELITE continues to expand its global reach, launching ELITE Scotland and ELITE America in the year. Five ELITE companies joined AIM Italia, taking the total number of IPOs from ELITE companies on our markets to 29.

We continue to be a leading global venue for international debt fundraising, including issuances in Indian Rupee, Chinese Renminbi, Sukuk bonds and Indonesian Rupiah, raising over £9.3 billion in 2019. In total, 1,524 bonds were listed on our markets, raising over £405 billion, 45% of which was raised by international issuers (2018: 1,972 bonds, £410 billion raised, 47% international).

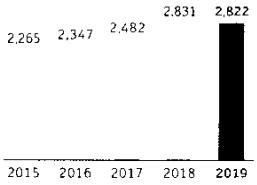
Equity money raised – Group
£ bn



Market capitalisation of companies listed – Group
£ bn



Exchange Traded Products – Group
number listed at year end



London Stock Exchange launched the Sustainable Bond Market (SBM) in October, building upon the success of its Green Bond Segment, launched in 2015. The SBM includes new dedicated segments for social and sustainability bonds, in addition to the existing Green Bond Segment. The total number of green, social and sustainable bonds listed on our markets as at the end of 2019 was 215, raising £37.4 billion. For more information on the SBM see page 15 of our Corporate Sustainability report.

Borsa Italiana launched a new bond segment of its ExtraMOT market, ExtraMOT PRO[3], for Italian SME companies not listed on regulated markets and / or with an issue value of less than €50 million. 161 debt instruments have been listed with over €5 billion raised in 2019.

Secondary Markets
Equities

– Secondary Markets – Equities revenue down 11% to £151 million (2018: £169 million), also down 11% on a constant currency basis

Equity trading in the UK was down 18% to £1.19 trillion in 2019 (2018: £1.46 trillion), while average daily value traded was down 18% to £4.7 billion (2018: £5.8 billion). In Italy, the average daily number of trades decreased by 10% to 255,000 (2018: 282,000). Activity levels across both of these markets were broadly reflective of lower volumes in the wider global equity markets.

Trading on the Shanghai-London Stock Connect was launched alongside Huatai Securities' listing in June 2019, with an average of US$5.9 million value traded per day, this was one of the top traded depository receipts on the International Order Book (IOB). 32 LSE member firms have already traded on the Stock Connect service with more expected over the course of 2020.

In October we launched the Global Equity Segment (GES) in London, offering trading in 95 international securities including US blue chip and Chinese ADRs during regular London trading hours. This segment provides investors the opportunity to reduce time zone risk in major international stocks whilst accessing exposure to global securities. In 2019, since launch, the average daily value traded on GES was £15.5 million. We expect volumes to grow during 2020 as investors take advantage of London's unique time zone, trading expertise and global investor community.

Turquoise, our pan-European MTF saw total value traded decline by 36% to €531 billion (2018: €828 billion) with Turquoise Lit activity of €318 billion (2018: €624 billion) declining by 49% as Lit flow tended towards the primary listing venue. Turquoise Plato's dark order book, Europe's largest dark pool, achieved new records with value traded up 4% to €213 billion (2018: €204 billion) with around half of this executed through Turquoise Plato Block Discovery, our MiFID II compliant mechanism for executing large anonymous block orders. In March, the Dutch authorities granted Turquoise a licence to operate an MTF in the Netherlands. In July, Turquoise removed more than 200 Swiss stocks after the EU and Switzerland did not agree to renew equivalence and in September, Turquoise announced changes to its tariff structure that increased the level of rebates to liquidity providers for passive limit orders above certain thresholds. In December, Turquoise NYLON, Turquoise's equity derivatives trading solution, launched an innovative cleared contract, which combines the economics and flexibility of OTC swaps with the capital efficiencies of central clearing.

The Group remains the largest exchange by turnover and number of trades for ETP order book trading in Europe, with £196 billion total value traded across our markets in the year (2018: £202 billion). This was down 3% compared with the strong trading seen in 2018. ETP trading accounts for around 9% of equity trading on LSE and 16% of equity trading on Borsa Italiana. ETPs trade on our platforms across four currencies including Chinese Renminbi.

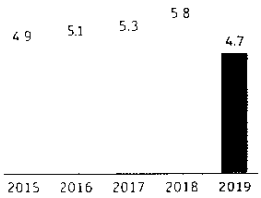
95

Global Equity Segment launched offering trading in 95 international securities

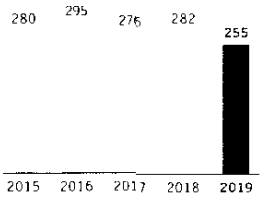
€103 billion

Value traded on Turquoise Plato Block Discovery
(2018: €93 billion)

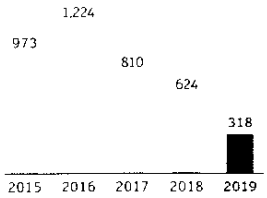
LSE – average daily value traded
£ bn



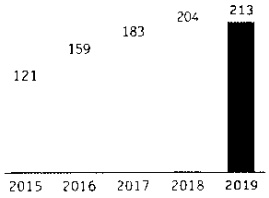
Borsa Italiana – average daily number of trades
thousands



Turquoise lit book – total value traded
€ bn



Turquoise dark book – total value traded
€ bn



Segmental review (continued)

€237 billion

Value traded on our retail bond markets
(2018: €205 billion)

5.7 million

***Interest rate derivative* lots traded on CurveGlobal**
(2018: 3.3 million)

Fixed Income, Derivatives and Other

– *Secondary Markets – Fixed Income, Derivatives and Other* revenue was broadly flat at £124 million (2018: £125 million), and up 1% on a constant currency basis

Our retail bond markets include MOT in Italy, which is the most liquid and heavily traded retail fixed income platform in Europe, EuroTLX and the UK Order Book for Retail Bonds (ORB). Across the year, these platforms continued to provide liquid markets despite the prevailing low interest rate environment. Total trades for the year were 6.0 million (2018: 5.1 million) with value traded at €237 billion (2018: €205 billion).

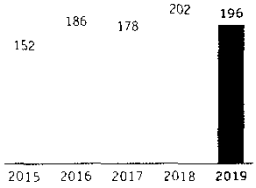
Derivative volumes fell 23% in the year owing to challenging markets in the first half of 2019 with 33.1 million contracts traded (2018: 42.8 million). Volumes were primarily executed on IDEM, the Group's Italian derivatives market which saw trading volumes of 30.7 million contracts (2018: 36.2 million). As planned, the London Stock Exchange Derivatives Market (LSEDM) has been rebranded CurveGlobal Markets as of 24 June 2019, following the withdrawal of IOB Equity Derivatives contracts on 21 June 2019 and the subsequent withdrawal of Norwegian equity derivatives from 29 November 2019.

CurveGlobal, our interest rate derivative trading platform operated as a joint-venture, saw over 11 million lots trade on the platform since launch with open interest at 395,000 lots at the end of the year (2018: 348,000), mostly in European Short-Term Interest Rate futures (STIRs). During 2019, CurveGlobal continued its innovation by launching One-Month SONIA contracts on the platform to aid the UK's transition from a LIBOR benchmark. Alternative interest rate products continue to be an area of focus, with further short term interest rate products to be launched later in 2020. Towards the end of 2019, CurveGlobal introduced a unique uncapped pre-paid trading scheme allowing its member firms and their clients to execute an unlimited number of lots in any CurveGlobal interest rates derivatives products over a one or three year period. As a minority shareholder, the results of CurveGlobal are not consolidated by the Group.

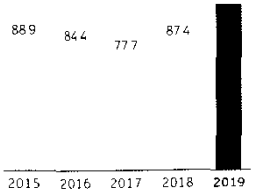
MTS is our leading regulated electronic trading platform for European wholesale government bonds and other types of fixed income securities. Value traded in MTS Repo increased 30% to €113 trillion (2018: €87 trillion) as European repo markets saw strong activity across the year due to continued excess liquidity, a stable interest rate environment and the compression of spreads between repo rates for core and periphery countries in the Eurozone. MTS Cash and BondVision's value traded ended the year down 4% to €3.2 trillion (2018: €3.3 trillion).

MTS extended the number of countries on its Cash market to 21, with the launch of MTS Cyprus in November 2019. This is the first designated electronic trading platform for Euro-denominated Cypriot government bonds. MTS is exploring further opportunities to provide infrastructure for other global markets to generate recurring licence based revenues. In 2018, MTS launched BondVision Repo, a Dealer to Client (D2C) repo solution in preparation for upcoming EU regulation, Securities Financing Transactions Regulation (SFTR), which will require participants to report repo transactions. Development has taken place throughout the year, alongside record volume activity towards the end of 2019, with a final release expected in 2020 ahead of the implementation of SFTR on 11 April 2020. In July 2019, Maria Cannata was announced as the new President of MTS. With 18 years of experience at the Italian Ministry of Economy and Finance, Maria will further strengthen MTS' relationships with the market.

Exchange Traded Products – total value traded
£ bn



MTS Repo
€ tn



Technology Services

LSEG Technology provides the Group and its customers, including banks, specialist trading firms and other capital market venues with resilient, high-speed, low-latency trading platforms, post trade platforms, real time market data and surveillance products and services.

Technology Services earns revenue through the sales of capital markets software via licensing arrangements as well as implementation fees and ongoing maintenance. The business also earns fees for network connections, server hosting and systems supplied by Group businesses.

For more information on our Technology division, see:
www.lseg.com

Market trends and our response for Technology can be found on pages 14–20. Profitability of each segment can be found in the Financial Review on pages 53–59. A glossary of terms can be found on pages 204–206.

– Technology revenue increased by 2% to £66 million (2018: £65 million) on a reported basis and 1% on a constant currency basis

During the year the Group continued to pursue its cloud-first strategy, with the aim of leveraging the potential of cloud technologies to reduce operational costs, deliver system scalability and support our growing global footprint. Our aim is to operate a significant proportion of service delivery and corporate computing from the cloud by 2021.

In 2019, using a cloud-based environment for the first time, LSEG Technology was able to successfully launch a low-latency, resilient and scalable matching engine for Atom Asset Exchange (AAX), a 24-hour digital asset exchange. This demonstrates the opportunities for our technology outside traditional marketplaces and in the cloud.

LSEG Technology also successfully implemented Millennium Exchange and Millennium Surveillance platforms for the Johannesburg Stock Exchange (JSE) for its Equity, Equity Derivatives and FX Derivatives markets in 2019. This new release represented a major upgrade, delivering operational efficiencies to both users and the wider market across all derivatives asset classes with the ability for JSE to extend to other products in the future.

In December 2019, the Securities Clearing Corporation of the Philippines (SCCP), a wholly-owned subsidiary of the Philippine Stock Exchange selected LSEG Technology's Millennium Post Trade product to improve its post trade processes, providing an efficient and effective, clearing, settlement and risk management solution.

Through our Millennium Exchange technology, our UK cash equity trading platform exhibited 99.99% uptime during the year (2018: 99.99%). The platform experienced a total downtime of 67 minutes in the year as a result of a technical software issue that affected trading in certain securities.

Highlights

Technology revenue
(2018: £65 mil)

LSEG Technology delivers innovative technology solutions to over 40 capital markets *organisations globally*

Uptime of the UK equity market
(2018: 99.99%)

Supporting sustainable growth

Why Corporate Sustainability matters

LSEG believes that good Corporate Sustainability (CS) practices are fundamental to our continued success and delivery of enhanced business performance. We aim to support financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs. This corporate purpose encapsulates not only commercial and performance objectives but also Environmental, Social and Governance (ESG) responsibilities. Accordingly, we set our CS strategy in line with our wider business strategy.

To develop and achieve the Group CS objectives and targets, we established a Group CS Committee in 2011.

£4 trillion

Size of investment opportunity from transition to green economy

(Source FTSE Russell Investing in the global green economy report 2018)

Sustainability Governance

Our approach to Corporate Sustainability is overseen by the LSEG Board. The CEO is responsible for sustainability matters, while the Group CFO, who is a Board member, has responsibility for the environmental policy. In 2019, the Board met four times to discuss ESG matters.

Our sustainability strategy is driven by the Group CS Committee, on which Executive Committee members sit. Delivery of the sustainability programme is carried out by the Sustainable Business team, reporting to the heads of Investor Relations and Government Relations and Regulatory Strategy.

Each pillar lead has established working teams drawn from across the Group, two of which also have oversight of related CS initiatives, shown in the diagram to the right, such as the Diversity and Inclusion (D&I) committee which feeds into the 'Our People' working team.

Risks

We continue to assess the materiality of ESG and related risks to LSEG and to increase our focus on embedding these risks into our Enterprise Risk Management Framework. While we recognise the importance of Environment, Human Rights and Anti-bribery and corruption (ABC) risks, these are not currently considered principal risks for the Group. Some climate-related risks have been categorised as emerging risks and it is acknowledged that they are inherently linked to other strategic, financial and operational risks. Additionally, some social matters are still identified under the Employees principal risks for the Group in the Principal Risks section of the report.

In 2019, further steps have been taken to cement our approach, including the formal training of risk champions on ESG-related risks, and the determination of key scenarios to inform Task Force on Climate-related Financial Disclosures (TCFD) reporting, both facilitated by an independent and external consultancy. More information on our sustainability and climate-related principal risks can be found on page 73.

Sustainability Governance

LSEG Board

LSEG Executive Committee

LSEG Corporate Sustainability Committee
Chair, Group Chief Risk Officer

Programme Delivery Oversight
Group Head of Investor Relations;
Group Head of Government Relations and Regulatory Strategy

Programme Delivery
Head of Sustainable Business; Sustainability Manager

Working Teams

Our Markets	**Our Services**	**Our People**	**Our Communities**
Group Director, Capital Markets	Group Director, Information Services	Group Head of Human Resources	Group Chief Risk Officer
		D&I	**Foundation**
		Women Inspired Network (WIN)	**Environmental Management Group (EMG)**

Our approach to Corporate Sustainability

Our purpose

We support global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs.

CS strategy

We have six impact areas that direct our focus on all of our CS activities.

Convene
Leveraging our position at the centre of capital markets to drive global growth

Grow
Small and medium-sized enterprises (SMEs) raise capital and fund investments to create employment worldwide

Disclose
Providing investors with information and tools to assess the ESG performance of companies to facilitate engagement and investment approaches

Transition
We work with issuers and investors to provide solutions that accelerate and manage the transition to a low carbon and sustainable economy

Develop
Employ and invest in the development of a highly diverse global workforce to deliver on our sustainable vision

Sustain
We will help the less advantaged in communities worldwide to develop business skills and to support the environment

CS pillars

Our strategy is executed through four pillars, which we report progress against.

Our Markets
Supporting the sustainable growth of companies for long-term economic prosperity

See page 42

Our Services
Enabling informed investment decisions and transparent markets operations

See page 42

Our People
Recruiting and developing diversified talent to fulfil their potential

See page 43

Our Communities
Empowering people, enriching communities

See page 47

These two pillars represent areas where we can have the biggest impact as a business, using our unique skills and position at the centre of capital markets to make a meaningful difference. On the following pages, we summarise our approach and performance in these areas. Further information can also be found within our segmental reviews in this report and CS report.

Other CS considerations

We aim to ensure our corporate behaviour and actions are consistent with good practice while generating long-term value creation.

Further information
In this section we provide a high-level overview of our CS activities in 2019.
For more detail, see our separate CS report at **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability**

Supporting sustainable growth (continued)

Our Markets

As a fundamental component of the economy, our markets, built on transparency and trust, help customers optimise their capital resources and let businesses thrive.

Our markets support sustainable growth by providing a platform for funding global businesses, including access to funding for SMEs, through our AIM and ELITE programmes, as well as creating a marketplace for green and sustainable companies, funds and fixed income securities.

Highlights in 2019

- Launch of the Sustainable Bond Market and Green Economy Mark (see box below)
- A record 79 new ESG ETFs were listed on our markets
- Borsa Italiana launched a new segment of its ExtraMOT market for the growth of small and medium-sized companies

75

Companies on our London markets receiving Green Economy Mark

215

Companies on the Sustainable Bond Market

Our Markets in action

Sustainable Bond Market and Green Economy Mark launch

In October 2019, London Stock Exchange launched the Green Economy Mark, recognising equity issuers on London Stock Exchange and AIM with green revenues of 50% or more using the Green Revenues data model developed by FTSE Russell, and the Sustainable Bond Market (SBM) building upon the success of London Stock Exchange's Green Bond Segment, launched in 2015. The SBM includes new dedicated segments for social and sustainability bonds, in addition to the existing Green Bond Segment.

Our Services

The Group supports informed and sustainable investment decisions by providing global and multi-asset class indices, analytics and data solutions across the financial markets value chain. This is supported by our philosophies of customer partnership and Open Access that underpin all our operations.

Our services provide data, indices and analytics to help informed investment decision-making, incorporating ESG data factors.

€5.8 billion

Commitment to tracking FTSE Custom Developed Ex Korea SDG Aligned Net Tax (DSDG) Index

Highlights in 2019

- LSEG acquired Beyond Ratings and FTSE Russell launched the Climate Adjusted World Government Bond Index (Climate WGBI) (see box on next page)
- FTSE Russell launched the FTSE Custom Developed Ex Korea SDG Aligned Net Tax (DSDG) Index
- In early 2020, FTSE Russell launched the FTSE TPI Climate Transition Index in collaboration with TPI and the Church of England Pensions Board

Further information

Our activities under these two pillars are integrated with our operational activities. Further details on our CS progress can be found within our segmental review and CS report, as identified by the following symbols:

M Our Markets
S Our Services

Our Services in action

Launching the world's first Climate Risk-Adjusted Government Bond Index

In June 2019, LSEG acquired Beyond Ratings, a specialist ESG research company that specialises in fixed income and government bond ESG solutions. FTSE Russell worked with Beyond Ratings to develop the Climate WGBI, the first government bond index to adjust index weights based on each country's preparedness and resilience to climate change risk.

Our People

The engagement of colleagues is central to our organisation. We rely on their skills and experience to deliver on Group strategy and create a culture that ensures we can attract, retain and develop the best talent.

LSEG fully recognises its responsibilities to its people and their importance to our business model. The Group continues to nurture a culture that reflects its values of partnership, innovation, integrity and excellence and supports colleagues' professional development. We also continue to support both diversity and wellbeing across our global locations.

The LSEG Board receives updates on matters relating to employees and culture, through the Group Culture Dashboard and other reporting.

See the Board's report on Corporate Governance on pages 78–84 for further information.

Highlights in 2019

- LSEG launched its Inclusion Network (IN) (see box below)
- Launch of Group Culture Dashboard reporting to Group Executive Committee and Board
- First spring week programme for Science Technology Engineering and Maths (STEM) students
- All Managing Directors received 360° feedback and development programmes

25%

of roles filled internally in 2019

Our People in action

Launch of LSEG Inclusion Network (IN)

In 2019, we launched our global Inclusion Network (IN) to act as a forum where all of our Diversity and Inclusion (D&I) networks will be able to share knowledge and collaborate.

"We are fully committed to creating a culture of inclusion and embracing diversity in all forms to allow our people to be their best"

David Schwimmer
CEO

Supporting sustainable growth (continued)

Our People (continued)

84%

of respondents that agree people from all backgrounds feel welcome

Our culture

Culture continues to be a key strategic focus for the Group. We aim to develop and embed a unified culture across our businesses, supporting our vision: 'to become the leading global financial markets infrastructure group'. During the year, the CEO and Executive Committee (ExCo) continued the development of a culture of collaboration, innovation, feedback, learning and inclusion.

An action plan to support this includes:

- Working with Managing Directors (MDs) across the Group to embed new ways of working, with performance objectives further developed to support the delivery of the Group's strategic objectives
- Making behaviour a key factor in performance assessment and using insights from 360° feedback to strengthen development reviews and plans
- Creating an environment of continuous learning and development for all employees through the Futures career framework to encourage and support individual growth and career development

These actions are supported by a strong set of values that apply to all parts of the Group:

- **Integrity** (my word is my bond): Underpins all that we do – from our commitment to building and supporting global markets based on transparency and trust to every transaction across our business with each stakeholder
- **Partnership** (we collaborate to succeed): We pride ourselves on working together as proactive partners, building positive relationships with our colleagues, customers, investors, regulators, governments and shareholders, for our mutual success and the benefit of all
- **Innovation** (we nurture new ideas): We are ambitious and forward-looking market innovators, driven by fresh thinking that has kept us ahead of change. We invest to make sure that our markets and services are constantly developing and evolving with advances in technology
- **Excellence** (we are committed to quality): We are committed to developing talented teams who deliver to the highest standards in all that we do. By collaborating, we will sustain industry-leading levels of excellence

Our values are, in turn, supported by LSEG Behaviours which are embedded into everything we do:

- **Focusing on Results:** We pursue business goals, take accountability and drive success
- **Using Commercial Judgement:** We know the business, think globally and apply a commercial mindset
- **Creating Value:** We identify opportunities and innovate to create sustainable value for LSEG and its customers
- **Leading Change:** We manage change, provide the context for change and show adaptability
- **Building Effective Relationships:** We understand and address stakeholder needs, collaborate with and influence others
- **Developing Talent:** We develop ourselves and others and build high performance teams

The introduction of the LSEG Behaviours as part of the Futures career framework provides us with a strong foundation on which to build. We are better able to articulate what we expect from individuals at every career stage in terms of skills, knowledge and behaviours.

In 2019, we developed a Culture Dashboard to measure and assess our culture and ensure full alignment to the Group's values and behaviours. The Dashboard provides the Board and ExCo with a quantitative way to measure and assess progress over time, using data gathered from our 'Have Your Say' employee engagement survey and other sources.

The Dashboard focuses on five key areas:

- **Recruitment & On-Boarding:** We recruit individuals with the right skills, behaviours and mindset to support our strategy
- **Performance & Development:** We set individual goals that are aligned with enterprise-wide objectives and supported by a strong organisational learning culture
- **Talent & Mobility:** We identify, nurture, and retain talent, promoting internal mobility to support opportunities across the Group
- **Diversity & Inclusion:** We encourage an inclusive environment, where diverse perspectives are welcomed, and all colleagues can be their best selves at work
- **Leavers:** We use the insights from our leavers to improve future recruitment and reduce turnover

The table below shows our performance against one of the indicators from each area from the Group Culture Dashboard:

Focus area	Indicator	2019	2018	2017
Recruitment & On-Boarding	% of new joiners who understand LSEG's values	**99%**	97%	N/A[1]
Performance & Development	Hours spent on training	**74,770**	63,150	41,675
Talent & Mobility	% of roles filled internally	**25%**	23%	14%
Diversity & Inclusion	% of respondents that agree people from all backgrounds feel welcome	**84%**	81%	N/A[1]
Leavers	% of leavers that cited work-life balance as primary reason for leaving	**7%**	5%	N/A[1]

1 Survey data from 2017 not available

Attracting the best talent

Our Graduate and Early Career Programmes continue to help fuel our growth and diversification. We have 39 graduates on programmes globally, and this year provided over 150 internships across six locations. Throughout 2019 we held events to encourage women into finance and technology, resulting in 54% female representation across the global graduate class. In 2019, we also ran our first programme for first-year students studying STEM subjects to encourage broader engagement earlier in the pipeline of recruitment. This is being expanded in 2020.

Supporting our people in their careers

The most recent employee engagement survey results confirm that career progression and access to training and development are still significant drivers of engagement.

We increased our focus on supporting internal mobility and improving our succession planning in 2019, with 25% of roles filled by existing employees.

Learning and Development

We have rolled out a range of initiatives in 2019, including:

- Introducing a range of online training tools, with over 3,300 hours of training accessed in the first three months
- Extending our global mentoring programme and during the year we supported more than 300 mentoring partnerships across 10 countries
- Rolling out 360° feedback and bespoke development programmes to all our MDs
- Introducing our global management development programme, with half of our line managers attending the programme in 2019

Engaging our people

An annual engagement survey enables colleagues to share their views on what it is like to work for LSEG and provides a clear indicator of employee engagement. The overall response rate of 84% in 2019 was our highest to date. The Engagement Index score of 81%, up six points from 2018, provides strong evidence that our colleagues care about the future of the Group and take pride in the organisation as a place of work[1].

As well as the annual employee engagement survey, feedback comes through: a colleague forum which is led and attended by elected volunteers from the workforce; townhalls and ExCo meetings which are open to all employees and held regularly throughout the year; and an Employee-Board consultation process which was launched in London in 2019.

1. "I care about the future of the Group" (94%) and "I am proud to say I work here" (90%)

Diversity and Inclusion

Colleagues are recruited and helped to develop their careers regardless of age, gender, nationality, culture or personal characteristics.

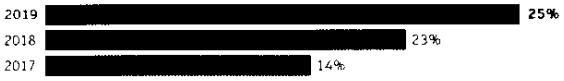
The Diversity and Inclusion (D&I) Committee is chaired by our Chief Risk Officer and meets quarterly to review strategy and progress. In 2019, we launched our global Inclusion Network (IN) to act as an umbrella network for a number of groups.

300+

Mentoring partnerships supported in 2019

Training hours

Roles filled internally



Supporting sustainable growth (continued)

Our People (continued)

41%

Female candidates hired externally at senior manager level

137%

Share price appreciation for employees' Sharesave maturities

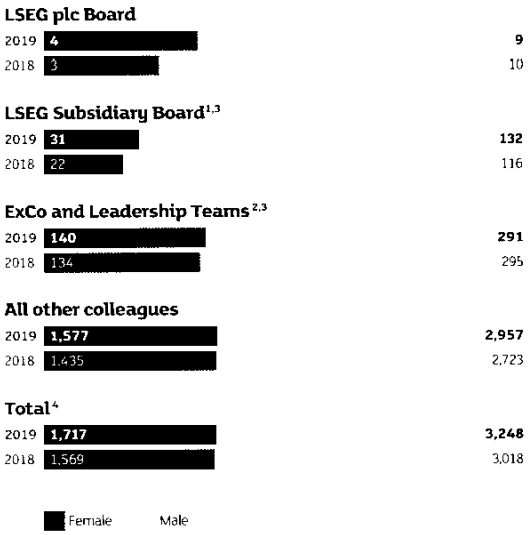
Gender diversity

The Group was an early signatory of HM Treasury's Women in Finance Charter in the UK, and we set ourselves a stretch target of reaching 40% female representation in our senior leadership population by the end of 2020. We have made good progress and are committed to working further towards this target. The Hampton-Alexander report recognised the Group for making significant improvements that have led to women comprising 31% of our Board.

Following a focus on a number of initiatives, the proportion of female candidates hired externally rose from 37% in 2018 to 38% in 2019. At senior manager level this proportion was 41%.

At LSEG, we conduct equal pay analysis as part of our annual pay review process and are confident that we do not differentiate pay between men and women who perform equivalent roles. We have a Group-wide reward framework, which establishes the compensation structure, elements and leverage for each stage in our career framework. This is used to review any potential gender bias as part of our annual pay review process. However, we acknowledge that we do have a gender pay gap, due to the unequal distribution of men and women across the company.

Gender breakdown



1 Mix of employees and Non-Executive Directors
2. Executive Committee and Leadership Teams in LSEG
3. The LSEG Subsidiary Board members and the members of the Executive Committee and Leadership Teams together comprise the 'Senior Managers' for the purposes of section 414C(8)(c)(ii) of the Companies Act 2006
4 Total comprises ExCo and Leadership Teams and All other colleagues

Note: Figures as of year ended 31 December 2019.

We go beyond UK statutory disclosure requirements to increase transparency, provide a more accurate picture of our gender pay gap and establish a more meaningful baseline against which to track progress. Our global gender pay gap mean stood at 23% and median 10% in 2019. The biggest factor behind our gender pay gap continues to be the fact that there are fewer women in senior positions. A report on gender pay gap was published on 16 March 2020. This report can be found at: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability**

Rewarding our people

LSEG's reward strategy focuses both on the short term, through an annual bonus scheme linked to our global performance management approach, and on the medium term through share schemes aimed at senior management and the wider workforce. The Long-Term Incentive Plan, details of which can be found on page 108, aligns the performance and reward of senior management with the Group's ongoing performance and growth.

Sharesave, our principal employee share ownership scheme, is available to all permanent employees across France, Hong Kong, Italy, Malaysia, Sri Lanka, the UK and the US. Colleagues can save up to £500 or equivalent per month, with the option after three years of using their accumulated savings to buy LSEG shares at a discounted price. In 2019 we also launched SharePurchase to permanent employees in Australia and Romania. Under this plan, colleagues can purchase up to £500 per month of LSEG shares and are awarded additional shares which vest after the completion of a three-year plan cycle.

During 2019, almost 600 employees across six countries benefited from Sharesave maturities including share price appreciation of 137%, reflecting the Group's performance over the previous three years. Participation was extended further, with almost 1,100 employees joining the 2019 scheme, increasing overall participation to over 59% of eligible employees.

We endeavour to develop a remuneration policy that is aligned with good market practice and corporate governance developments and which continues to promote the long-term success and cultural agenda of the Group; both for LSEG as a standalone company and in the event that the proposed transaction of Refinitiv completes. The Remuneration Committee continues to place great importance on ensuring that there is a clear link between pay and performance, including a focus on culture, adherence to the Group's risk framework, and that our remuneration outcomes are reflective of this wider context. More information on our Remuneration policy can be found on pages 98–128 of this report.

Supporting our people's wellbeing

LSEG's Wellbeing strategy is designed to provide a dedicated framework of awareness and support centred around five pillars: Emotional, Physical and Financial Wellbeing, Workplace choice and Social Purpose.

During 2019 a range of programmes and initiatives focused on these topics were rolled out across the Group. For more information please see our CS report (pages 26–27)

Our Communities

As our global presence grows, we monitor our impact on the communities around us and how it aligns with our strategy and values. We aim to promote sustainable practices and support local communities and the environment where we have a significant business presence.

Highlights in 2019

- LSEG Foundation donated £1.4 million to charities in 2019
- Launched volunteering initiative for SMEs in partnership with Centre for Entrepreneurs as part of their NEF Fast Track programme
- LSEG Foundation Challenge launched in October 2019
- Lindenfeld Association Ajungem Mari chosen as Romania charity partner

Our communities in action

LSEG Foundation

London Stock Exchange Group Foundation provides a primary channel for the Group's charitable giving as well as a focal point for staff engagement with local charities. In 2019, the Group donated £1,616,000 to the LSEG Foundation, and £130,000 directly to a number of charities. The Foundation's approach and positioning is aligned with the overall Group CS strategy, while recognising the global reach of LSEG's business model. More information on this can be found in the CS report on page 33.

20%

of our global workforce volunteered in 2019

Our wider responsibility

In addition to activities that specifically aim to deliver our CS strategy, we also aim to ensure that our own business activities are consistent with good practice.

Environment

We recognise that we must use resources in ways that deliver long-term sustainability and profitability for the business and have regard for impact on the environment. We also take such factors into account in developing our products and services. The Group's primary greenhouse gas (GHG) emissions arise from energy, waste and water in our offices and data centres around the world, from staff travel, and indirectly from our supply chain. We are aware of the risks and opportunities for our business arising from climate change and have developed measures to address them.
We actively monitor these changes so that we can adapt and respond as necessary.

Managing our environmental impact

We take an active approach to emissions management. Our Environmental Management Group (EMG) guides the Group's environmental strategy, and is responsible for setting Group-wide targets, managing and seeking to improve our environmental performance.

Its responsibilities also include:

- Increasing efficiency and reducing consumption in areas including energy, water usage, waste management and business travel
- Ensuring that environmental considerations are incorporated in the Group's purchasing and procurement decisions
- Engaging with clients, suppliers and community partners to promote environmental best practice

The EMG accurately measure and report on GHG impacts across our property portfolio, including managed offices where possible. We report beyond the mandatory reporting guidelines to include Scope 3 emissions, performance is reported quarterly on an internal basis, and we annually disclose to CDP, Dow Jones Sustainability Indices (DJSI), FTSE4Good and on our website: **www.lseg.com**.

We have maintained our accreditation for our ISO 14001 Environmental Management System by a UKAS accredited body. The system currently covers the UK property portfolio and we are assessing expansion to cover further locations.

The Group CFO reports to the Board on environmental issues.

Supporting sustainable growth (continued)

Our wider responsibility (continued)

41%

Reduction in our absolute carbon footprint in 2019

Our targets and progress in 2019

During the reporting period, we achieved a 41% reduction in our absolute carbon footprint and a 42% reduction in carbon emissions per Full Time Employee (FTE). This reduction was primarily due to our move to 100% renewable electricity. This has been achieved *through maintaining 100% renewable supplier tariffs for 66%* of our electricity consumption and the procurement of energy attribute certificates for all other electricity consumption (purchased from an internationally recognised trader, member of IETA and CDP gold partner). Energy conservation measures (such as office consolidation projects, LED lighting upgrades, and decommissioning of legacy servers) have continued in all regions to reduce energy consumption. Throughout 2019 there has also been an increased focus on recycling and waste management.

LSEG was one of the first companies in the financial services sector to commit to a long-term science-based carbon reduction target, which is that "We commit to a 40% reduction of our global scope 1 *and 2 GHG emissions by 2030 from a 2016 baseline*". As this target has been achieved, we continue to work towards the approval of our 2030 targets by the Science-based Targets initiative, therefore, in 2020 we aim to achieve a further 2% reduction in Scope 1 and 2 emissions per FTE and per £m revenue and a 2% reduction in waste per FTE compared to 2019. We will fully assess the actions needed to achieve carbon neutrality, including offsetting unavoidable air travel emissions through Gold Standard carbon credits. More information on this can be found in our CS report.

Methodology and verification

We report all of the emission sources required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. These sources fall within our consolidated financial statement. We do not have responsibility for any emission *sources that are not included in our consolidated statement.*

Our emissions are calculated according to an 'operational control' boundary using GHG Protocol Corporate Accounting and Reporting Standard (revised edition) and UK Government Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance (March 2019).

LSEG's Scope 1, 2 and 3 emissions have been externally verified by SGS against the requirements of the WRI/WBCSD GHG Protocol – Corporate Accounting and Reporting Standard. Conduct of the verification met the requirements of ISO 14064-3:2006.

More information and full details of our emissions inventory and targets can be found in our CS report. Our verification statement is available on our website.

Global 2019 GHG Emissions

tCO_2e – Tonnes of carbon dioxide equivalent		2019	2018	% change
Total Group Carbon Footprint[1]		**10,604**	17,864	(41)
	– per m²	**0.11**	0.20	(45)
	– per FTE	**1.95**	3.37	(42)
	– per £m Revenue	**4.58**	8.37	(45)
Energy Consumption (kWh)[2]		**71,160,796**	69,527,917	2
Scope 1[3]		**1,816**	1,414	28
Scope 2[4]		**0**	7,132	(100)
Scope 3[5]		**8,788**	9,319	(6)
Renewable Electricity[6] (%)		**100**	66	52
UK	Energy Consumption (kWh)	**45,548,676**	45,772,555	(0.5)
	Scope 1	**513**	399	29
	Scope 2 – Market based	**0**	1,830	(100)
	Scope 2 – Location based	**11,166**	12,440	(10)
Rest of Group	Energy Consumption (kWh)	**25,612,121**	23,755,362	8
	Scope 1	**1,303**	1,015	28
	Scope 2 – Market based	**0**	5,301	(100)
	Scope 2 – Location based	**6,884**	6,728	2

1 All Group totals and electricity breakdowns use market-based Scope 2 emissions factors. Group carbon footprint includes tenant consumption

2. Electricity, Natural Gas, Diesel, LPG and Fleet Vehicle fuel have each been converted from their respective units to kWh in order to be presented as an aggregate fuel consumption value. Defra GHG Conversion Factors 2019 (Fuel Properties) have been used as the basis for this conversion. Refrigerant consumption is not included in total kWh

3 Scope 1 Emissions Combustion of fuel and operation of facilities – includes Natural Gas, Diesel, LPG, Fugitive Emissions and Fleet Vehicles

4. Scope 2 Emissions Purchase of electricity by the Group for its own use (the Group does not purchase heat, steam or cooling). Market based emissions use supplier-based *emission factors and energy attribute certificates for where 100% renewable supplier tariffs are not in place. Residual mix factors are excluded due to the entire group* electricity consumption being covered by 100% renewable tariffs or energy attribute certificates

5. Scope 3 emissions are not separately reported by UK and Rest of Group, due to the collection of travel data at the group level

6 Energy attribute certificates have been purchased to claim renewable electricity consumption for all sites where 100% renewable supplier tariffs are not in place. These certificates have been sourced from an internationally recognised trader who is an IETA member and gold partner of CDP. 65% of our total electricity consumption is via 100% direct renewable supplier tariffs

Task Force on Climate-related Financial Disclosures (TCFD)

Supporting the call for more effective climate-related financial disclosures to inform longer-term investment decision, in June 2017 LSEG signed a statement of support for the recommendations of the TCFD framework established by the Financial Stability Board.

The table below, by cross-referencing relevant disclosures, summarises LSEG's current TCFD alignment.

TCFD recommended disclosures	LSEG approach	2019 enhancements	References
GOVERNANCE			
a. Information on LSEG's governance around climate-related risks and opportunities: Board's oversight	– LSEG Board has oversight of the Group Corporate Sustainability Policy, which includes our Environmental policy. – The Group CEO sponsors the Group CS Policy at Board level – The Group CFO reports to the Board on environmental matters	– Board Risk Committee presented with clearly identified non-financial risk framework as part of Group ERM, including climate-related risks	– Group Corporate Responsibility Policy – LSEG CS Report 2019: Environment section, page 36 – Risk section of this report, page 73 – LSEG Corporate Sustainability report 2019, Governance section, page 7 – LSEG Annual Report 2019, Supporting Sustainable Growth section, page 40
b. Information on LSEG's governance around climate-related risks and opportunities: Management's role	– Group CS Committee chaired by the Group CRO comprise a number of Executive Committee members – The EMG is responsible for setting Group-wide targets, and managing and seeking to improve our environmental performance		
STRATEGY			
a. Climate-related risks and opportunities identified over the short, medium and long-term:	– Impact of low-carbon transition and rise of green industries monitored by FTSE Russell through Green Revenues data model	– The Group has developed climate-related risk scenarios over both the medium and longer term to help identify how these risks may impact our business	– LSEG CS Report 2019: Environment section, page 36–42 – FTSE Russell Green Revenues data model – Strategy section of this report, page 15 – For scenario analysis, see risk section of this report, page 73 – LSEG Annual Report 2019, Supporting Sustainable Growth, page 40
b. Impacts of climate-related risks and opportunities on LSEG's business, strategy and financial planning	– Our EMG guides the Group's environmental strategy, and is responsible for setting Group-wide targets, managing and seeking to improve our environmental performance	– ESG and climate factors are becoming a mainstream consideration in investment decision making	
c Resilience of the organization's strategy based on scenario analysis	– We have been working on developing scenarios to identify the most material physical and transition risks for the business	– Scenario selection completed	
RISK MANAGEMENT			
a. Information on LSEG's processes for: identifying and assessing climate-related risks	– Some climate-related risks have been categorised as emerging risks and it is acknowledged that they are inherently linked to other strategic, financial and operational risks	– Training was delivered to Risk champions to enable effective identification and assessment of ESG risks, including climate-related – The Group has developed climate-related risk scenarios over both the medium and longer term	– LSEG 2019 CDP Response: Risk and Opportunities Section, questions C2.1–C2.3 – LSEG annual report: Principal risks and uncertainties – emerging risks section, page 73 – LSEG Annual Report, Supporting Sustainable Growth, page 40
b. Information on LSEG's processes for: managing climate-related risks	– LSEG has taken proactive steps to develop its methodology to define and model how climate change impact its businesses. The aim is to reinforce the Group's resilience		
c. Information on LSEG's processes for: how climate-related risks are integrated into LSEG ERM system	– LSEG continues to increase our focus on embedding these risks in our ERM framework and some climate-related risks have been categorised as emerging risks and it is acknowledged that they are inherently linked to other strategic, financial and operational risks		
METRICS AND TARGETS			
a. Metrics and targets used by LSEG to assess and manage: relevant climate-related risks and opportunities	– Exposure of our markets to the green economy		– LSEG CS Report 2019: Environment section, pages 36–42 – FTSE Russell Report "Investing in the Global Green Economy: busting common myths", 30 May 2018 – LSEG Annual Report 2019, Supporting Sustainable Growth, page 48
b. Metrics and targets used by LSEG to assess and manage: Scope 1, 2 and 3 GHG emissions	– Physical risk metrics are associated with LSEG environmental programme targets		
c. Metrics and targets used by LSEG to assess and manage: Targets and performance	– LSEG sets environmental targets for business operations for 2020 and 2030 and reports against these targets externally on an annual basis	– LSEG has submitted 2030 targets to the Science Based Targets initiative (SBTi) and is still working to obtain approval	

Our wider responsibility (continued)

Policies
A Group-wide Policy Framework has been established with each policy containing the following:

- Risk definition and identification
- Risk Appetite and Tolerances
- Minimum Standards and Risk Management Activities

All Group-level policies are approved by the Executive Committee as a minimum and other Committees and Boards as defined in the Enterprise Risk Management Framework. Policies are subject to annual review, which may be approved by the Policy Owner and Executive Sponsor if there are no material changes.

Polices are implemented and managed in accordance with the Enterprise Risk Management Framework and three lines of defence operating model. All Group Policies are published on Bond, the internal online intranet site, available to all staff. Material Policy breaches are reported to the Board, the Executive Committee and relevant sub-Committees.

Given their relevance for our industry and associated risks, we provide below a brief comment on the outcomes of the following policies, deemed to be most relevant to our Corporate Sustainability processes:

- Financial Crime (including Anti-Money Laundering)
- Anti-bribery and Corruption
- Group Information Security
- Business Continuity Management

In the case of all policies stated above, compliance with which is regularly monitored, the outcome is that there have been no breaches material to LSEG in 2019. More details on these policies can be found on page 45 of the CS report.

Our Code of Conduct and Corporate Sustainability policy, both published on our website, are underpinned by LSEG's values and behaviours and a number of policies that embed sustainability into our day to day operations

All new and existing LSEG employees are provided with training on the Group's core policies, including all the key regulatory and legal requirements. The Group has maintained a 100% completion rate across all compliance training delivered in the 2019 period.

Human Rights
LSEG respects and seeks to adhere to the UN Guiding Principles on Business and Human Rights, together with the International Labour Organization Conventions and Recommendations within our working environment in each location where we operate. The Group strongly supports these conventions which aim to abolish forced labour and child labour and promote freedom of association and equality. Human rights considerations are also included in our Supplier Code of Conduct and Group Corporate Sustainability policy.

Our risk assessment and research in 2019 has once again indicated that LSEG operates in an industry where the risk of modern slavery and human trafficking is inherently low. However, we operate as a global business and therefore recognise the risks of partnering with a varied spectrum of global suppliers and of slavery occurring deeper in those complex supply chains.

The Group has a zero-tolerance approach to modern slavery. Some of the key actions taken in 2019 were:

- Refreshed risk assessment on our current supplier base to identify the highest risk suppliers from a slavery perspective which has confirmed majority of our relevant supplier spend is with suppliers in our lowest slavery risk tier. Our procedures and anti-slavery approaches continue to be appropriate and proportionate
- Following from the 2018 Modern Slavery Act Statement and analysis we obtained agreement to our enhanced Supplier Code of Conduct from a number of higher risk suppliers, with the majority of our current relevant supplier base having now accepted our Supplier Code of Conduct
- Having identified a small number of suppliers' risk to be in our highest tier risk category, we have established an action to ensure that such identified suppliers agree to our Supplier Code of Conduct in 2020

The most recent version of our modern slavery statement can be found at: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/modern-slavery-act-statement**

Board engagement with stakeholders

The table below sets out how the Board engages with and seeks to understand the views of our key stakeholders: customers, regulators and the workforce. Not all information is reported directly to the Board and not all engagement takes place directly with the Board. However, the output of this engagement informs business-level decisions, with an overview of developments and relevant feedback being reported to the Board and/or a Board Committee.

Further information on the activities of the Board can be found in the Corporate Governance Report beginning on page 78.

Stakeholder group	Form of engagement	How this engagement influenced Board discussions and decision making
Our customers The Group has grown rapidly through growth and acquisition, building businesses around three strategic areas: Capital Formation, Information Services and Post Trade and Risk Management services. We intend to further develop these businesses and focus on delivering the opportunities and efficiencies of operating a unified Group to benefit our customers and drive sustainable long-term growth.	We believe that aligning our strategy, services and products to the needs and interests of our customers is central to supporting long-term value creation, enabling innovation in products which can be rapidly adopted. A number of our businesses including LCH, Turquoise and MTS are owned and governed in partnership with our customers which we believe helps us to better understand their views and enhances our ability to add value to their businesses We also engage regularly with our customers at roundtable events, market opens and more recently, the introduction of the new market close sessions and conferences. We monitor customer feedback to help us establish our customer's views on the Group's products and services as well as the ways that they would like us to improve our offering. In addition, customer engagement meetings are held for our senior management to understand what matters to our customers and build strategic relationships with them.	Customer feedback is communicated by the Group CEO, Group CFO and other members of the Executive team to the Board through its regular reporting mechanisms when decisions are taken which could impact customers. When taking the decision to move ahead with the proposed acquisition of Refinitiv the Board concluded that the acquisition would not only result in the long-term success of the Company but further improve customer experience as the combined group will create a global leader in data analytics, risk, collateral and processing solutions as well as provide access to a breadth of capital raising and trade execution innovations beyond listed equities.
Our workforce	Engagement with our workforce includes formal and informal meetings, an annual engagement survey, and town hall meetings. Directors visit our operations and engage with the workforce. The Board seeks to engage with a wide cross section of the workforce to better understand their perspective on the business During 2019 this included: – Informal dinners with staff in Italy – Breakfast meetings with staff in the UK and the US More information on workforce engagement can be found on pages 43–46 of the Strategic report and page 80 of the Corporate Governance Report.	There was acknowledgement in these sessions that there was a lot of work that needed to be done ahead of completing the proposed acquisition of Refinitiv and colleagues made some suggestions about communications to employees. This feedback has been incorporated into the Group's internal communications strategy for 2020.
Our regulators	We engage with regulators on public policy, regulation and official guidance that may affect the Group's businesses in many countries across the globe. Brexit was a key topic where we had regular engagement with a number of regulators in 2019. We also engaged with key regulators before and after the announcement of the proposed acquisition of Refinitiv. The Board's of the LSEG's regulated businesses have considerable engagement on a number of other matters, including regulatory change, operational resilience including cyber preparedness.	Feedback from ongoing engagement with UK and international regulators on Brexit helped inform the Board's decision-making on Brexit planning and has positioned the Group well both in its response to and planning for the regulatory impacts of Brexit and the opportunities to deliver solutions to help the market address the changing regulatory environment, including those linked with the departure of the UK from the EU. The views of regulators were taken into account in planning for the Refinitiv transaction. Closing of the Transaction will be subject to regulatory approval.

Suppliers

Our suppliers are also important stakeholders of the Group. During 2019, the Group adopted an enhanced Supplier Code of Conduct with additional on-boarding procedures placing more robust expectations on the Group's suppliers in the area of modern slavery and human trafficking. We also commenced a transformation of our Group Procurement function to enable more effective management of the Group's suppliers and this included a review of the Group's 500 most important supplier contracts. A number of the Group's subsidiaries are required to report their supplier performance and policies as part of the Small Business, Enterprise and Employment Act 2015. During 2019, further steps were taken to accelerate the payment process and focus was given to ensuring purchase orders are raised and receipted promptly in compliance with the Group's procurement policy.

More information on the Group's approach to managing its supply chain found at: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/modern-slavery-act-statement**

How the Board has complied with Section 172(1)of the Companies Act 2006

Section 172(1) statement
Section 172 of the Companies Act 2006 requires a Director of a company to act in the way he or she considers, in good faith, would most likely promote the success of the company for the benefit of its members as a whole. In doing this Section 172 requires a Director to have regard, amongst other matters, to the:

- Likely consequences of any decisions in the long-term
- Interests of the company's employees
- Need to foster the company's business relationships with suppliers, customers and others
- Impact of the company's operations on the community and environment
- Desirability of the company maintaining a reputation for high standards of business conduct
- Need to act fairly as between members of the company

In discharging our Section 172 duties we have regard to the factors set out above. We also have regard to other factors which we consider relevant to the decisions being made. Those factors, for example, include the interests and views of our suppliers and our relationship with regulators and governments. We acknowledge that every decision we make will not necessarily result in a positive outcome for all of our stakeholders. By considering the Company's purpose, vision and values together with its strategic priorities and having a process in place for decision-making, we do, however, aim to make sure that our decisions are consistent and predictable.

For details on how our Board operates and the way in which we reach decisions, including the matters we discussed and debated during the year, the key stakeholder considerations that were central to those discussions and the way in which we have had regard to the need to foster the company's business relationship with customers, suppliers and other stakeholders, please see pages 78–87 of the Corporate Governance Report, Committee Reports, stakeholder engagement disclosure, other relevant strategic report disclosures and the new disclosure requirements in relation to suppliers, customers and others.

We set out below some examples of how the Directors have had regard to the matters set out in Section 172(1)(a)-(f) when discharging their Section 172 duty and the effect of that on certain of the decisions taken by them.

1. Annual strategy review
The Board carries out a review of the Company's strategy on an annual basis. This includes approving the business plan for the following three years. In 2019 the Board's strategic review included a review of progress against 2019 strategic priorities, LSEG's long-term strategic goals and presentation of the Divisional strategy for the Capital Markets, Information Services and Post Trade businesses. During its review the Board also focused on selected Group priorities including: the Group's technology strategy, culture, government relations and regulatory strategy and the financial impact of the strategy. The Board also considered integration planning for the proposed acquisition of Refinitiv.

In making its decision to approve the business plan and future strategy of the Company, the Board also considered amongst other things, its impact on the long-term position of the Company and its reputation as well as feedback from engagement exercises with our workforce and dialogue with customers and regulators.

2. All-share acquisition of Refinitiv
During 2019, having monitored the development of the financial markets infrastructure sector, the Board considered the proposed all-share acquisition of Refinitiv, a leading global provider of markets data, analytics and infrastructure. Following those discussions, the Board concluded that the proposed transaction supported LSEG's value creation strategy to create a financial markets infrastructure leader of the future and was the approach which was most likely to deliver the best results for the Company and its stakeholders. In doing so it considered a number of different factors including the impact of the transaction on specific stakeholders. For example:

Customers
The Board believes that the transaction will:

- Transform LSEG's position as a leading global financial markets infrastructure group
- Significantly enhance LSEG's customer proposition in data and analytics
- Create a global multi-asset capital markets business
- Deepen and expand our shared core principles of customer partnership and open access

Shareholders
The Board also believes that the transaction has a compelling financial profile for shareholders, resulting in sustainable growth and substantial synergies, with in excess of £350 million cost and £225 million revenue run rate synergies identified, leaving LSEG well positioned for future growth.

The LSEG General Meeting held on 26 November 2019 in which the LSEG shareholders approved the acquisition of Refinitiv in an all-share transaction for a total enterprise value of approximately US$27 billion confirmed that the Company's shareholders had a positive view of the transaction and marked an important milestone toward achieving completion.

Employees
The Board also considered the potential impacts on the LSEG workforce of the cost run rate synergies identified. The Board considered the management structures which would need to be established to lead the Combined Company. Through its Remuneration Committee the Board developed a Remuneration Policy which will appropriately reward employees both as a standalone company and in the event that the transaction completes.

3. Rejection of Conditional Proposal from HKEX
During 2019, the Board fully reflected on the unsolicited approach, from HKEX to acquire the entire share capital of LSEG. As detailed in the LSEG announcement published on 13 September 2019, the Board highlighted fundamental concerns around key aspects of the conditional proposal: strategy, deliverability, form of consideration and value especially when compared to the significant value expected to be created through the planned acquisition of Refinitiv.

As a result and having considered their legal duties as Directors, the Board took the decision to unanimously reject the conditional proposal and reaffirm its commitment to the acquisition of Refinitiv.

Financial review

David Warren
Group Chief
Financial Officer

The financial review covers the financial year ended 31 December 2019. Commentary on performance uses variances on a continuing organic and constant currency basis, unless otherwise stated. Constant currency is calculated by rebasing 2018 at 2019 foreign exchange rates. Sub-segmentation of revenues are unaudited and are shown to assist the understanding of performance.

Highlights

- Total income of £2,314 million (2018: £2,135 million) increased by 7% and total revenue of £2,056 million (2018: £1,911 million) increased by 6%
- Adjusted EBITDA[1] of £1,265 million (2018: £1,066 million) increased by 17%
- Adjusted operating profit[1] of £1,065 million (2018: £931 million) increased by 13%
- Operating profit of £738 million (2018: £751 million) decreased by 3%
- Adjusted basic earnings per share[1] of 200.3 pence (2018: 173.8 pence) increased by 15%
- Basic earnings per share of 119.5 pence (2018: 138.3 pence) decreased by 14%
- Total dividend per share of 70.0 pence (2018: 60.4 pence) increased by 16%

There were no discontinued operations in 2019.

1 London Stock Exchange Group uses non-GAAP performance measures as key financial indicators as the Board believes these better reflect the underlying performance of the business. As in previous years, adjusted operating expenses, adjusted EBITDA, adjusted operating profit and adjusted earnings per share all exclude amortisation and impairment of purchased intangible assets and goodwill and non-underlying items

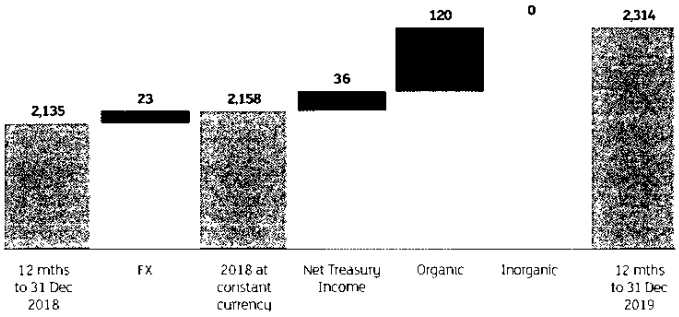
Revenue	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at organic and constant currency[2] %
Information Services	**902**	841	7	5
Post Trade Services – LCH	**550**	487	13	13
Post Trade Services – CC&G and Monte Titoli	**103**	102	1	2
Capital Markets	**426**	407	5	5
Technology Services	**66**	65	2	1
Other	**9**	9	–	–
Total revenue	**2,056**	1,911	8	6
Net Treasury Income through CCP businesses	**255**	218	17	16
Other income	**3**	6	–	–
Total income	**2,314**	2,135	8	7
Cost of sales	**(210)**	(227)	(8)	(8)
Gross profit	**2,104**	1,908	10	9
Operating expenses before depreciation, amortisation and impairment[1]	**(839)**	(834)	1	(1)
Income from equity Investments	**7**	–	–	–
Share of loss after tax of associates	**(7)**	(8)	(12)	(12)
Adjusted earnings before interest, tax, depreciation, amortisation and impairment[1]	**1,265**	1,066	19	17
Depreciation, amortisation and impairment[1]	**(200)**	(135)	49	49
Adjusted operating profit[1]	**1,065**	931	14	13
Amortisation of purchased intangible assets and non-underlying items	**(327)**	(180)	81	78
Operating profit	**738**	751	(2)	(3)
Adjusted basic earnings per share[1]	**200.3p**	173.8p	15	
Basic earnings per share	**119.5p**	138.3p	(14)	

1. Before amortisation of purchased intangible assets and non-underlying items
2. Organic growth is calculated in respect of businesses owned for at least 12 months in either period and excludes Beyond Ratings

Note: Variances in all tables are calculated from unrounded numbers

Total Income

£ m



1. Inorganic includes income for businesses held for less than 12 months in either period: Beyond Ratings

Financial review
(continued)

Information Services

Revenue	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at organic and constant currency[1] %
Index - Subscription	**418**	373	12	8
Index - Asset Based	**231**	219	6	2
FTSE Russell[2]	**649**	592	10	6
Real Time Data	**97**	94	3	3
Other Information Services[1,2]	**156**	155	1	(1)
Total revenue	**902**	841	7	5
Cost of sales	**(74)**	(70)	5	2
Gross profit	**828**	771	7	5
Operating expenses before depreciation, amortisation and impairment[3]	**(323)**	(302)	7	–
Earnings before interest, tax, depreciation, amortisation and impairment[3]	**505**	469	7	–
Depreciation, amortisation and impairment[3]	**(56)**	(29)	93	–
Operating profit[3]	**449**	440	2	–

1 Organic growth is calculated in respect of businesses owned for at least 12 months in either period and so excludes Beyond Ratings
2 Mergent and some other minor items (previously reported in FTSE Russell subscriptions) are now included in Other Information Services for both periods
3 Operating expenses before depreciation, amortisation and impairment, earnings before interest, tax, depreciation, amortisation and impairment; depreciation, amortisation and impairment; and operating profit variance percentage is shown on a reported basis only i.e. not on a constant currency basis. Variances will include underlying movements and foreign exchange effects

Information Services provides global index products, real time pricing data, product identification, reporting and reconciliation services. Revenue was £902 million (2018: £841 million).

FTSE Russell's revenue was £649 million (2018: £592 million). On a reported basis, revenue increased by 10% and growth on a constant currency basis was 6% driven by strong subscription renewal rates and data sales, as well as increases in average AUM levels in benchmarked ETFs and other investable products.

Real Time Data revenue increased by 3% to £97 million (2018: £94 million) driven by increased licence sales, partially offset by the revenue impact of a 4% decline in the number of terminals to 167,000 (2018: 174,000).

Other Information Services revenue is broadly in line with last year at £156 million (2018: £155 million), with recurring licence growth in data products offset by a decline in transactional revenues in UnaVista.

Cost of sales increased by 2% to £74 million (2018: £70 million), primarily as a result of increased data charges and partnership costs, in relation to growth in FTSE Russell revenue.

Reported operating expenses excluding depreciation, amortisation and impairment (D&A) increased by 7% to £323 million (2018: £302 million), and D&A rose 93% to £56 million (2018: £29 million) reflecting continued investment to support growth of the business and share of IFRS 16 right of use asset amortisation. The increase in total cost contributed to a marginal operating profit margin decline.

Reported operating profit increased by 2% to £449 million (2018: £440 million). The Group remains on track to achieve the financial performance announced as part of the Yield Book acquisition.

Post Trade Services – LCH

Revenue	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at constant currency %
OTC	**307**	268	15	13
Non-OTC	**140**	136	3	4
Other	**103**	83	25	24
Total revenue	**550**	487	13	13
Net Treasury Income	**206**	175	18	17
Total income	**756**	662	14	14
Cost of sales	**(114)**	(123)	(8)	(7)
Gross profit	**642**	539	19	18
Income from equity investments	**7**	–	–	–
Operating expenses before depreciation, amortisation and impairment[1]	**(234)**	(235)	–	–
Earnings before interest, tax, depreciation, amortisation and impairment[1]	**415**	304	36	–
Depreciation, amortisation and impairment[1]	**(76)**	(62)	23	–
Operating profit[1]	**339**	242	40	–

1 Operating expenses before depreciation, amortisation and impairment, earnings before interest, tax, depreciation, amortisation and impairment, depreciation, amortisation and impairment, and operating profit variance percentage is shown on a reported basis only i.e. not on a constant currency basis. Variances will include underlying movements and foreign exchange effects

Post Trade Services – LCH comprises the Group's majority owned global clearing business. Total income was £756 million (2018: £662 million).

2019 performance is in line with the Group's double-digit growth revenue target for OTC clearing. OTC clearing revenue increased by 13% to £307 million (2018: £268 million), driven by SwapClear, with strong growth in client clearing where client trade volume increased by 13% to 1,681,000 (2018: 1,487,000). ForexClear membership increased to 34 members (2018: 32) while notional value cleared grew by 5% to US$18.0 trillion (2018: US$17.2 trillion). Of this, $61 billion was client cleared notional, up significantly from the previous year (2018: $8 billion).

Non-OTC clearing revenue increased by 4% to £140 million (2018: £136 million), reflecting continued strong performance in RepoClear. RepoClear reached a record nominal value cleared of €106 trillion (2018: €98.7 trillion) up 7% largely as a result of strong growth in the underlying Repo market, particularly in Europe as a result of excess liquidity with members realising netting and other benefits from the newly consolidated Euro debt pool in LCH SA.

Other revenue, which includes fees from non-cash collateral management, compression services, recharged pass through costs and revenue sharing agreements, increased by 24% to £103 million (2018: £83 million).

Net Treasury Income increased by 17% to £206 million (2018: £175 million). The growth reflects a 13% rise in average cash collateral held to €98.4 billion (2018: €86.7 billion), primarily driven by volumes cleared and market volatility. Increased capacity with investment counterparties as well as continued expansion of the range of products invested in for asset allocation optimisation continued to support NTI growth. The Group expects NTI to stabilise around the levels seen in H2 2019 if collateral levels remain unchanged.

Cost of sales decreased 7% to £114 million (2018: £123 million), reflecting the updated SwapClear agreement which came into effect at the start of the year, which exceeded the £30 million benefit previously communicated.

Reported operating expenses excluding D&A remained flat and D&A increased by 23% to £76 million (2018: £62 million), driven by investment to support growth and IFRS 16 right of use asset amortisation.

LCH EBITDA margin increased by nine percentage points to 55% (2018: 46%), significantly exceeding the target of approaching 50% by 2019.

Reported operating profit increased by 40% to £339 million (2018: £242 million).

Post Trade Services – CC&G and Monte Titoli

Revenue	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at constant currency %
Clearing (CC&G)	**43**	41	3	4
Settlement, Custody and Other (MT)	**60**	61	–	1
Inter-segmental revenue	**–**	1	–	–
Total revenue	**103**	103	1	2
Net Treasury Income (CC&G)	**49**	43	14	15
Total income	**152**	146	5	6
Cost of sales	**(7)**	(7)	–	–
Gross profit	**145**	139	5	6
Operating expenses before depreciation, amortisation and impairment[1]	**(44)**	(47)	(6)	–
Earnings before interest, tax, depreciation, amortisation and impairment[1]	**101**	92	10	–
Depreciation, amortisation and impairment[1]	**(9)**	(9)	–	–
Operating profit[1]	**92**	83	11	–

1. Operating expenses before depreciation, amortisation and impairment, earnings before interest, tax, depreciation, amortisation and impairment, depreciation, amortisation and impairment, and operating profit variance percentage is shown on a reported basis only i.e. not on a constant currency basis. Variances will include underlying movements and foreign exchange effects

Post Trade Services provides clearing (CC&G), settlement and custody activities (both Monte Titoli). Total income was £152 million (2018: £146 million).

CC&G clearing revenues increased by 4% to £43 million (2018: £41 million) mainly due to growth in bonds clearing volumes, mirroring trading performance on MTS Repo market, jointly with higher guarantee deposit fees and fails commissions. Underlying Monte Titoli revenues were flat year on year as a result of higher custody revenues, largely due to the rise in assets under custody, offset by lower settlement revenues recorded in the year following a decrease in settlement instructions.

CC&G generates Net Treasury Income by investing the cash margin held, retaining any surplus after members are paid a return on their cash collateral contributions. Net Treasury Income increased by 15% to £49 million (2018: £43 million) as result of higher average daily initial margin at €14.4 billion, 31% higher than 2018 (2018: €11.0 billion).

Cost of sales was in line with 2018.

Reported operating expenses excluding D&A decreased by 6% to £44 million (2018: £47 million), driven by lower IT costs from efficiency and lower staff costs. D&A was flat year on year.

Reported operating profit increased by 11% to £92 million (2018: £83 million).

Capital Markets

Revenue	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at constant currency %
Primary Markets	151	113	34	34
Secondary Markets – Equities	151	169	(11)	(11)
Secondary Markets – Fixed Income, Derivatives and Other	124	125	–	1
Total revenue	426	407	5	5
Cost of sales	(5)	(16)	(67)	(67)
Gross profit	421	391	8	8
Operating expenses before depreciation, amortisation and impairment[1]	(192)	(189)	2	–
Share of loss after tax of associates	(1)	(1)	–	–
Earnings before interest, tax, depreciation, amortisation and impairment[1]	228	201	13	–
Depreciation, amortisation and impairment[1]	(32)	(17)	88	–
Operating profit[1]	196	184	7	–

1 Operating expenses before depreciation, amortisation and impairment, earnings before interest, tax, depreciation, amortisation and impairment, depreciation, amortisation and impairment; and operating profit variance percentage is shown on a reported basis only i.e. not on a constant currency basis. Variances will include underlying movements and foreign exchange effects

Capital Markets comprises Primary and Secondary Market activities. Revenue was £426 million (2018: £407 million).

Primary Markets revenue increased by 34% to £151 million in 2019 (2018: £113 million) with underlying revenue remaining stable despite uncertainty due to Brexit delays and the UK general election. The Group benefited from a change in estimate relating to IFRS 15 due to a reduction in the length of time initial admissions and further issue revenues are required to be recognised, which resulted in a £32 million one-off balance sheet release. The total amount of capital raised across the Group's markets, through both new and further issues, decreased by 18% to £23.4 billion (2018: £28.7 billion), however four new admissions each raised over £1 billion (2018: one admission over £1 billion). Although there was a 38% decrease in the number of new issues across the Group's markets to 109 (2018: 176), the average market capitalisation of companies joining the Group's UK markets increased by 50% to £849 million (2018: £565 million). Further issuance from investment funds accounted for £4.2 billion (2018: £2.6 billion) with 55% of prior year listings raising further capital in 2019 (2018: 21%) following the trend that funds are able to upscale expediently on the Group's markets to advance their strategies after listing.

Secondary Markets revenue decreased by 11% to £151 million (2018: £169 million). UK average order book daily value traded fell by 19% to £4.7 billion (2018: £5.8 billion) in line with the subdued volume trend impacting European equity markets in 2019. Following on the same trend, Italian equity trading volumes also decreased by 10% year on year, with 255,000 trades per day (2018: 282,000). Turquoise, the Group's pan-European equities platform, was similarly impacted with a 36% reduction in average daily equity value traded to €2.1 billion (2018: €3.2 billion). Lower market volumes on Turquoise Lit Book were partly offset by Turquoise Plato and Turquoise Plato Lit Auctions which had record years, up 3% and 9% respectively on 2018 performance.

Financial review
(continued)

Fixed Income, Derivatives and Other revenue remained broadly flat year on year at £124 million (2018: £125 million). MTS Fixed Income revenue saw a 4% increase with strong performance by Repo up 24% partially offset by a decline of Cash and BondVision down 6% and 3% respectively. Derivatives performance was down 16% driven by the removal of Equity derivatives in the UK during the year and lower volumes on the Italian IDEM market. Growth in ELITE continued, with increased membership revenue in both the UK and Italy.

Cost of sales decreased by 67% to £5 million (2018: £16 million), primarily driven by Turquoise commercial policy changes from rebate model to discount scheme.

Reported operating expenses excluding D&A increased by 2% to £192 million (2018: £189 million) while D&A increased 88% to £32 million (2018: £17 million), reflecting ongoing investment and IFRS 16 right of use asset amortisation.

Share of loss after tax of associates relates to the Group's share of the HUB Exchange funding platform.

Reported operating profit increased by 7% to £196 million (2018: £184 million).

Technology Services

	12 months ended Dec 2019 £m	12 months ended Dec 2018 £m	Variance %	Variance at constant currency %
Revenue	**66**	65	2	1
Inter-segmental revenue	**17**	21	(19)	(19)
Total revenue	**83**	86	(3)	(3)
Cost of sales	**(7)**	(9)	(23)	(23)
Gross profit	**76**	77	(1)	(1)
Operating expenses before depreciation, amortisation and impairment[1]	**(20)**	(59)	66	–
Earnings before interest, tax, depreciation, amortisation and impairment[1]	**56**	18	211	–
Depreciation, amortisation and impairment[1]	**(25)**	(20)	25	–
Operating profit/(loss)[1]	**31**	(2)	–	–

1 Operating expenses before depreciation, amortisation and impairment, earnings before interest, tax, depreciation, amortisation and impairment, depreciation, amortisation and impairment, and operating profit / (loss) variance percentage is shown on a reported basis only i.e. not on a constant currency basis. Variances will include underlying movements and foreign exchange effects

Technology Services provides server location solutions, client connectivity and software products for the Group and third parties.

Third party revenue increased by 1% to £66 million (2018: £65 million), driven by an expanding product suite and higher sales volumes.

Reported operating expenses excluding D&A decreased by 66% to £20 million (2018: £59 million), and D&A increased 25% to £25 million (2018: £20 million), driven by continued Group technology investment.

The Technology segment made a profit of £31 million (2018: £2 million loss)

Operating Expenses

Group operating expenses (including D&A) before amortisation of purchased intangible assets and non-underlying items, were £1,039 million (2018: £969 million).

Operating Expenses

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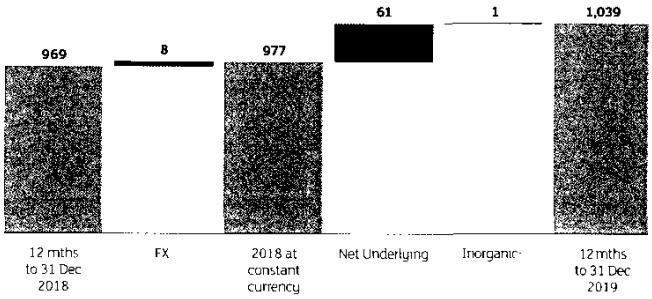

1 Inorganic includes costs for businesses held for less than 12 months in either period. Beyond Ratings

Reported operating expenses increased by 7% (6% on an organic and constant currency basis). Within this, reported expenses excluding D&A were well controlled, with a 1% increase driven by salary and IT costs as the Group continues to invest in new products and resilient infrastructure.

D&A increased by 49%. Within this increase was a £26 million amortisation charge relating to implementation of IFRS 16, which requires items categorised as finance leases to be recognised on the balance sheet as an asset and the right to use the asset amortised. Reflecting the 2019 capital expenditure of £195 million and ongoing investment, underlying D&A in 2020 is expected to increase by a similar amount as in 2019.

Inorganic expenses increased by £1 million due to the acquisition of Beyond Ratings, which supports product expansion in FTSE Russell ESG indices.

The Group continues to integrate Yield Book and continues with the global headcount programme announced in March 2019, delivering a benefit of £17 million in 2019. The Group expects to achieve the announced run rate savings of £30 million by the end of 2020.

Income from Equity Investments and Share of Loss After Tax of Associates

Income from equity investments of £7 million reflects the dividend from the Group's 4.92% share in Euroclear. As the acquisition was in January 2019 there is no prior year comparative.

The share of loss after tax of associates primarily reflects the Group's 44.1% minority share of the operating loss of CurveGlobal of £6 million (2018: £7 million share of loss). CurveGlobal volumes continued to grow and open interest at the end of 2019 was up 14%, to 395,000 contracts (2018: 348,000 contracts). The Group recognised a £1 million share of loss on the Group's investment in the HUB Exchange funding platform (2018: £1 million share of loss).

Non-underlying Items
Non-underlying operating items increased by £147 million to £327 million (2018: £180 million). Non-underlying items in 2019 included amortisation and impairment of goodwill and purchased intangible assets of £195 million (2018: £159 million). Within this, £25 million relates to accelerated amortisation in relation to Mergent Inc; £15 million relates to impairment of goodwill and purchased intangibles, Turquoise Global Holdings Ltd £9 million, driven by uncertainty of future cash flows; and Mergent Inc £6 million, driven by lower expected future cash flows than forecast at the time of acquisition.

The Group incurred restructuring costs of £32 million (2018: nil) in relation to implementation of the headcount programme announced in March 2019. Integration costs of £4 million (2018: £12 million) relate to integration of Yield Book.

In relation to acquisitions, the Group has incurred £96 million (2018: £9 million) of transaction costs.

The Group incurred £16 million (2018: nil) of non-underlying financing fees for establishing a bridge financing facility in two tranches of $9.325 billion and €3.58 billion (Bridge Facility) in relation to the Refinitiv acquisition.

Finance Income and Expense and Taxation
Net finance costs were £71 million, up £5 million on the prior year driven by £4 million of lease interest recognised as a result of IFRS 16. In October 2019, upon its maturity, the Group repaid a £250 million bond with a coupon of 9.125% per annum, drawing down on existing facilities to refinance at significantly lower rates of interest.

The effective tax rate for the period in respect of continuing underlying operations and excluding the effect of prior year adjustments was 23.7% (2018: 21.6%).

This reflects the Group's mix of profits across a largely stable tax base without any material changes in underlying rates but does include several one-off items increasing the rate. These items include the write off of Turquoise Global Holding Ltd's deferred tax assets, London Stock Exchange Plc's pension asset being subjected to a temporary higher rate of tax, increased exposure to US state taxes and a one off increase in US federal tax arising from changes in the US legislation. Excluding one-off items the underlying effective tax rate was 22%.

While the UK corporation tax rate was due to fall to 17% from 1 April 2020 it was made clear during the 2019 general election that the Conservative party intends to amend this and hold the UK Corporation Tax rate at 19%. With regards to the Group's UK deferred tax assets and liabilities, these are measured on substantially enacted future rates at the balance sheet date, which remains at 17% with the next UK budget scheduled for 11 March 2020.

From a sustainability perspective, we do not expect there to be any material changes to both the underlying tax base and tax rates (assuming the UK remains at 19%). If the mix of profits remains constant with 2019 and each sub group achieves a tax rate close to the local statutory rate the Group should expect to record a reported tax rate of between 22% to 23% for 2020.

Cash Flow and Balance Sheet
The Group's business continued to be strongly cash generative during the year, with cash generated from operations of £1,089 million (2018: £969 million).

At 31 December 2019, the Group had net assets of £3,801 million (2018: £3,698 million). The central counterparty clearing business assets and liabilities within LCH and CC&G largely offset each other but are shown gross on the balance sheet as the amounts receivable and payable are with different counterparties.

Net debt

Year ended 31 December	2019 £m	2018 £m
Gross borrowings	**2,085**	2,203
Cash and cash equivalents	**(1,493)**	(1,510)
Net derivative financial liabilities	**38**	47
Net debt	**630**	740
Regulatory and operational cash	**1,125**	1,120
Operating net debt	**1,755**	1,860

At 31 December 2019, the Group had operating net debt of £1,755 million after setting aside £1,125 million of cash and cash equivalents held to support regulatory and operational requirements, including cash and cash equivalents at LCH Group and amounts covering regulatory requirements at other LSEG companies. There was little movement in total capital amounts during the year and the Group's operating net debt decreased as cash generated, after organic and inorganic investments and other normal course payment obligations, was applied to pay down borrowings.

In August 2019, the Group arranged a Bridge Facility in connection with its proposed acquisition of Refinitiv. The Bridge Facility offers the Group greater certainty of availability of funds, to potentially refinance the debt it takes on at completion as a result of the acquisition. The Bridge Facility has been arranged on terms appropriate for an investment grade borrower and is available in two tranches, one of $9.325 billion and one of €3.580 billion. As at 31 December 2019, the Bridge Facility was undrawn.

In addition to the Bridge Facility, the Group retained total committed bank facilities for general corporate purposes of £1.2 billion during the financial year. The maturity of the five-year £600 million facility arranged in December 2017 was extended during the period for a further year to December 2024.
The Group therefore continues to be well positioned to fund future growth. Strong cash generation, £678 million of undrawn committed bank lines (after taking into account committed, swingline backstop coverage for the €300 million euro commercial paper in issuance) and the Bridge Facility, continued to provide an appropriate level of financial flexibility to the Group in its planning at the end of 2019.

Financial review
(continued)

Debt maturity profile
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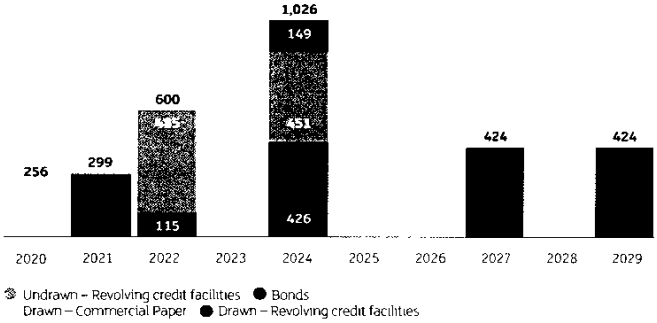


Graph excludes multi-currency Bridge Facility

The Group's interest cover, the coverage of net finance expense by EBITDA (consolidated earnings before net finance charges, taxation, impairment, depreciation and amortisation, foreign exchange gains or losses and non-underlying items), decreased to 14.4 times in the 12 months to 31 December 2019 (31 December 2018: 16.1 times) due to the additional costs of the Bridge Facility. Net leverage (operating net debt to EBITDA updated to account for the EBITDA of acquisitions or disposals undertaken in the period) decreased to 1.4 times at 31 December 2019 (31 December 2018: 1.8 times) and returns the Group to the middle of its targeted range of 1-2 times.

At the end of 2019, the Group's long-term credit ratings were A3 and A with Moody's and S&P respectively, with both agencies having moved their ratings to a negative outlook in anticipation of the impact of the Refinitiv acquisition on net leverage. Both agencies are positive about the strategic rationale for the transaction and note the Group's clearly positioned de-leveraging plans. Prior to the announcement of the Refinitiv acquisition on 1 August 2019, S&P had upgraded LSEG by one notch to the current A rating and Moody's had applied a positive outlook to its A3, reflecting their views on the Group's continued progress as it diversifies and strengthens its businesses and resulting earnings.

Foreign exchange

	2019	2018
Spot £/€ rate at 31 December	**1.17**	1.11
Spot £/US$ rate at 31 December	**1.31**	1.27
Average £/€ rate for the year	**1.14**	1.13
Average £/US$ rate for the year	**1.28**	1.34

The Group's principal foreign exchange exposure arises as a result of translating its foreign currency earnings, assets and liabilities into LSEG's reporting currency of Sterling. For the 12 months to 31 December 2019, the main exposures for the Group were its European based Euro reporting businesses and its US based operations, principally Russell Indexes, Mergent and The Yield Book. A 10 euro cent movement in the average £/€ rate for the year and a 10 cent movement in the average £/US$ rate for the year would have changed the Group's operating profit for the year before amortisation of purchased intangible assets and non-underlying items by approximately £29 million and £34 million, respectively.

The Group continues to manage its translation risk exposure by, where possible, matching the currency of its debt to the currency of its earnings, to ensure its key financial ratios are protected from material foreign exchange rate volatility.

Earnings per share
The Group delivered a 15% increase in adjusted basic earnings per share, which excludes amortisation of purchased intangible assets and non-underlying items, to 200.3 pence (2018: 173.8 pence). Basic earnings per share were 119.5 pence (2018: 138.3 pence).

Dividend
The Board is proposing a final dividend of 49.9 pence per share, which together with the interim dividend of 20.1 pence per share paid to shareholders in September 2019, results in a 16% increase in the total dividend to 70.0 pence per share. The final dividend will be paid on 27 May 2020 to shareholders on the register as at 1 May 2020.

Financial Targets

At an Investor Update event in June 2017, the Group set out financial targets for 2017-2019, with the 2019 outcome provided below.

Financial Targets to 2019		Performance
FTSE Russell	**Double-digit growth to continue 2017-2019**	**2019: Up 10%** on a reported basis; **up 6%** on a constant currency basis
LCH	**Double-digit OTC revenue growth to continue**	**2019: Up 15%** on a reported basis; **up 13%** on a constant currency basis
	Adjusted EBITDA margin growth – approaching 50% by 2019	**2019: 55%**

Targets relating to increases in operating expenses and Group EBITDA margin of c55% were stepped away from at the end of 2018. The Group achieved an EBITDA margin of 54.7% in 2019.

Capital Management Framework

The Group has reviewed its Capital Management Framework, which remains broadly unchanged (shown below). The Group continues to focus on maintaining a prudent balance sheet while also continuing to deploy capital for select organic and inorganic investments. Returns to shareholders, including share buy-backs, will continue to be kept under review.

Prudent Balance Sheet management Maintain existing leverage target of 1.0-2.0x Net Debt / EBITDA	– Flexibility to operate within this range for normal investment / development and to go above this range in the short term for compelling strategic opportunities – Manage credit rating, debt profile, and regulatory requirements
Investment for growth Preserve flexibility to pursue growth both organically and through 'bolt-on'/strategic M&A	– Selective inorganic investment opportunities - meeting high internal hurdles – Continued organic investments
Ordinary dividend policy Progressive ordinary dividend policy	– Progressive dividend - reflects confidence in strong future financial position – Operating in target 2.5-3.0x dividend cover range – Interim dividend payment of 1/3 of prior full year dividend results
Other capital returns	– Continue to keep other returns under review

Principal risks and uncertainties

The management of risk is fundamental to the successful execution of our strategy and to the resilience of our operations. During 2019, the Group successfully adapted its systems, processes and controls, in preparation for regulatory changes and to address Brexit contingency plans. The Group continues to support its key markets and deliver stable and resilient services that meet our customers' needs.

As LSEG's risk culture, objectives, appetite, governance and operations are well established, these descriptions naturally do not significantly change from year to year. We have also included a category of emerging risks which are new to the Group or which are difficult to quantify due to their remote or evolving nature. In most cases, the mitigation for such risks is to establish appropriate contingency plans and monitor the development of the risk until it can be quantified and removed or included as a principal risk.

FURTHER DETAIL

Our strategic risk objectives, current risk focus, a narrative description of our risk appetite, how LSEG's risk management framework operates, as well as an overview of the CCPs risk management and operations, are well established and are not described here

Detailed information can be found in our risk management oversight supplement. Please visit: **www.lseg.com/about-london-stock-exchange-group/risk-management-oversight**

LSEG Risk Governance

OVERVIEW OF PRINCIPAL RISKS:

Strategic Risks	Financial Risks	Operational Risks	Emerging Risks
Global economy Regulatory change Refinitiv Transaction Competition Transformation Reputation/Brand/IP	Credit risk Market risk Liquidity risk Capital risk	Technology Physical threats Model risk Security threats – Cyber Change management Settlement and custodial risks Compliance risks Data governance Employees and culture	Climate-related risk Emerging technology

KEY:

▲ Risk Level Increasing ▬ Risk Level Static ▼ Risk Level Decreasing ↗ Emerging Risks

STRATEGIC RISKS

Risks related to our strategy (including the implementation of strategic initiatives and external threats to the achievement of our strategy). The category also includes risks associated with reputation or brand values.

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Global economy (Executive Lead: Chief Executive Officer, Executive Committee) As a diversified markets infrastructure business, we operate in a broad range of equity, fixed income and derivative markets servicing clients who increasingly seek global products and solutions. If the global economy underperforms, lower activity in our markets may lead to lower revenue. Weaker economic data and low levels of inflation have dominated central bank official rate actions. The Federal Open Market Committee (FOMC) concerned about a slowing US economy, decreased the Fed Funds target rate three times during 2019. Meanwhile the European Central Bank (ECB) has left rates unchanged at zero and has restarted its quantitative easing programme. Ongoing geopolitical tensions continue to add uncertainty in the markets and may impact investor confidence and activity levels. In particular, the political uncertainty in the UK following its exit from the EU, tensions between the US and its major trading partners and other countries as well as tensions in Hong Kong and in China, continue to affect global markets. The emergence toward the end of 2019 of the Novel Coronavirus outbreak in China could have a significant impact on the global economy. In a prolonged outbreak situation, the imposition of travel restrictions, border controls and quarantine protocols could contribute to a major pause in industrial productivity across the Asia Pacific region and could suppress demand for commodities, impact the supply chain for many industries globally and the international retail market which in turn could significantly impact the global financial markets The UK exit from the EU leaves significant uncertainty concerning the political and regulatory environment, the UK's future relationship with the EU and other trading partners, and the overall impact on the UK and EU economies both in the short and medium term. These could have adverse impacts on the Group's businesses, operations, financial condition and cash flows.	The footprint of the Group continues to broaden, further improving the geographical diversification of the Group's income streams which mitigates the risks of a localised economic downturn. Furthermore, income streams across the business divisions of the Group comprise annuity and fee based recurring revenues to balance against more cyclical and market driven activity. This diversification will be significantly enhanced (including enjoying an increasing proportion of recurring revenues) if the Group completes the acquisition of Refinitiv, expected during H2 2020. The Group performs regular analysis to monitor the markets space and the potential impacts of market price and volume movements on the business. Activities include Key Risk Indicator tracking, stress testing, and hedging. We continue to actively monitor the ongoing developments following the UK's exit from the EU. Committees have been established to assess and address areas of impact on our operations and the Group has formulated contingency plans with the objectives of continuity of market function and customer service in the event of a divergence of regulation if no trade agreement is achieved. The Financial Risk Committee closely monitors and analyses multiple market stress scenarios and action plans in order to minimise any impacts stemming from a potential deterioration of the macroeconomic environment. The stress scenarios are regularly reviewed and updated in response to changes in macroeconomic conditions. LSEG monitors the potential impact of macroeconomic and political events on our operating environment and business model and the Group is an active participant in international and domestic regulatory debates.	▲

For more information, see Market trends and our response on pages 14–20, and Note 3 to the accounts, Financial Risk Management on pages 158–163.

Principal risks and uncertainties (continued)

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Regulatory change and compliance (Executive Lead: Chief Executive Officer, Executive Committee) LSEG is a global business operating in multiple regulatory environments that reflect the diversity of products and the jurisdictions in which it operates. The Group is exposed to risks associated with the management of changes to these regulatory requirements. Key regulatory changes include: **Brexit** – LSEG companies conducting regulated activities in the EU or with customers in the EU are subject to EU regulation. The Group has implemented contingency plans to maintain continuity of service to customers and orderly functioning of its markets, including incorporation of new entities in the EU27 and securing authorisation within the EU27 for certain Group businesses. The Group continues to engage with regulators and parties in the UK, EU and other jurisdictions to advise on financial market infrastructure considerations such as the potential impacts of divergence. **Regulation impacting CCPs** – Regulatory initiatives with the potential to impact cleared derivatives markets and CCPs continue through international standard setters and regulators in the EU and US and other major jurisdictions. Our primary focus remains on development of a coherent, cross-border regulatory framework for market access to global CCPs, including appropriate access rules under the EMIR review published in December 2019. As part of this review, EMIR 2.2 introduces the option to impose enhanced supervision or deny the recognition of third country CCPs that are of systemic importance for the EU, which could have implications for the Group's CCPs as well as comparable compliance frameworks for jurisdictions of equivalent regulatory frameworks. Proper calibration of EU rules on CCP Recovery and Resolution and harmonisation with other key jurisdictions is also a key priority and could likely have an impact on the Group's CCPs. The European CCP Recovery and Resolution framework is expected to be finalised in 2020 – it could impose additional resources for CCPs. **MiFID II/MiFIR** – The Regulation and the Directive came into force on 3 January 2018, however the European Commission and ESMA commenced a targeted review process in the second half of 2019 with potential impacts on the Group, particularly in the areas of trading transparency (e.g. double volume cap) and market data (fees transparency and potential introduction of consolidated tape). The third country access rules for trading venues and market participants continued to be evaluated in 2019 and could also have a potential impact to access our trading venues in the UK and EU, in particular the scope of the Share Trading Obligation. **Prudential Capital Rules** – In June 2019, the Basel Committee on Banking Supervision (BCBS) published final recommendations on the Basel III Framework, which as currently drafted could adversely impact the cleared derivatives industry. One area of primary importance is the treatment of customer margin under the leverage ratio. BCBS has announced a targeted revision of the leverage ratio to allow initial margin and variation margin received from a client to offset the replacement cost and potential future exposure for client cleared derivatives. This is a positive development for market participants and therefore the Group. The EU regulatory framework already recognised this offsetting via the Capital Requirements Regulation adopted in May 2019. In 2019, the review of the prudential regime for investment firms was finalised. The implementation of the Regulation and the Directive will take place in 2020 and we will monitor its impact on proprietary trading firms and their continued ability to provide liquidity on LSEG markets.	Changes in the regulatory environment form a key input into our strategic planning, including the political impact on our growth strategies, both organic and inorganic. We monitor regulatory developments continually and engage directly with regulatory and governmental authorities at local, regional and national levels. The Group also has a structured Brexit programme which includes regulatory specialists engaging at appropriate levels and on financial market infrastructure considerations. Risks are actively monitored and managed - see Emerging Risks. The Group has executed the following contingency plans for its business. Following the European Commission implementing decision for UK CCPs on 19 December 2018, it was announced on 18 February 2019 that LCH Ltd has been recognised by ESMA as a third country CCP under Article 25 of EMIR. On 23 December 2019 the European Commission extended this equivalence decision for another 12 months in case of a no-deal Brexit. This recognition confirms LCH Ltd's ability to continue to offer all clearing services for all products and services to all members and clients if there were to be a no-deal Brexit scenario post 31 January 2020. LCH reserves its right to take any action it considers appropriate at any time, should there be a material change in circumstances. In addition, LCH SA and CC&G are allowed under the Bank of England Temporary Recognition Regime (TRR) to provide clearing services and activities in the UK for up to three years in a 'no deal' scenario. LSEG's key objectives to provide continuity of stable financial infrastructure services as part of our global remit. As the various regulatory initiatives progress, there will be greater certainty with regard to their likely final form. The Group continues to focus on remaining well positioned to respond to regulatory developments and further opportunities exist for the Group to deliver solutions to help the market address the changing regulatory environment including those linked with the departure of the UK from the EU.	▲

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Regulatory change and compliance (continued) **Benchmark Regulation** – Regulatory focus on the role of benchmarks in the market and regulation of benchmark providers continues to increase in several major jurisdictions around the world. FTSE International Limited was authorised by the UK's Financial Conduct Authority (FCA) in 2018 as a Benchmark Administrator, under the European Benchmark Regulation. In March 2019 political agreement was reached for sustainable finance legislative proposals and the ESA Review, which could impact benchmarks. In October 2019, the Commission consulted on a potential EU BMR Review. **Financial Transactions Tax (FTT)** – A sub-set of EU member states are discussing, under enhanced cooperation, a possible FTT, which could adversely impact volumes in financial markets. During 2019 little progress was made, but efforts continue to finalise the measure. **Information and cyber security standards** – In many of our key regulatory jurisdictions, there is an increasing legislative and regulatory focus on cyber security and data protection which could impact our operations and compliance models. LSEG supports the regulatory efforts on these issues, as they increase the standards for customers, vendors and other third parties with whom we interact. We continue to support regional and global efforts to harmonise these standards globally to avoid conflicting or duplicative requirements for financial market infrastructure providers operating in several jurisdictions and our market participants		▲
For more information on regulatory changes, see Market trends and our response on pages 14–20.		
Refinitiv Transaction (Executive Lead: Chief Executive Officer, Executive Committee, Group Board) On 1 August 2019, LSEG announced that it had agreed definitive terms with a consortium including certain investment funds affiliated with Blackstone, as well as Thomson Reuters (together, the Refinitiv Shareholders) to acquire Refinitiv in an all share transaction (the Transaction). Completion of the Transaction is subject to a number of conditions (including merger control clearances and regulatory approvals) which may not be satisfied or waived, or which may not be capable of satisfaction without the imposition of undertakings, conditions or divestments, which could be material. If merger clearances are not obtained or there is material delay in reaching agreement on remedies to facilitate the Transaction, LSEG will in certain circumstances pay a termination fee of £198.3 million to the Refinitiv Shareholders. Delay in completing the Transaction will prolong the period of uncertainty for LSEG, and both delay and failure to complete may result in the accrual of additional and, in the case of a failure to complete, wasted costs, without any of the potential benefits of the Transaction having been achieved. Further, LSEG's management would have spent time in connection with the Transaction that could otherwise have been spent more productively in connection with other activities of LSEG. In addition, the success of the Transaction will be dependent upon LSEG's ability to integrate the businesses of LSEG and Refinitiv; there will be challenges associated with the integration and the delivery of synergies and/or the benefits expected as a result of the Transaction may not be achieved as anticipated or at all. There are also further risks in relation to the Transaction, existing risks to LSEG that will be impacted by the Transaction and new risks to LSEG as a result of the Transaction which are each described in the shareholder circular related to the Transaction dated 6 November 2019.	An Integration Management Office for the Transaction (the IMO) has been established, headed by David Shalders, Chief Integration Officer and Group COO. The IMO is responsible for managing the overall integration planning process and will be responsible for ensuring that the synergies expected to result from the Transaction are properly monitored, reported on and delivered. The IMO comprises senior leaders from both LSEG and Refinitiv and will build upon the strong working relationship already established between the two organisations. LSEG has also engaged a leading global external consulting firm, which is a specialist in planning and delivering large-scale and complex business integration projects for global institutions, to support the integration. The integration will be managed in two phases, integration planning (prior to Completion) and integration implementation (following Completion). Each phase will be overseen by an integration committee of senior executives, led by David Schwimmer, with representation from LSEG, Refinitiv and the Refinitiv Shareholders, and will report to the Board on a regular basis.	**New**

Principal risks and uncertainties (continued)

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Competition (Executive Lead: Chief Executive Officer, Group Director for each division, Chief Information Officer) The competitive environment in which LSEG operates has undergone, and continues to undergo, transformational changes triggered by market participants, investors, infrastructure operators and regulators, as well as intensifying competition. The Group operates in a highly competitive industry. Continued consolidation has fuelled competition including between groups in different geographical areas. Sophisticated FMI providers are diversifying and expanding. As a result, LSEG faces competition from market operators from the EU, US and Asia that are increasingly broadening their propositions (organically, as well as through consolidation) to gain access to new product areas and geographies. The Group's Information Services business faces competition from a variety of sources, notably from index providers which offer indices and other benchmarking tools which compete with those offered by the Group as well as from other venues that offer market data relating to securities that are traded on the Group's markets. As the Information Services offering diversifies and seeks to meet customer needs for new data sources, segments and asset classes, it is facing a broader range of competitors. In Post Trade Services, we continue to see increased clearing activity across a number of asset classes, in particular OTC derivatives products, reflecting the attractiveness of the Group's current customer offering and open access philosophy. The competition within the post trade environment has also intensified due to a general industry move towards inter-operability of CCPs (where participants on trading platforms are offered a choice of CCPs), strengthened by regulatory developments, including MiFID II and MIFIR. Our Capital Markets operations face continuing risk from competitors' commercial and technological offerings. There is strong competition for primary listings and capital raises from other global exchanges and regional centres. Private equity, venture capital and new options such as crowd-funding and crypto-currencies are increasingly being considered as alternatives methods of capital formation for issuers. We maintain a dedicated international team who promote the benefits of listing on our markets to international issuers, the global advisory community and other stakeholders. The Group will need to continue strong and collaborative dialogue with customers and other relevant industry stakeholders to ensure it remains responsive to changing requirements and is able to react in a timely manner. If competitors are quicker to access and deploy technology innovations such as artificial intelligence (AI), machine learning and analytics, they may achieve a valuable advantage which may impact the attractiveness of the Group's offering and its relative profitability. Our integrated and business-led approach to technology innovation helps us to manage this risk and the Group is well advanced in investigating and applying numerous new technology innovations across its business portfolio. In Technology Services, there is intense competition across all our current activities and in some of our growth areas, in addition to strong incumbent providers. New entrants are increasing from both within and outside of our traditional competition base and some consolidation is evident. Start-ups, which may be sponsored by existing LSEG competitors or customers, are introducing new technology and commercial models to our customer base to which we need to respond with new products and services of our own. Continual customer dialogue, facilitated through our partnership approach and investment in product management and innovation are critical to understanding and managing the impact of changing customer requirements in our technology and other business lines.	*Competitive markets are, by their very nature, dynamic, and* the effects of competitor activity can never be fully mitigated. Senior management and a broad range of customer-facing *staff in all business areas are actively engaged with clients to* understand their evolving needs and motivations. We have established a Group Relationship Programme to co-ordinate this across Group businesses globally. The Group undertakes constant market monitoring and pricing revision to mitigate risks and ensure we are competitive. Commercial initiatives are aligned with our clients and this is complemented by an ongoing focus on technology operations and innovation.	—

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Transformation (Executive Lead: Chief Executive Officer, Chief Operating Officer) The Group is exposed to transformation risks (risk of loss or failure resulting from change/transformation or integration) as it continues to grow rapidly both organically and inorganically. Acquisitions may, in some cases, be complex or necessitate change to operating models, business models, technology and people. This is particularly likely for the current target acquisition of Refinitiv. In general, the combined business' success will be dependent upon its ability to integrate the businesses of LSEG and Refinitiv; there will be challenges associated with the integration and the delivery of synergies, the benefits or business performance expected as a result of the transaction may not be achieved as anticipated or at all, and the costs to achieve the synergies and benefits may be higher than anticipated. This derives from internal (organic) change and change required by the integration of acquisitions whereby the Group targets specific synergy benefits, necessitating change to operating models, business models, technology and people. A failure to align the businesses of the Group successfully may lead to an increased cost base without a commensurate increase in revenue; a failure to benefit from future product and market opportunities; and risks in respect of capital requirements, regulatory relationships and management time. The additional effort related to M&A, especially to the potential acquisition of Refinitiv and post-transaction alignment activities, could have an adverse impact on the Group's day-to-day performance and/or key strategic initiatives which could damage the Group's reputation and financial performance. The size and complexity of current acquisition targets as well as those acquired in the past five years have increased the Group's change management and transformation risks. However, the target acquisitions aim to increase the Group's opportunities to compete on a global scale and diversify its revenue footprint by industry, geography and customer base.	The Group's exposure to transformation risk is mitigated through the application of the Group's Enterprise Risk Management Framework to deploy consistent, appropriate Risk Management across the Group, both during and post-acquisition. The governance of the Group following a merger or acquisition is aligned and strengthened as appropriate. The Integration Management Office, reporting to the Executive Committee, has been established to oversee the completion of the planned acquisition of Refinitiv. Oversight during transformation is provided by a Steering Committee comprising Executive Committee members with regular reports to the Board Risk Committee and the Board. The Group has an effective track record of integrating acquisitions and delivering tangible synergies, supported by robust governance and programme management structures through the Group's Change Framework to mitigate change-related risks.	▲
Reputation/Brand/IP (Executive Lead: Chief Executive Officer, Executive Committee) A number of the Group's businesses have iconic national brands that are well- recognised at international as well as at national levels. The strong reputation of the Group's businesses and their valuable brand names are a key selling point. Any events or actions that damage the reputation or brands of the Group, such as those propagated via social media or caused by its misuse, could adversely affect the Group's business, financial condition and operating results. Failure to protect the Group's intellectual property rights adequately could result in costs for the Group, negatively impact the Group's reputation and affect the ability of the Group to compete effectively. Further, defending or enforcing the Group's intellectual property rights could result in the expenditure of significant financial and managerial resources, which could adversely affect the Group's business, financial condition and operating results.	LSEG has policies and procedures in place which are designed to ensure the appropriate use of the Group's brands and to maintain the integrity of the Group's reputation. LSEG actively monitors the use of its brands and other intellectual property, including monitoring for internet brand impersonation and social media sentiment, in order to prevent, identify and address any infringements. The Group protects its intellectual property by relying upon a combination of trademark laws, copyright laws, patent laws, trade secret protection, confidentiality agreements and other contractual arrangements with its affiliates, customers, suppliers, strategic partners and others.	—

Principal risks and uncertainties (continued)

FINANCIAL RISKS

The risk of financial failure, reputational loss, loss of earnings and/or capital as a result of investment activity, lack of liquidity, funding or capital, and/or the inappropriate recording, reporting and disclosure of financial results, taxation or regulatory information.

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Credit risk (Executive Lead: Chief Financial Officer, Director of Post Trade, Financial Risk Committee) **Clearing** CCPs in the Group are exposed to credit risk as a result of their clearing activities. A default by a CCP clearing member that could not be managed within the resources of the defaulted clearing member could adversely affect that CCP's revenues and its customers' reputation. CCPs authorised in the EU are required to make a proportion of their regulatory capital available to cover default losses after the defaulter's resources have been exhausted and prior to allocation of losses to non-defaulters and so, in extreme circumstances, a default could lead to a call on the Group CCPs' own capital 'skin-in-the-game'. CCPs may also be exposed to credit exposure to providers of infrastructure services such as Central Securities Depositaries (CSDs) and commercial banks providing investment and operational services. In addition, certain CCPs within the Group have interoperability margin arrangements with other CCPs requiring collateral to be exchanged in proportion to the value of the underlying transactions. The relevant clearing provider entities within the Group are therefore exposed to the risk of a default of other CCPs under such arrangements. **Non-Clearing** CCPs and other parts of LSEG Group are also exposed to credit risk as a result of placing money with investment counterparties on both a secured and unsecured basis. Losses may occur due to the default of either the investment counterparty or of the issuer of bonds bought outright or received as collateral. The Group's credit risk also relates to its customers and counterparties being unable to meet their obligations to the Group either in part or in full. Regulators are increasingly looking at the impacts of climate change on credit risks, although methodologies are in their infancy. We do not believe this will give rise to significant increased risks in the short term, and will monitor market development, in particular the proposed climate stress tests as part of the UK Prudential Regulation Authority Biennial Exploratory Scenario (BES) in 2021.	**Clearing** As CCP members continue to work towards strengthening their balance sheets, the risk to LSEG CCPs of a member default reduces, although continuing geopolitical uncertainty continues, and the banking sectors of some countries remain stressed. The financial risks associated with clearing operations are further mitigated by: – Strict CCP membership rules including supervisory capital, financial strength and operational capability – The maintenance of prudent levels of margin and default funds to cover exposures to participants. Members deposit margin, computed at least daily, to cover the expected costs which the clearing service would incur in closing out open positions in a volatile market in the event of the member's default. A default fund sized to cover the default of at least the two members with the largest exposures in each service using a suite of extreme but plausible stress tests mutualises losses in excess of margin amongst the clearing members – Regular 'Fire Drills' are carried out to test the operational soundness of the CCPs' default management processes – Infrastructure providers are regularly assessed in line with policy **Non-Clearing** Policies are in place to ensure that investment counterparties are of good credit quality, and at least 95% of CCP commercial bank deposits are secured. CCP and non-CCP counterparty concentration risk is consolidated and monitored daily at the Group level and reported to the Executive Committee and to the Board Risk Committee, including limits and status rating. Group companies make a judgement on the credit quality of their customers based upon the customer's financial position, the recurring nature of billing and collection arrangements and, historically, a low incidence of default.	—

For more information on this risk see the Post Trade Services section of the Segmental Review on pages 30–34, and Note 3 to the accounts. Financial Risk Management on pages 158–163.

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Market risk (Chief Financial Officer, Director of Post Trade) **Clearing** The Group's CCPs assume the counterparty risk for all transactions that are cleared through their markets. In the event of default of their clearing members, therefore, credit risk will manifest itself as market risk. As this market risk is only present in the event of default this is referred to as 'latent market risk'. The latent market risk includes interest rate risk, foreign exchange risk, equity risk and commodity price risk as well as country risk, issuer risk and concentration risk. This risk is greater if market conditions are unfavourable at the time of the default. **Non-Clearing** The Group is exposed to foreign exchange risk as a result of its broadening geographical footprint. There are, however, also benefits of global diversification including reduced exposure to local events such as the UK Brexit vote and the geopolitical tensions. The Group is exposed to interest rate risk through its borrowing activities (including to support M&A objectives) and treasury investments. Further changes in interest rates in 2020 may increase the Group's exposure to these risks. Similar to credit risks, regulators are also considering the impacts of climate change on market (systemic) risks, and whilst we do not foresee any short-term material risks, we will also keep this under review.	**Clearing** The margins and default funds referred to previously are sized to protect against latent market risk. The adequacy of these resources is evaluated daily by subjecting member and customer positions to 'extreme but plausible' stress scenarios encapsulating not only historical crises, but theoretical forward-looking scenarios and decorrelation events. All our CCPs are compliant with the appropriate regulatory requirements regarding margin calculations, capital and default rules. Latent market risk is monitored and managed on a day-to-day basis by the risk teams within the clearing services. Committees overseeing market risks meet on a regular basis. **Non-Clearing** Foreign exchange (FX) risk is monitored closely and translation risk is managed by matching the currency of the Group's debt to its earnings to protect key ratios and partially hedge currency net assets. FX derivatives including cross-currency swaps are used under a control framework governed by LSEG Board approved policy. The split between floating and fixed debt is managed to support the Group's target of maintaining an interest coverage ratio that underpins a good investment grade credit rating. Authorised derivatives can be used to: – transform fixed rate bond debt, to supplement a mix of short dated commercial paper and floating rate loan borrowings, to achieve the Group's policy objective, and / or – hedge prospective FX and interest rates ahead of the completion of a planned M&A transaction to protect the financial position of the Group.	—

For more information on this risk, see Note 3 to the accounts, Financial Risk Management on pages 158–163.

Principal risks and uncertainties (continued)

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Liquidity risk (Chief Financial Officer, Director of Post Trade, Financial Risk Committee) ***Clearing*** There are two distinct types of risk to which the Group's CCPs are exposed to that are commonly referred to as liquidity risk – market liquidity risk and funding liquidity risk. The former is the risk that it may be difficult or expensive to liquidate a large or concentrated position and is addressed under market risk. The latter is the risk that the CCP may not have enough cash to pay variation margin to non-defaulters or to physically settle securities delivered by a non-defaulter that cannot be on-sold to a defaulter and this is the subject of this section. The Group's CCPs collect clearing members' margin and/or default funds contributions in cash and/or in highly liquid securities. To maintain sufficient ongoing liquidity and immediate access to funds, the Group's CCPs deposit the cash received in highly liquid and secure investments, such as sovereign bonds and reverse repos, as mandated under EMIR; securities deposited by clearing members are therefore held in dedicated accounts with CSDs and/or International Central Securities Depositaries (ICSDs). The Group's CCPs also hold a small proportion of their investments in unsecured bank and money market deposits subject to the limitations imposed by EMIR. The successful operation of these investment activities is contingent on general market conditions and there is no guarantee that such investments may be exempt from market losses. **Non-Clearing** Liquidity risk in a non-clearing context is the risk that the firm may be unable to make payments as they fall due.	**Clearing** The Group's CCPs have put in place regulatory compliant liquidity plans for day-to-day liquidity management, including contingencies for stressed conditions. The Group's CCPs have multiple layers of defence against liquidity shortfalls including intraday margin calls, minimum cash balances, access to contingent liquidity arrangements, and, for certain CCPs, access to central bank liquidity. Under the Enterprise Risk Management Framework, CCP investments must be made in compliance with the Group CCP Financial Risk Policy (as well as the policies of the CCPs themselves). These policies stipulate a number of Risk Management standards including investment limits (secured and unsecured) and liquidity coverage ratios. Committees overseeing CCP investment risk meet regularly. Each CCP monitors its liquidity needs daily under stressed and unstressed assumptions and reports to the Group Financial Risk Committee each month. **Non-Clearing** Requirements for liquidity including headroom requirements are set out in the Group's Board approved Treasury Policy. The Group maintains appropriately sized liquidity facilities for business as usual and, from time to time, large scale acquisitions and monitors its requirements on an ongoing basis. Stressed facility headroom is assessed regularly and on a one-off basis for working capital reviews associated with large scale acquisitions using plausible downside business projections. Group Treasury risk is monitored daily and is managed within the constraints of a Board approved policy by the Group Treasury team and is overseen by the Treasury Committee (a sub-Committee of the Financial Risk Committee, both chaired by the CFO). An update on Group Treasury risks and actions is provided monthly to the Financial Risk Committee and to each meeting of the Board Risk Committee.	—
Capital risk (Chief Financial Officer, Financial Risk Committee) Principal risks to managing the Group's capital are: – In respect of regulated entities, capital adequacy compliance risk (the risk that regulated entities do not maintain and report sufficient qualifying capital to meet regulatory requirements) and capital reporting compliance risk (the risk that regulated entities fail to comply with capital reporting and regulatory obligations). *If a regulated entity in the Group fails to ensure that sufficient capital resources are* maintained to meet regulatory requirements, this could lead to loss of regulatory approvals and/or financial sanctions – In respect of regulated and unregulated entities, commercial capital adequacy and quality risk (the risk that Group and solo entities do not maintain both sufficient quantity and quality of capital to meet commercial requirements) and investment return risk (the risk that capital is held in subsidiaries or invested in projects that generate a return that is below the Group's cost of capital) – Availability of debt or equity capital (whether specific to the Group or driven by general financial market conditions)	The Group's Capital Management Policy provides a framework to ensure the Group maintains suitable capital levels (both at Group and solo entity levels), and effectively manages the risks thereof. The Group's Treasury Policy recognises the need to observe regulatory requirements in the management of the Group's resources. The Risk Appetite approved by the Board includes components related to the Group's leverage ratios and capital risks; Key Risk Indicators are monitored regularly. The Group maintains an ongoing review of the capital positions of its regulated entities to ensure that they operate within capital limits which are overseen by the Financial Risk Committee, the Executive Committee and the Board. The Group can manage its capital structure by varying returns to shareholders, issuing new shares or increasing or reducing borrowings. The Board reviews dividend policy and funding capacity on a regular basis and the Group maintains comfortable levels of debt facility headroom. The Group regularly assesses debt and equity markets to maintain access to new capital at reasonable cost. The Group is mindful of potential impacts on its key metrics when considering changes to its capital structure.	—

For more information on this risk, see Note 3 to the accounts, Financial Risk Management on pages 158–163.

OPERATIONAL RISKS

The risk of loss, or other adverse consequences to the business, resulting from inadequate or failed internal processes, people and systems, or from external events.

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Technology (Responsibility: Chief Operating Officer, Chief Technology Officer) LSEG is highly dependent on the development and operation of its sophisticated technology and advanced information systems and those of its third-party service providers. Technology failures may impact our clients and the orderly running of our markets, potentially leading to system outages. The Group is reliant on outsourced service providers for key technology services and data provision and actively manages relationships with strategic technology suppliers to avoid a breakdown in service provision. The Group also actively monitors new technological developments and opportunities for innovation.	The performance and availability of the Group's systems are constantly reviewed and monitored to prevent problems arising and where possible, ensure a prompt response to any potential service-impacting incident. The Group continues actively to identify, manage and mitigate risks associated with the consolidation of technology development and operations. Regular rigorous business impact and operational risk scenario analysis is performed in conjunction with the Group Risk, Group Business Continuity and Crisis Management functions to identify, assess and remedy potential system and governance vulnerabilities. In addition, all technology solutions are comprehensively tested by both LSEG Technology and third-party quality assurance providers as appropriate; functional, non-functional, user-acceptance and other testing is performed across a number of technical environments to ensure products are ready for deployment. The Group's technology teams mitigate the risk of resource over-stretch by ensuring prioritisation of key development and operations activities, and resource utilisation and allocation are kept under constant review. The LSEG Technology systems are designed to be software and hardware fault tolerant and alternative systems are available in the unlikely event of multiple failures from which the system is unrecoverable. The Group has worked to enhance its service management capability and tooling to enhance technology service delivery. The Group actively manages relationships with key strategic technology suppliers to avoid any breakdown in service provision which could adversely affect the Group's businesses. Where possible the Group has identified alternative suppliers that could be engaged in the event of a third party failing to deliver on its contractual commitments. The Group actively monitors new technological developments and opportunities such as blockchain and AI.	—

For more information, see the Technology Services section of the Segmental Review on page 39.

Principal risks and uncertainties (continued)

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Physical threats (Executive Lead: Chief Operating Officer) The Group is reliant upon secure premises to protect its employees and physical assets as well as deploying appropriate safeguards to ensure uninterrupted operation of its IT systems and infrastructure. Terrorist attacks and similar activities directed against our offices, operations, computer systems or networks could disrupt our markets, harm staff, tenants and visitors, and severely disrupt our business operations. Civil or political unrest could impact companies within the Group. Long-term unavailability of key premises could lead to the loss of customer confidence and reputational damages. Climate change may cause an increase in the severity and frequency of extreme weather events across the locations where LSEG operates. This could disrupt business operations, through damage to offices and infrastructure, and cause harm to staff.	Security threats are treated with the utmost seriousness. The Group has robust physical security arrangements. The Group is supported by relevant governmental organisations in our key areas of operation. Security teams respond to intelligence received and liaise closely with police and global government agencies. Across major hubs covering the UK, Europe, the Americas and Asia, the Group maintains close monitoring of geopolitical threats and horizon scanning through a third-party security monitoring service. Where events are detected, response support services are mobilised to support as required. The Group has well established and regularly tested business continuity and crisis management procedures. The Group assesses its dependencies on critical suppliers and ensures robust contingency measures are in place.	—
Model risk (Executive Lead: Model Risk Committee) The Group defines model risk as the potential loss an institution may incur, as a consequence of decisions that could be principally based on the output of models, due to errors in the development, implementation or use of such models. The key model risks are in CCP margining, Yield Book mortgage valuation, Environmental, Social and Governance (ESG) scoring and the firms' capital models. Model risk can be both reputational and financial.	LSEG businesses have in place industry standard model risk control and governance pillars, including a Model Risk Policy, model inventory tools, documentation templates and standards. Robust model validation is in place to ensure our models are fit for purpose and appropriately developed and implemented. The Model Risk Management team provides model risk status reports on a quarterly basis to the Model Risk Committee, which oversees model risk across the Group.	—
Security threats – Cyber (Executive Lead: Chief Information Officer, Chief Information Security Officer) Public and private organisations continue to be targeted by increasingly sophisticated cyber threats. Threats such as ransomware, theft of customer data and distributed denial of service attacks were increasingly significant to the financial industry as a whole in 2019. The Group's data, IT systems and networks, and those of its third-party service providers, may be vulnerable to threats, such as cyber-attacks, data breach or other leakage of sensitive data, which could adversely affect the Group's business. Additionally, new emerging technologies such as cloud computing and AI could impact our cyber risk profile. A major information security breach that results in data and intellectual property loss, system unavailability or loss of integrity of data or systems, could have a significant negative impact on our reputation, financial results and the confidence of our clients and could lead to fines and regulatory censure.	The Group continues to invest in and enhance its information security control environment, cyber defences and operational processes, as it delivers its Board approved Cyber Security Strategy. Extensive organisational, technological and culture measures aligned to the National Institute of Standards and Technology (NIST) control framework are in place to prevent, detect, respond to and recover from cyber security threats. Regular testing of security controls and incident response processes is undertaken, both internally across our three lines of defence model and externally by independent third parties to provide assurance over the effectiveness of cyber security controls and recovery processes. The Group monitors intelligence and liaises closely with global Government agencies as well as industry forums and regulators to help improve our ability to respond to the evolving threats faced by us and our industry.	▲

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Change management (Executive Lead: Chief Operating Officer, Chief Information Officer) The considerable change agenda exposes the Group to the risk that change is either misaligned with the Group's strategic objectives or not managed effectively within time, cost and quality criteria. The volume of change is driven by both internal and external factors. Internal factors include the diversification strategy of the Group and its drive for technology innovation, consolidation and operational resilience. External factors include the changing regulatory landscape and requirements which necessitate changes to our systems and processes. Design defects, errors, failures or delays associated with new, modified or upgraded technology, products or services introduced by LSEG and Refinitiv, and therefore the combined business, could negatively impact its business.	The risks associated with change are mitigated by effective implementation of the Group's Change framework. This includes Board oversight across the Group's change portfolio and project pipeline, to ensure these align to the Group and Divisional strategies and support our financial plans. Appropriate governance, risk and executive oversight is exercised over individual programmes and projects based on the scale, complexity and impact of the change. The purpose of this oversight is to confirm changes do not breach the Group's risk appetite, are compliant with the approved project management policy and to oversee the management of budget, resource, escalations, risks, issues and dependencies. For software specific development, software design methodologies, testing regimes and test environments are continuously being enhanced to minimise implementation risk.	—
For more information, see the Chair's statement on pages 4–5, and the Chief Executive's statement on pages 6–9.		
Settlement and custodial risks (Executive Lead: Director of Post Trade) The Group's CCPs are exposed to operational risks associated with clearing transactions and the management of collateral, particularly where there are manual processes and controls. While the Group's CCPs have in place procedures and controls to prevent failures of these processes, and to mitigate the impact of any such failures, any operational error could have a material adverse effect on the Group's reputation, business, financial condition and operating results. The Group provides routing, netting and settlement and custody services through its CSD to ensure that securities are settled in a timely and secure manner. There are operational risks associated with such services, particularly where processes are not fully automated.	Operational risk related to settlement and custodial operations is minimised via highly automated processes reducing administrative activities while formalising procedures for all services. The operations of the settlement service are outsourced to the European Central Bank (TARGET2-Securities). The CSD mitigates technology risk by providing for redundancy of systems, daily backup of data, fully updated remote recovery sites and SLAs with outsourcers. Our CSD and CCPs Business Continuity Plan covers all the critical operational processes and related activities.	—
Compliance (Executive Lead: Chief Executive Officer, Executive Committee) There is a risk that one or more of the Group's entities may fail to comply with the laws and regulatory requirements to which it is, or becomes, subject. In this event, the entity in question may be subject to censures, fines and other regulatory or legal proceedings.	The Group continues to maintain systems and controls to mitigate compliance risk. Compliance policies and procedures are regularly reviewed to ensure that Group entities and staff are compliant with applicable laws and regulations and uphold our corporate standards. All staff across the Group are subject to mandatory compliance training.	—
Data Governance (Executive Lead: Chief Information Officer, Chief Data Officer) Through its various entities, LSEG collects, owns, licenses, calculates, transforms, and distributes data in many forms (e.g. structured, unstructured, electronic, and print formats, audio-visual data, production, testing, archive data, derived data, etc.). LSEG is accountable to its customers, counterparties, owners, vendors, regulators, and the public, for the careful and proper protection and use of its data. As such the Group has defined a consistent, standardised approach to procurement, collection, ingestion, transformation, quality, storage, retention, calculations and disposition of its data. Failure to govern the Group's data effectively, could result in this data being unfit for purpose with respect to availability, completeness, accuracy, validity, usage, entitlement and timeliness. This could result in the Group or its customers and stakeholders placing reliance on inadequate data when making strategic or operational decisions which could adversely affect the Group's business, financial condition and operating results.	Data standards are defined through the Chief Data Office (CDO) which identifies the various data held across the Group, access rights/entitlements, any legal or regulatory restrictions which may apply and how such data is used and the intended future uses. The framework sets out the principles to ensure Group Data is of the highest quality and meets the highest standards, while highlighting key characteristics of data which are important for measurement, oversight, and governance.	—

Principal risks and uncertainties (continued)

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Employees and culture (Executive Lead: Group HR Director) The calibre and performance of our leaders and colleagues is critical to the success of the Group. The Group's ability to attract and retain key personnel is dependent on several factors. This includes organisational culture and reputation, prevailing market conditions, compensation packages offered by competing companies, and any regulatory impact thereon. These factors also encompass the Group's ability to continue to have appropriate variable remuneration and retention arrangements in place, which help drive strong business performance and alignment to long-term shareholder value and returns, impact the size of the local labour force with relevant experience, and the number of businesses competing for such talent. Whilst the Group focuses very carefully on the attraction and retention of talent, if unsuccessful, it may adversely affect the Group's ability to conduct its business through an inability to execute business operations and strategies effectively. Cultivating a diverse talent pool and an inclusive culture is of great importance to the Group to reflect the societies we serve, both for the innovation benefits that diversity of thought help to promote, but also in light of increased industry-wide expectations for ESG transparency. If the Group were unable to attract, support and retain diverse talent, it may have an adverse impact on the Group's ability to deliver its strategic objectives and its reputation. Whilst our preparations are comprehensive in relation to Brexit, a common risk across the Group is the uncertainty surrounding the status of the EU citizens in the UK and UK citizens in the EU. Pandemics represent a potential threat to employee health and wellbeing. Please see also Supporting sustainable growth for details regarding employee matters and Corporate Governance for information about Workforce Engagement.	We focus on a number of strategic initiatives to ensure we attract and retain the right calibre of talent for our business and continue to facilitate a culture of high performance. We have a rigorous in-house recruitment and selection process, to ensure that we are bringing the best possible talent into the organisation, in terms of their skills, technical capabilities, cultural fit and potential. We undertake a comprehensive annual review of critical roles, and ensure we have succession plans in place to minimise the impact of losing critical personnel. We monitor the attrition in each division and country, in addition to any critical colleague turnover, so that appropriate mitigation can be taken where needed. We aim to remove barriers to our colleagues' overall sense of engagement, proactively measuring how satisfied they are with their working experience at LSEG, and the extent to which they would recommend it as a place to work, via our annual engagement 'Have Your Say' survey. We recognise that the overall wellbeing of our colleagues is vital for our continued performance and have introduced a proactive approach to wellbeing in the UK, which we are in the process of rolling out globally. This looks to improve wellbeing across five dimensions: physical, mental, financial, social purpose, and work-life balance. We also operate a Speak Up campaign, designed to provide our colleagues with the confidence to speak up and raise concerns when they witness or suspect inappropriate behaviour, misconduct or wrongdoing that conflicts with our values. Career development remains a key enabler for success, and we have a carefully managed learning and development programme which enables us to focus on providing colleagues with a range of courses, materials and tools to support their development. We strive to inspire diverse talent to pursue careers at LSEG and encourage industry-wide change to increase equal opportunity for all, across every part of LSEG. We support diversity and have established targets for female representation at senior management level and overall as well as having signed the Women in Finance Charter. Performance management plays a key role in mitigating retention and performance risk at LSEG, and the Group has in place a robust approach to assess performance against financial objectives, strategic deliverables, and the extent to which colleagues role model the Group's values and behaviours. We also regularly benchmark our reward, benefits and incentive systems to ensure they are competitive. LSEG continuously engages with the EU and the UK regulators to minimise the impact of Brexit on our colleagues. The Group adopts preventative critical monitoring and contingency arrangements to manage potential threats such as pandemics.	—

For more information, see Supporting sustainable growth on pages 40–50 and Remuneration Report on pages 98–128.

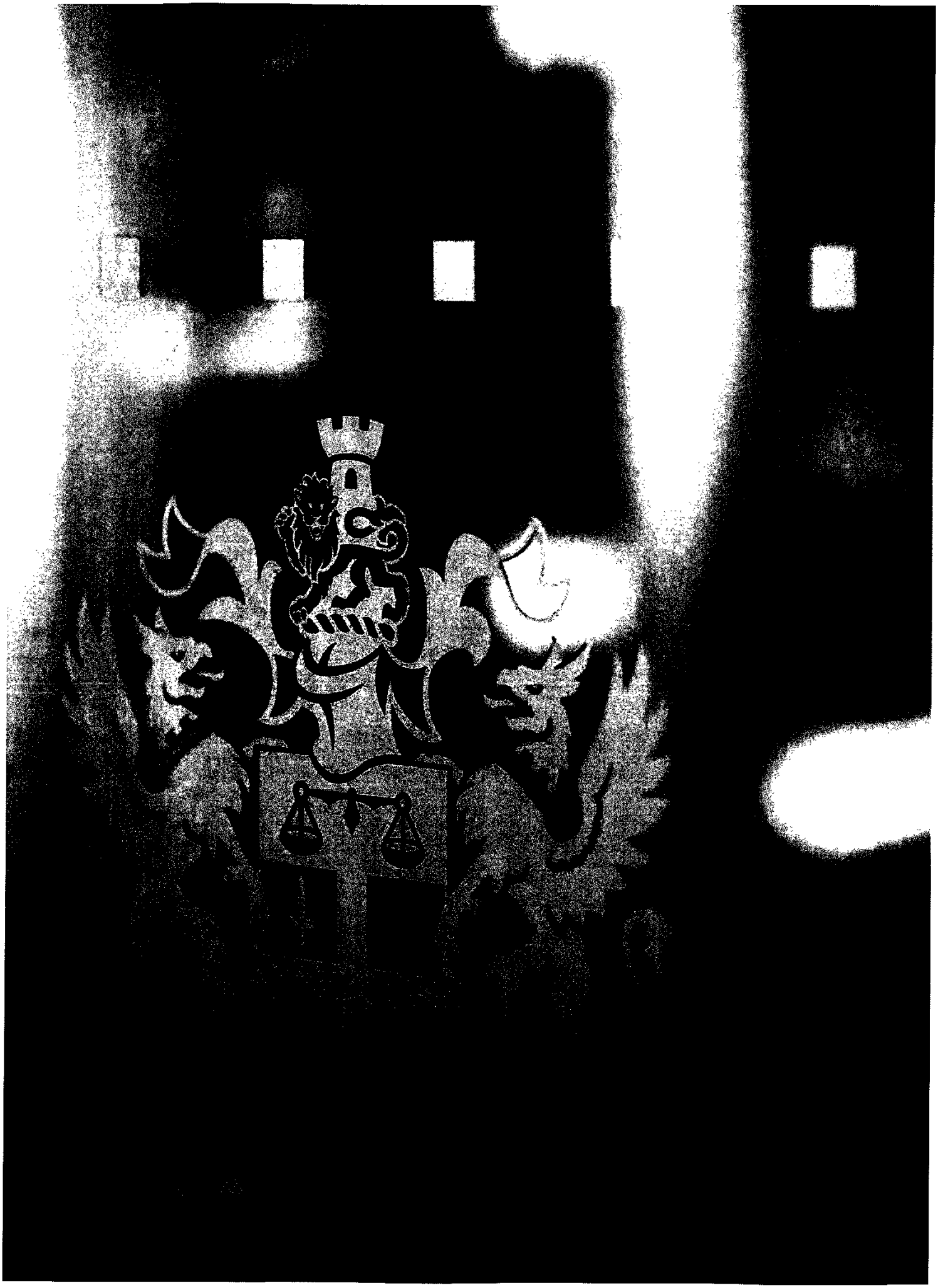
EMERGING RISKS

Risks which risks which are new to the Group or which are difficult to quantify due to their remote or evolving nature.

RISK DESCRIPTION	MITIGATION	RISK LEVEL
Climate-related Risk (Executive Lead: Group Corporate Sustainability Committee) International organisations, governments and regulators are focused on integrating climate risks and opportunities into investment decision making, to enable transition to a low carbon economy. This is an area of emerging and wide-ranging policy making, impacting financial market participants and corporates. The increased focus from regulators, investors and other stakeholders, has generated a requirement for enhanced climate-related risk oversight. Climate-related risks include Transition risks, Litigation risks and Physical risks (further information is provided under Physical Threats risk). With respect to this, it is acknowledged that although climate-related risks have been categorised as an emerging risk, they are inherently linked to other strategic, financial and operational risks, as well as commercial opportunities. Please see also Supporting sustainable growth for details regarding Corporate Sustainability.	We support consistent global standards and encourage continued alignment between the EU and UK on sustainable finance. We have been members of the EU High Level Expert Group and the Technical Expert Group, and the FCA/PRA Climate Financial Risk Forum. To further align with the TCFD recommendations, the Group has developed climate-related risks scenario over both the medium and longer term, and how these may impact credit, operational, market and liquidity risks. In line with increased disclosure requirements for corporations and financial markets participants, LSEG has taken proactive steps to develop its methodology to define and model how climate change impacts its businesses. The aim is to reinforce the Group's resilience to acute physical risks today and chronic physical risks in the future, and to address transition risks, to be aligned with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, be prepared for potential future mandatory reporting requirements and to protect the Group's reputation – See the TCFD disclosures section under Supporting Sustainable Growth for more information. To further align with the TCFD recommendations, the Group has developed climate-related risk scenarios over both the medium and longer term, to help identify how these scenarios may impact credit, operational, market and liquidity risks using the most material physical and transition risks for the business. From the review of published climate scenarios, two scenarios from the International Energy Agency World Energy Outlook have been selected for transition risk, and for physical risk, two scenarios from the Intergovernmental Panel on Climate Change are considered most appropriate. These scenarios cover a <2 degree and 3-4 degree scenario, over both the medium (2025-2035) and longer (2050) term. Looking ahead, we plan to continue to integrate climate risk into our existing risk management frameworks.	↗

More information on our environmental management can be found in the supporting sustainable growth section of this report on pages 47–49.

Emerging Technology (Executive Lead: Chief Information Officer) The increased integrated artificial intelligence (AI) in digital transformation strategies brings with it associated risks such as inherent bias in the historical data and behaviour patterns which feed AI algorithms. This may give rise to automated decisions which are not aligned with current societal expectations or organisational values. AI use by cyber hackers can also render cyber security defence and detective mechanisms ineffective. Regulators are considering the application of existing or new frameworks to manage the development of innovative financial services technologies, which are important for maintaining the resilience and stability in the market and allowing innovation with emerging technology.	The Group continues to maintain systems and controls to mitigate the risk resulting from emerging technology. Risk arising from the Group's use of AI is identified, assessed, managed and reported through the current ERMF. We align with industry best practices and guidance when considering the trustworthiness and bias in AI systems and AI aided decision making. The Group ensures the use of AI is fair, explainable and transparent, secure and safe. The continuous development of AI has the potential to impact industry behaviour and our business, we will continue to monitor and manage this risk closely.	↗



Board of Directors

Board structure as at 31 December 2019
– Chair, who was independent on appointment

– One Senior Independent Director

– Eight other Non-Executive Directors

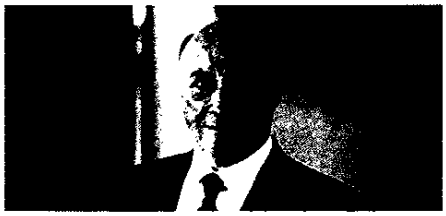
– Three Executive Directors

Director changes during the year
The following Directors were appointed as Non-Executive Directors (NED) during the year: Don Robert joined the Board as a NED on 1 January 2019 and became Chair on 1 May 2019. Cressida Hogg joined the Board on 8 March 2019.

Sir Donald Brydon CBE stepped down as a NED and Chair on 1 May 2019.

Additionally, on 1 January 2020 Dominic Blakemore was appointed as a NED and will become Chair of the Audit Committee following the conclusion of the Group's AGM in April 2020. A copy of his biography is also included in this section of the Annual Report.

A short biography is provided for each Board Director listed on pages 75–77. More detailed biographies for the Board of London Stock Exchange Group plc are available on the company's website at: **www.lseg.com/about-london-stock-exchange-group/london-stock-exchange-group-board.**



Don Robert
Chair of the Company and the Nomination Committee.
Appointed to the Board on 1 January 2019 and subsequently Chair in May 2019. N R

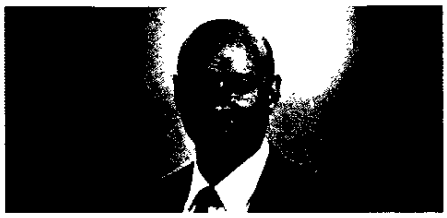
Key areas of experience: Data and analytics, technology, international business, financial services, mergers and acquisitions.

Don brings to the Board a strong track record in the global financial services sector and a deep understanding of technology, data and analytics as well as regulatory knowledge gained from his Bank of England role.

Relevant past experience: Don joined Experian plc in 2001. Prior to his appointment as Chairman in 2014, a position he held until July 2019, he was Group Chief Executive Officer from 2006 to 2014 having previously held various other senior roles including Chief Executive Officer of Experian North America.

Previous senior roles include: President of Credco, Inc., Chairman of the US Consumer Data Industry Association, Director and Trustee of the National Education and Employer Partnership Taskforce, NED First Advantage Corp and Senior Independent Director at Compass Group Plc, a NED of the Court of Directors, Bank of England and Chairman of Achilles Group Limited.

Other current appointments: Chairman of Validis Holdings Limited. A Partner of Corten Capital. Don is a Visiting Fellow at Oxford University. With effect from 1 April 2020, Don will assume the role of Chair of the London School of Hygiene & Tropical Medicine Council.



David Schwimmer
Group Chief Executive Officer.
Appointed to the Board in August 2018. G

Key areas of experience: Market structure, corporate finance, capital markets, mergers and acquisitions, emerging markets.

David brings significant knowledge of market structure and investment banking to the Board

Relevant past experience: Prior to joining the Group in August 2018, he spent 20 years at Goldman Sachs where he held a number of senior roles, most recently as Global Head of Market Structure and Global Head of Metals & Mining. During his tenure, he also served as Chief of Staff to Lloyd Blankfein, who was then President and COO of Goldman Sachs, and also spent three years in Russia as Co-Head Russia/CIS

Prior to joining Goldman Sachs, he practiced law at Davis Polk & Wardwell. He holds a B.A. from Yale University, and post graduate degrees in law (JD) and international affairs (MALD) from Harvard University and The Fletcher School of Law and Diplomacy, respectively

Other current appointments: NED at the Center for New American Security (not-for-profit)

David Warren
Group Chief Financial Officer.
Appointed to the Board in July 2012. G

Key areas of experience: Accounting, corporate finance, investor relations, mergers and acquisitions, strategy, treasury management.

David brings significant international financial management expertise to the Board.

Relevant past experience. David was appointed Group CFO in July 2012 and also served as Interim CEO and Group CFO from 29 November 2017 to 31 July 2018. Prior to being appointed CFO of London Stock Exchange Group, David was Chief Financial Officer of NASDAQ from 2001 to 2009 and Senior Adviser to the CEO of NASDAQ from 2011 to 2012. Other senior roles David has held include. Chief Financial Officer at the Long Island Power Authority of New York and Deputy Treasurer of the State of Connecticut.

Other current appointments. None.

Raffaele Jerusalmi
Executive Director, Chief Executive Officer of Borsa Italiana and Director of Capital Markets.
Appointed to the Board in June 2010. G

Key areas of experience: Capital markets, corporate finance, fixed income, equity and derivatives trading.

Raffaele brings significant experience in capital markets and in fixed income, equity and derivatives trading to the Group

He has worked for Borsa Italiana S.p.A. for over 20 years and is Borsa Italiana's Chief Executive Officer as well as the Group's Director of Capital Markets. Raffaele also holds a number of other internal senior positions within the Group including the Vice Chairmanship of Monte Titoli, MTS and CC&G and Chairman of Elite S.p.A.. On 2 June 2019 he was appointed "Cavaliere Ordine al Merito della Repubblica Italiana", the first rank knighthood of the Italian Republic

Relevant past experience: Prior to joining Borsa Italiana, Raffaele was Head of Trading for Italian Fixed Income at Credit Suisse First Boston. Raffaele was also a member of Credit Suisse's proprietary trading group in London as well as representing Credit Suisse First Boston on the Board of MTS S.p.A.. Prior to joining Credit Suisse, he was Head of Trading for the fixed income and derivatives divisions at Cimo S.p.A. in Milan.

Other current appointments: None.

Committee membership key

A Audit	N Nomination
R Remuneration	R Risk
G Group Executive	■ Committee Chair

Board of Directors
(continued)

Committee membership key

- A Audit
- N Nomination
- R Remuneration
- R Risk
- G Group Executive
- Committee Chair

Jacques Aigrain
Non-Executive Director and
Chair of the Remuneration Committee.
Appointed to the Board in May 2013. A R N

Key areas of experience: Client management, corporate finance, corporate governance, post trade and clearing, investment management, mergers and acquisitions, strategy.

Jacques brings significant expertise and knowledge of global post trade and clearing and investment management to the Board. He also holds a PhD in Economics from the University of Paris (Sorbonne).

Relevant past experience: Jacques was Chair of LCH Group Holdings Limited from 2010 to 2015. He has also been a NED of Resolution Ltd, a Supervisory Board member of Deutsche Lufthansa AG, a NED of the Qatar Financial Centre Authority and a NED of Swiss International Airlines AG (a subsidiary of Deutsche Lufthansa AG). Jacques was also Chief Executive Officer of Swiss Re from 2006 to 2009.

Prior to 2001 (when he joined Swiss Re), Jacques spent 20 years with J.P. Morgan Chase, working in the New York, London and Paris offices.

Other current appointments: Jacques is currently a Senior Advisor at Warburg Pincus LLC, Chairman of LyondellBasell Industries NV, Chairman of Singular SAU and a NED of WPP plc.

Marshall Bailey OBE
Non-Executive Director.
Appointed to the Board in September 2018. R N

Key areas of experience: Banking and capital markets, insurance, government regulation.

Marshall has 30 years' experience in the financial services sector and substantial experience of leading complex international committees and boards. In addition to being a member of the LSEG Board, he is also currently Chair of the Group subsidiary, LCH Group Holdings Limited.

Relevant past experience: Marshall was previously an Independent Director on the Board of UK Financial Investments Ltd (UKFI), the government body overseeing the UK government's ownership of financial assets after the 2008 financial crisis. He also had an active role in setting codes of conduct for the Fixed Income Currencies and Commodities (FICC) markets, working with the Market Participants Group of the Bank for International Settlements (BIS). Marshall volunteers on the Board of the East End Community Foundation in Tower Hamlets. He was previously a NED of Chubb European Group from 2015 to 2018.

Other current appointments: Marshall is Chairman of the Financial Services Compensation Scheme. He is also Chairman of CIBC World Markets Plc in London and he is the Representative for the Public Investment Fund in Saudi Arabia on the Board of the National Commercial Bank in Jeddah.

Professor Kathleen DeRose
Non-Executive Director.
Appointed to the Board in December 2018. A N R

Key areas of experience: FinTech, financial markets, asset management.

Having spent 30 years working in global finance and asset management, Kathleen brings significant FinTech and global financial market expertise to the Board.

Relevant past experience: Kathleen previously held a number of senior roles at Credit Suisse Group AG from 2010-2015. Other roles Kathleen has undertaken have included: Managing Partner, Head of Portfolio Management and Research at Hagin Investment Management (2006 to 2010) and Managing Director, Head of Large Cap Equities at Bessemer Trust (2003 to 2006).

Prior to 2003, Kathleen also held a number of senior roles at Deutsche Bank and JPMorgan Chase (formerly Chase Manhattan Bank).

In addition to her senior executive positions, Kathleen served as a board member of EDGE (Economic Dividends for Gender Equality) from 2014 to 2015, and she was founding Chair of Evolute Group AG from 2016 to 2017.

Other current appointments: Kathleen is a NED of Evolute Group AG, Voya Financial, Inc and a Clinical Associate Professor of Finance at The New York University Leonard N. Stern School of Business where she leads the FinTech programme and is the Fubon FinTech Director.

Paul Heiden
Senior Independent Director and Chair
of the Audit Committee.
Appointed to the Board in June 2010. A N R

Key areas of experience: Corporate finance and accounting, technology and engineering, corporate governance and risk, commercial manufacturing and supply chain.

Paul is a chartered accountant and provides the Board and the Audit Committee with relevant financial expertise, gained through a long career of senior finance and management roles across a wide range of business sectors.

Relevant past experience: Paul was previously a NED of United Utilities Group plc, Bunzl plc, Filtrona plc and Meggitt plc and Non-Executive Chairman of A-Gas (Orb) Limited, Talaris Topco Limited and Intelligent Energy Holdings plc.

Paul was Chief Executive Officer of FKI plc from 2003 to 2008, Executive Director of Rolls-Royce plc from 1997 to 1999 and Group Finance Director of Rolls-Royce plc from 1999 to 2003. He also held previous senior finance roles at Hanson plc and Mercury Communications.

Other current appointments: Paul is Non-Executive Chairman of MIR Bidco SA and a NED of Project Dart Topco Limited.

Cressida Hogg CBE
Non-Executive Director.
Appointed to the Board in March 2019. R N

Key areas of experience: Chair, corporate governance, infrastructure and private equity, mergers and acquisitions, pensions

Cressida brings significant board experience to the Group combined with a strong corporate background in infrastructure and private equity.

Relevant past experience: Cressida spent nearly 20 years at 3i Group plc and was one of the co-founders of 3i's infrastructure business in 2005, becoming Managing Partner in 2009

During this time, Cressida advised on all of 3i's infrastructure transactions

She was also Global Head of Infrastructure at Canada Pension Plan Investment Board between 2014 and 2018

Cressida has a BA from the University of Oxford and an MBA from the London Business School.

Other current appointments: Cressida is the Non-Executive Chair of Land Securities Group plc and NED of Troy Asset Management.

Stephen O'Connor
Non-Executive Director and Chair of the Risk Committee.
Appointed to the Board in June 2013. R A N

Key areas of experience: OTC derivatives, risk management, capital markets, clearing, corporate finance.

Stephen brings international expertise in clearing and counterparty risk management to the Board He has worked extensively with global regulators in the area of financial services market reform.

Relevant past experience: Stephen was Chairman of the International Swaps and Derivatives Association from 2011 to 2014 having been appointed as a NED in 2009. Stephen also worked at Morgan Stanley for 25 years, where he was a member of the Fixed Income Management Committee, serving in a number of senior roles

Stephen has served as a member of the High Level Stakeholder Group for the UK Government's review of the Future of Computer Trading in Financial Markets and as Vice-Chairman of the Financial Stability Board's Market Participants Group on Financial Benchmark Reform. He was a NED of OTCDerivNet Ltd from 2001 to 2013 and was Chairman from 2001 to 2011

Other current appointments: Stephen serves as Chairman of Quantile Technologies Limited. He is a member of the Scientific Advisory Board of the Systemic Risk Centre (LSE). Stephen is also a NED of the FICC Market Standards Board Limited and HSBC Bank plc where he became Chairman of the bank in August 2018.

Dr Val Rahmani
Non-Executive Director.
Appointed to the Board in December 2017. N R R

Key areas of experience: Technology, technical risk management, innovation, corporate governance, strategy.

Val brings significant expertise and knowledge of technology and technical risk management to the Board gained from almost 30 years with IBM and four years as CEO of a cyber security start up.

Val has wide-ranging experience as a senior executive in the technology sector fulfilling the role of general manager, board member, start up mentor, management consultant and public speaker. Val holds a DPhil in Chemistry from the University of Oxford.

Relevant past experience: Val is a former NED of Aberdeen Asset Management plc and Teradici Corporation and former Chair of the Innovation Panel at Standard Life Aberdeen plc.

Other current appointments: Val currently serves as a NED and member of the Audit Committee at RenaissanceRe Holdings Limited. She is also a NED of Computer Task Group Inc, where she chairs the Compensation Committee and serves as a member of the Audit and Governance Committees. Val is a NED and member of the Compensation Committee of the private company Entrust Datacard and a NED of the early stage company, Rungway.

Professor Andrea Sironi
Non-Executive Director.
Appointed to the Board in October 2016. R N

Key areas of experience: Finance, financial risk management, banking regulation

Andrea provides significant banking and finance experience to the Board

Relevant past experience: Andrea was an Independent NED of UniCredit Group until February 2019. He was a NED of Banco Popolare Società Cooperativa, SAES Getters S.p A. and Cogentech S.c a.r.l. He has been the Vice Chairman of Banca Aletti & C S.p.A from April 2009 to October 2012 He has also been a Member of the Fitch Academic Advisory Board from June 2006 to June 2010.

Other current appointments: Andrea is the Chairman of Borsa Italiana S.p.A., a subsidiary of the London Stock Exchange Group He is a Director of Intesa Sanpaolo S.p A. He is also Vice President of Bocconi University, Italy, where he was Rector from 2012 to 2016 and where he is currently also a Professor of Banking and Finance.

Dr Ruth Wandhöfer
Non-Executive Director.
Appointed to the Board in October 2018. A N R

Key areas of experience: Banking, financial services, FinTech, market regulation.

Ruth brings to the Board significant knowledge of both the business and banking regulatory landscape in addition to considerable expertise in regulatory and technology change within complex businesses.

Ruth's career spans more than 18 years in financial services, which includes more than a decade spent at the global investment bank, Citi

Relevant past experience: Ruth was previously Global Head of Regulatory & Market Strategy for Citi Treasury and Trade Solutions from 2012-2018, having previously held other senior roles since joining Citi in 2007.

Prior to joining Citi, Ruth worked for the European Banking Federation from 2003-2007 as a Policy Adviser for Securities Services and Payments Prior to that, she worked at the Commerzbank Real Estate Fund and was also a trainee in the European Commission.

Ruth has held a number of industry board and working group positions in the UK, Europe and globally.

Other current appointments: Ruth is a NED of Permanent TSB Group Holdings PLC. She is a Partner at Gauss Ventures and a strategic adviser of the ETPPA, a European trade body in the payments space. Ruth is also a Visiting Professor of the London Institute of Banking and Finance and a fellow of CASS Business School

Dominic Blakemore
Non-Executive Director (and Chair of Audit Committee following the conclusion of the Group's AGM in April 2020).
Appointed to the Board in January 2020. A N R

Key areas of experience: Accounting, corporate finance, investor relations, mergers and acquisitions, strategy, treasury management

Dominic is currently Group Chief Executive Officer of Compass Group PLC, a role he assumed in January 2018 Dominic's previous roles at the Compass Group included Group Finance Director from 2012 to 2015 and Group Chief Operating Officer, Europe from 2015 to 2017, before becoming Deputy Chief Executive Officer in October 2017.

Dominic brings extensive financial management experience to the Board gained from a number of senior finance roles in international businesses together with general operational management experience. Dominic is a chartered accountant.

Relevant past experience: Dominic was formerly a NED and Chair of the Audit, Risk and Compliance Committee of Shire plc from 2014 to 2018 and Chief Financial Officer of Iglo Foods Group Limited from 2010 to 2011. Before joining Iglo, Dominic was European Finance & Strategy Director at Cadbury plc from 2008 to 2010 having previous held senior finance roles at that company. Prior to his role at Cadbury plc, Dominic was a Director at Pricewaterhouse Coopers LLP.

Other current appointments: Dominic is also a member of the Council of University College London.

Corporate governance

"Good governance is key to promoting the long-term sustainable success of the Company, generating value for shareholders, building and maintaining relationships with stakeholders and contributing to wider society."

Don Robert
Chair

Dear Shareholders,
I am very pleased to present the Corporate Governance Report for the year ended 31 December 2019. This report provides an overview of how LSEG is governed and the control structures we have in place. The Board is responsible for the long-term sustainable success of the Company, generating value for shareholders and contributing to wider society. The Board does this by supporting and challenging executive management to ensure we operate to high governance standards. This report explains how we seek to achieve this. It also contains some highlights from my perspective as Chair.

2019 is the first year that companies have been asked to report against the new Corporate Governance Code ("the Code"). At the heart of the new Code is an updated set of principles that emphasise the value of good corporate governance to long-term sustainable success.

Board composition and appointments
There have been changes to the Board's composition during the year. The purpose of the changes is to ensure the replacement of key skills and experience and to enhance the strength of the Board, also having regard to Board Diversity.

Following my appointment to the Board on 1 January 2019, I became Chair on 1 May 2019. Cressida Hogg joined the Board on 8 March 2019. In July 2019 we announced that Dominic Blakemore would be joining the Board from 1 January 2020 and would replace Paul Heiden as Audit Committee Chair following the April 2020 AGM. Cressida and Dominic have both had extremely successful careers in executive and non-executive positions and the Board will look to draw on this experience in the coming years. Following the 2020 AGM Stephen O'Connor will become the Senior Independent Director. The work of the Nomination Committee is described on pages 88–89 of this report.

Board effectiveness review
This year's results and agreed areas of focus for the Board are described on page 82. The Board will ensure that these focus areas are acted upon to further improve Board performance.

Board site visits and Workforce Engagement
Opportunities to visit our operations globally and learn more about the business continue to be very important and valuable for the Board, and new members in particular as they offer the opportunity for Directors to understand operations, performance and challenges in a regional context. Board members also get a chance to engage with the local workforce at different levels of seniority and from varying backgrounds. This aspect of Board visits provides real insight into the culture of the business. This year we also introduced more formal Board engagement with Employee forums. More information on the Board's site visits and workforce engagement can be found on page 80 of this report.

Committee Governance
Within this report and the Report on Directors' Remuneration, the Chairs of the Audit Committee, Nomination Committee, Remuneration Committee and Risk Committee (Paul Heiden, me, Jacques Aigrain and Stephen O'Connor, respectively) report personally on the activities of each of their committees during the year. I would like to thank the Committee Chairs for the work they have done during the year.

Wider society
An updated principle in the new Code provides that the Board has a role in ensuring that the Company is contributing to wider society. As described in the Supporting Sustainable Growth section of the Strategic Report (pages 47–50), LSEG has many initiatives in place to deliver our vision to become the leading global financial infrastructure group, supporting global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs.

Compliance with the UK Corporate Governance Code 2018 (the "Code")
London Stock Exchange Group plc has followed all principles of the Code throughout the financial year ended 31 December 2019 and to the date of this report. The Company is also required to disclose whether it has complied with all provisions of the Code during the financial year. In the Directors' Remuneration Report we explain the Company's pension arrangements for existing Executive Directors and highlight that we have not yet complied in full with provision 38 of the Code relating to pensions. We explain on page 85 how we are transitioning to compliance with provision 38 of the Code, aligning executives to the workforce. For more detailed information on the Company's pension arrangements for Executive Directors, please see page 107 of the Remuneration Report.

This report is intended to give shareholders a clear and comprehensive picture of the Group's governance arrangements and how they operated during the year. Pages 81–87 set out details of the areas of our focus during the year, followed by the Committee reports.

Conclusion
I hope you find this report helpful and informative in understanding governance at LSEG. I encourage all shareholders to vote their shares in favour of all resolutions to be considered at our AGM in April 2020, even if you are unable to attend in person. This will allow us to gain a better understanding of the views of our shareholders.

Don Robert
Chair
28 February 2020

Board responsibilities
The LSEG Board is collectively responsible for the long-term, sustainable success of the Company and generating value for its shareholders and contributing to wider society.

The Board:
- Provides leadership of the Company within a framework of prudent and effective controls which enables risk to be assessed and managed
- Sets the Company's purpose, values and strategic aims and satisfies itself that these and its culture are aligned
- Ensures necessary resources are in place for the Group to be able to meet its objectives and measures performance against these, this includes the establishment of a framework of prudent and effective controls, which enable risk to be assessed and managed
- Reviews financial and business performance
- Leads the development of the Company's culture, values and behaviours
- Ensures that its responsibilities to shareholders and stakeholders are met, through effective engagement. This includes having workforce policies and practices that are consistent with the Company's values and support the Company's long-term sustainable success

In carrying out the duties of the LSEG Board, the Directors act in accordance with all relevant and applicable legislative and regulatory rules. In particular, they take into account Directors' duties contained in the Companies Act 2006 (the "Act") and will consider the factors listed in section 172 of the Act and any other relevant factors.

LSEG's Section 172(1) statement for the year ended 31 December 2019, including illustrations of Board decisions taken during the year, can be found on page 52 of the Strategic Report as required by law.

Our Committees
The Board has delegated to its Committees responsibility for maintaining effective governance in relation to: Audit, Nomination, Remuneration and Risk. Full details of the Committees' responsibilities are detailed within the respective Committee reports on pages 88–128.

Board and Standing Committee meetings 2019
The Board held 11 Board meetings of which six were scheduled meetings and five were additional meetings. A table of attendance at Board and standing Committee meetings is set out below.

The table shows the number of meetings attended against the number of meetings each Director was eligible to attend.

Name of Director	Board	Audit	Nomination	Remuneration	Risk
Don Robert[1]	10/11		4/4	4/4	
Jacques Aigrain[2]	10/11	5/5	2/2	6/6	
Marshall Bailey	11/11		4/4	6/6	
Professor Kathleen DeRose[3]	10/11	4/4	2/2		4/4
Paul Heiden	9/11	5/5	3/4	2/3	6/6
Cressida Hogg[4]	9/9		2/2	3/3	
Raffaele Jerusalmi	11/11				
Stephen O'Connor[5]	10/11	3/5	4/4		5/6
Dr Val Rahmani[6]	11/11		2/2	5/6	6/6
David Schwimmer	11/11				
Professor Andrea Sironi	11/11		4/4		6/6
Dr Ruth Wandhöfer[7]	11/11	4/5	2/2		6/6
David Warren	11/11				
Directors who left during the year					
Sir Donald Brydon CBE	3/3		1/1	2/2	

1 Don Robert was unable to join the additional Board Meeting held in January shortly after he joined the Board due to a previous diary commitment scheduled before he joined the Board The Board was notified in advance of this commitment
2. Jacques Aigrain was unable to join to the additional Board meeting held in July The additional meeting was scheduled on short notice for a day when he had already committed to be at another Board meeting
3 Professor Kathleen DeRose was unable to join the additional Board meeting held in September, relating to the unsolicited proposal from HKEX scheduled on short notice, due to a previous commitment relating to her teaching role
4. Cressida Hogg was appointed to the Board on 8 March 2019
5 Stephen O Connor was unable to attend scheduled meetings of the Board and Risk Committee in April and July because of bereavements
6 Dr Rahmani was unable to join the additional Remuneration Committee meeting held in July relating to the Refinitiv transaction The additional committee meeting was scheduled on short notice for a day when she had already committed to be at another Board meeting
7 Dr Ruth Wandhöfer was unable to join one Audit Committee meeting due to previous diary commitments scheduled prior to her joining the Board The Board was notified in advance of these commitments

Attendance at Board Meetings
When Directors have not been able to attend meetings, they received and reviewed the relevant meeting papers. Where they had comments or concerns on the matters to be discussed, they provided these to the Chair of the Board or Committee in advance of the meeting. The Chair of the Board engages with Directors between Board meetings to discuss business and strategic issues.

When arranging meetings at short notice, every attempt is made to accommodate Directors' diaries; however, inevitably, not all Directors are able to attend all such meetings. The majority of meetings where Directors have been unable to attend were additional meetings. Some Directors also attended Committee Meetings where they were not members of the relevant Committee. These attendances are not recorded in the above table. The Board believes these assist in developing understanding of all issues by the Directors.

The Board also met without the presence of the Chair and throughout the year, the Chair met with Non-Executive Directors individually.

Comprehensive Board and Committee papers, comprising an agenda and formal reports and briefing papers are sent to Directors in advance of each meeting. Directors are continually updated with written and verbal reports, from senior executives and external advisors.

Corporate governance
(continued)

Stakeholder Engagement
The Board seeks to understand the views of shareholders and other key stakeholders: customers; regulators; and the workforce.

For more information on how we engage with our stakeholders as well as how the Board has discharged its duties under Section 172 of the Companies Act, please see pages 51–52 of the Strategic Report.

Workforce Engagement
During the year the Board has sought to increase its direct engagement with a wide cross section of the workforce to better understand their perspective on the business.

Board Engagement with the Employee Forum
During 2019 members of the Board met with employee forums as part of a new Employee Board consultation initiative. These forums are comprised of employees from a cross section of business and corporate areas, as well as representatives from the Colleague Forum, Works Council and our "Have Your Say" and "You Matter" engagement working groups. An agenda and questions for the representatives to consider were provided in advance. Topics where the Board asked for views included culture, leadership, remuneration as well as the proposed acquisition of Refinitiv. Forum members sought feedback in advance from colleagues on these areas as well as any other matters colleagues wished to raise. These consultations provide the Board with new opportunities to seek the views of colleagues across the Group and respond to this feedback. Feedback received from colleagues who attended the sessions included that the Refinitiv acquisition was viewed as positive for the Group. There was acknowledgement in these sessions that there was a lot of work that needed to be done ahead of completing the acquisition and colleagues made some suggestions about communications to employees. This feedback has been incorporated into the Group's internal communications strategy for 2020. Verbal and written summaries of the discussions are provided to the Board.

Employees who attend these forums also produced a blog for the Group's intranet site, Bond, to increase awareness of the engagement process across the organisation.

Other ways in which the Board has engaged with the workforce
The Board has also engaged with the workforce and sought to understand their views through a range of other mechanisms including:

- **Overseas visits:** as part of its ongoing development the Board visits the Group's overseas sites and/or receives presentations from these businesses. In 2019, it visited the Group's businesses in Italy, and met with employees in Milan. During its visit to Milan, the Board spent a day receiving updates on key business and strategic initiatives from employees in our Milan office. The Board also spent a day receiving presentations from employees from its Paris office;
- **Board breakfasts:** breakfast meetings with employees at director and managing director level on the morning of Board meetings. These meetings are attended by all NEDs. Feedback received from these breakfast sessions is then fed back to the Board as a whole, typically at the Board meeting that takes place immediately after these sessions;
- **Employee surveys:** the Board receives the results of the annual "Have Your Say" staff survey. The survey enables employees to share their views on what it is like to work for LSEG and it provides management and the Board with insight into employees' views on a number of topics as well as way to track the level of engagement within the organisation. In 2019, 84% of the organisation participated in the survey, the highest level to date; and
- **Culture dashboard:** the Board regularly reviews a culture dashboard throughout the year. The dashboard tracks metrics around: recruitment and onboarding, performance and development, talent and mobility, diversity and inclusion and leavers, allowing the Board to measure and assess culture to ensure full alignment to the Group's values and behaviours and assess progress over time.

Further information
More information on workforce engagement can be found in the section headed "Complying with the Provisions of the Code" of this Corporate Governance Report and in the section headed "Our People" in the Supporting Sustainable Growth section of the Strategic Report on pages 43–46.

Board Independence
The Board has concluded that all Non-Executive Directors are independent in character and judgement. In assessing each Director, the Board considers whether there are relationships or circumstances which are likely to affect or could appear to affect a Director's judgement.

In evaluating Directors' independence, the Board has taken into consideration the guidance provided by the Code including the requirement for a Company to state its reasons that a Director has served on the Board for more than nine years from the date of their first election. Paul Heiden has served on the Board since June 2010 and will be retiring from the Board following the 2020 AGM.

Although Mr Heiden had served more than nine years on the Board, the Board considered that Mr Heiden was independent in character and judgement. The Board considers that an individual's independence cannot be determined solely on the basis of a particular period of service. The Board continues to benefit from Paul's experience and knowledge resulting from the length of service, particularly in Q1 as he transitions his Audit Committee responsibilities across to Dominic Blakemore. More information around the Board's succession planning process can be found in the Report of the Nomination Committee at pages 88–89.

In line with the Code all Directors are subject to annual re-election.

Matters considered by the Board
Each of the regular meetings includes a wide-ranging report from the Chief Executive Officer and a report from the Chief Financial Officer on the Group's financial performance. Reports from the Committee Chairs, updates on major projects and certain administrative matters are also reported at each Board meeting.

A table of the principal matters considered by the Board during the year is provided on the next page.

How the Board spent its time during the year

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Strategy and Implementation												
LSEG CEO Report		●		●		●		●		●		●
LSEG CFO Report		●		●		●		●		●		●
2020 Strategic Objectives												●
M&A Update				●								
LSEG Strategy				●						●		●
Refinitiv Transaction		●			●	●	●					
Acquisition of stake in Euroclear	●											
HKEX unsolicited approach									●			
Report from Committee Chairs												
Audit		●		●			●			●		●
Nomination		●				●	●					●
Remuneration		●		●		●	●			●		●
Risk		●		●		●				●		●
Financial reporting and dividends												
Annual Report		●										
Final Dividend and Interim Dividend		●						●				
Preliminary Results and Interim Results		●						●				
Quarterly Trading Statement				●						●		
Intercompany financing arrangements				●								
2020 Budget and Business Plan												●
Shareholder Circular										●		
Business Unit Updates												
Business Spotlight – UnaVista							●					
Italian business update						●						
French business update												●
Risk, regulatory and compliance												
Brexit Contingency planning		●		●						●		
Risk Report and Risk Appetite		●		●								
Cyber Security Update and "Deep Dive"					●	●				●		
Governance and stakeholders												
Share Issuance and Hedging approach		●										
Notice of AGM		●										
Authorisation of Directors' Interests		●										
Directors' Independence		●										
LSEG Share Dealing Policy										●		
LSEG Data Policy Framework				●								
Renewal of Director Appointments				●						●		
Board Effectiveness (Internal Review)												●
ESG Matters												
Workforce Engagement Update						●	●					●
Modern Slavery Statement		●										
LSEG Culture Dashboard (including Diversity and Inclusion)						●	●					●
Corporate Sustainability Report		●										

Corporate governance
(continued)

Board Governance Day
In 2019, the Group held a "Governance Day" for Non-Executive Directors from LSEG and certain of its key subsidiaries. This included presentations from all the Group's divisional leaders and leaders from corporate functions such as Risk, Investor Relations and Government Relations and Regulation. Feedback received from NEDs indicated that they thought the day had been beneficial and improved their knowledge and understanding of the Group and of its shareholders and other stakeholders. During 2020, the Board will look at other opportunities for NEDs from across the Group to engage on common themes and topics of interest.

Board Effectiveness and Leadership

2019 Effectiveness Review
A Board Effectiveness Review is carried out annually. Every three years this is externally facilitated. In 2019, the Board carried out an internal review of its own effectiveness and that of its Committees and Directors. The evaluation process was conducted by the Group Company Secretary using a detailed questionnaire provided by an external provider, Lintstock. Lintstock also collated and summarised the Directors' responses into a report for the Board. As part of the process, the Senior Independent Director led a separate meeting without the presence of the Chair to discuss the Chair's performance. The Chair also met with Directors individually to discuss their performance. Lintstock do not have any additional connection with LSEG.

The results of the review will be used to assist the Board in the future development of the Board, its Committees and its individual Directors.

The Board identified that the key areas for Board focus were:

Board composition — to continue to consider the appropriate size of the Board and balance of skills, in particular, as a result of the Refinitiv transaction;

Stakeholder engagement — to continue to seek improvements in stakeholder engagement;

Technology — to continue to find ways of improving the Board's ability to oversee and provide effective challenge on technological opportunities and threats; and

Refinitiv integration — to continue to oversee preparations for integrating with Refinitiv.

The Committee reviews undertaken were positive about the management and composition of the committees as well as the quality of the information received. Areas for focus (by Committee) are summarised in the table below.

Committee	*2020 Area of Focus*
Audit	– Training to be provided on new accounting standards and impact of CCPs on the balance sheet and income statement.
Nomination Committee	– Planning for integration of three new Board members post Refinitiv closing. – Continued focus on structure of executive succession planning.
Remuneration Committee	– Ensuring that comparable market data remains appropriate as the Group grows in size.
Risk Committee	– Closer examination of some of the Principal Risks

2018 Effectiveness Review
The 2018 Effectiveness Review identified a number of areas on which the Board considered focus would be needed in 2019. These are summarised below, together with the resulting actions taken in 2019.

Area	Description	Summary of actions identified and taken
Knowledge of the business for all Directors and training for new Directors	Board members wanted to increase their knowledge and understanding of the Group, particularly as a number of new Directors joined the Board in 2018.	– A number of Director briefing sessions focused on different areas of the business were held in 2019 including: • cyber security, • Information Services Division; • ForexClear; • the Group's French businesses; and • the Group's Italian businesses. – A "Business Spotlight" item was added to the Board agenda – The Group held a "Governance Day" for NEDs from LSEG and certain of its key subsidiaries. This included presentations from all the Group's divisions and leaders.
Rotation of Non-Executive Directors	2018 was an unusual year with three NEDs leaving and five Directors appointed and the Board wished to see further focus on NED succession planning.	Four Nomination Committee meetings were held in 2019 including consideration of NED (and Executive) succession. A successor for Chair of the Audit Committee was identified and an additional Non-Executive Director was appointed.

Relations with shareholders
We believe that regular and ongoing engagement with our key stakeholders and, in particular, our shareholders is extremely important for good corporate governance. The Group's Investor Relations (IR) function, reporting to the Chief Financial Officer, manages a shareholder engagement programme throughout the year. Executive management and the IR team engage with investors through meetings, conference calls and presentations to discuss strategy, performance and other matters.

The Chair, Senior Independent Director and Chairs of each Board Committee are also available to meet major investors, typically to discuss corporate governance matters. In 2019, senior executive management and the IR team met with over 550 institutional debt and equity investors through one-to-one and group meetings or calls across the UK, North America and Europe. Senior executive management and the IR team also participate at institutional investor conferences hosted by banks or industry organisations as a further channel to meet existing or prospective investors, often presenting or taking part in discussion panels.

In addition, the Chair met with major shareholders in order to understand their views on governance and performance against the Company's strategy. The Chair of the Remuneration Committee also directly consulted with a number of shareholders on remuneration matters.

The Board receives a report on IR matters at each of its scheduled meetings, including feedback from investors, market expectations of financial performance and updates on share register composition. Sell-side analyst research notes are circulated to the Board following publication. The Group's corporate brokers and a specialist IR advisory firm also provide the Board with advice on market sentiment, input on market communications and share register analysis.

In 2019, the Group conducted an extensive shareholder engagement programme in relation to the proposed acquisition of Refinitiv to explain the rationale for the transaction and address any questions. Further follow up took place post the publication of the shareholder circular in relation to the transaction towards the end of 2019. Senior executive management also met with shareholders in response to the unsolicited approach by Hong Kong Exchanges and Clearing Limited. The Group continues to respond to ad-hoc meeting requests by shareholders and potential new investors throughout the year.

In addition to information on financial and operational performance, the Group engages with shareholders and relevant shareholder advisory agencies on environmental, social and governance (ESG) matters. The Group produces an annual Corporate Sustainability report that details its approach to ESG matters: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability**.

The Group's AGM provides the opportunity for all shareholders to meet and to put questions to the Board Directors. Procedures for the AGM (and any General Meeting) are compliant with the Code, with voting by way of a poll to ensure all shareholders' views are taken into account. The Board also met with shareholders in November 2019 at the General Meeting to approve the Refinitiv transaction.

The IR section of the Group's website (**www.lseg.com/investor-relations**) is a primary source of regularly updated information about the Group. All financial reports and statements, news releases, presentations and other documents including regulatory news service disclosures are available on the website together with a list of analysts producing research on the Company and a summary of analysts' forecasts of performance. Recognising that joining our preliminary and interim results calls is not always possible recordings of these calls are accessible to all shareholders via the Group website.

Conflicts of interest
The Company's Articles of Association allow the Board to authorise conflicts of interest that may arise and to impose such limits or conditions as it thinks fit. The Group has established procedures whereby actual and potential conflicts of interest are regularly reviewed, appropriate authorisation is sought prior to the appointment of any new Director and new conflicts are addressed appropriately.

The decision to authorise a conflict of interest can only be made by non-conflicted Directors and, in making such decisions, the Directors must act in a way they consider, in good faith, would be most likely to promote the Company's success.

Indemnities
Directors have the benefit of indemnity arrangements from the Company in respect of liabilities incurred as a result of their office and execution of their powers, duties and responsibilities. The Company maintained a Directors' and Officers' liability insurance policy throughout the year. This policy covers the Directors for any such liabilities in respect of which they are not indemnified by the Company and, to the extent to which it has indemnified the Directors, also covers the Company. This insurance cover has been renewed. Neither the Company's indemnity nor insurance provides cover for a Director in the event that the Director is proved to have acted fraudulently or dishonestly.

Risk Management and Internal Control
The Board is responsible for the Group's risk management framework and maintaining an appropriate system of internal controls. A Board approved Enterprise Risk Management Framework and Group Risk Appetite Statement are central to the Group's Risk Management process. The Risk Management Framework is updated on an ongoing basis in response to changes in the Group's business and associated risks. The Group Risk Appetite statement is approved annually.

The Audit Committee and Risk Committee assist the Board in discharging its responsibilities by reviewing and assessing the Group's Risk Management Framework, system of internal controls and risk management process on a regular basis. Refer to the reports of the Audit Committee on pages 90–95 and the Risk Committee on pages 96–97 for further detail on their oversight activities during the year.

The system of internal controls is designed to facilitate the management of the Group and its businesses within the Board's risk appetite rather than eliminate the risk of failure to achieve the Group's objectives, and can only provide reasonable, but not absolute, assurance against material misstatement or loss, fraud or breaches of laws and regulations.

Executive management is accountable for risk identification, evaluation, mitigation, monitoring and reporting in accordance with the framework. A divisional internal control and Risk Management self-certification process is also performed semi-annually. Each business unit is required to confirm that it is in compliance with the Group's policies and governance procedures and managing its risk within appetite: exceptions are reported to the Audit Committee and Risk Committee.

Further detail on the Group's risk management oversight can be found on: **www.lseg.com/about-london-stock-exchange-group/risk-management-oversight**.

An overview of the Principal Risks and Uncertainties (including details of emerging risks) of the Group is provided on pages 60–73.

Corporate governance
(continued)

Internal Controls

Management structure

The Group operates a matrix structure designed to optimise resource allocation and organisational capacity. The Board has delegated the day-to-day running of the Group to the Group Chief Executive Officer and he is supported in this role by the Group Executive Committee, which he chairs. Each Executive Committee member is responsible for one of the Group's operating divisions or a major area of strategic importance. The Executive Committee meets regularly to review business and financial performance, risk exposure and to approve key decisions. Each legal entity is responsible for engaging with its local regulators and monitoring and ensuring regulatory compliance.

Policies and Procedures

A framework of Group-wide policies establishes the principles, minimum standards and risk management activities LSEG requires the Group's businesses and functions to follow to manage their business within risk appetite. All Group-level policies are approved by the Executive Committee and may also require approval or ratification from the Audit Committee, the Risk Committee and the Board.

The Group runs a rolling programme of mandatory online training courses for all employees covering matters including ethical conduct, risk and control management, regulatory requirements and the Group policies.

Financial Control

The Group has a robust system of financial control and an appropriate framework of delegated authorities is in place.

Comprehensive financial planning, reporting and review procedures are in place, with an annual budget and three-year business plan approved by the Board. Financial and key performance indicators are reviewed against operational budgets on a monthly basis at a Group, divisional and business unit level. The Chief Financial Officer's management reports are shared with the Board and any key issues are reviewed at each Board meeting.

The Executive Committee monitors capital expenditure across the Group and approves and prioritises projects supported by divisional and functional investment committees and portfolio boards.

The Treasury Committee operates within a Board approved policy framework and meets regularly to review the management of the Group's credit, market and liquidity risks. Material Group counterparty exposures are assessed regularly including through a Group-wide centralised counterparty risk Value at Risk model. Further details on financial risk management are provided in Note 3 to the accounts.

Internal Audit

The Internal Audit function provides reasonable independent assurance to the Board and other key stakeholders over the adequacy and effectiveness of the Group's system of internal controls, the governance model and the Enterprise-wide Risk Management Framework. The function is the third line of defence in the Group's risk control structure and has no operational responsibilities over the entities or processes which it reviews.

The independence of the Internal Audit function from Executive Management is ensured through the following measures:

- The Group Head of Internal Audit reports directly to the Chair of the Audit Committee and has direct access to the Chair of the Board. For administrative matters the Group Head of Internal Audit has a secondary reporting line to the Chief Financial Officer
- The Chair of the Audit Committee and Chief Financial Officer jointly assess the performance of the Group Head of Internal Audit
- The Audit Committee approves the Internal Audit annual budget

Further details on the Internal Audit function can be found in the internal audit charter which is available on the Group's website at **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**.

Conclusion

The Board confirms that, through the Audit and Risk Committees, it has reviewed the operation and effectiveness of the Group's system of internal controls throughout 2019 and up to the date of approval of this Annual Report and Accounts. The Board has satisfied itself that a robust assessment of the principal risks facing the Company, including those that would threaten its business model, future performance and liquidity, have been carried out during the year. Necessary actions have been or are being taken to remedy any significant failings or weaknesses identified during these reviews. The Board is satisfied that the Risk Management process and system of internal controls conform with the FRC's 2014 Risk management, internal control and related financial and business reporting.

Further information

Further detail on the Group's risk management oversight can be found on: **www.lseg.com/about-london-stock-exchange-group/risk-management-oversight.**

An overview of the Principal Risks and Uncertainties (including a summary of emerging risks) of the Group is provided on pages 60–73.

Complying with the provisions of the Code

The Group is committed to high standards of corporate governance and business integrity in all its activities. Throughout the financial year ended 31 December 2019 and to the date of this report, London Stock Exchange Group plc has followed all principles of the Code. The Company is also required to disclose whether it has complied with all the provisions of the Code during the financial year. In the Directors' Remuneration Report we explain the Company's pension arrangements for existing Executive Directors and highlight that we have not yet complied in full with provision 38 of the Code relating to pensions. Under the Company's revised Remuneration policy that will be presented to the Company's shareholders for approval at the 2020 AGM in April, pension contributions for new Executive Directors will be limited going forwards to 10% of salary, which is below the UK workforce average of 11% of salary. Additionally, the current CEO's pension contribution will be reduced from 15% to 10%, effective April 2020. It is not intended to amend the contribution for the CFO who has stated his intention to retire from the Company by the end of 2020, or the CEO of Borsa Italiana, who accrues mandatory state pension benefits in Italy.

For more detailed information on the Company's pension arrangements for Executive Directors, please see page 107 of the Remuneration Report. In all other respects, the Company has complied with the provisions of the Code during the financial year ended 31 December 2019.

The Code is publicly available at the website of the UK Financial Reporting Council at **www.frc.org.uk**. This corporate governance section of the Annual Report and Accounts describes how we have applied the principles of the Code including its detailed provisions.

The Code sets out guidance in the form of main principles and more detailed provisions for good governance in relation to: Board Leadership and Company Purpose, Division of Responsibilities, Composition, Succession and Evaluation, Audit, Risk and Internal Control and Remuneration. This table forms part of the Corporate Governance Statement on page 129 of the Directors' Report.

1. Board Leadership and Company Purpose

A. Role of the Board

The Board is the principal decision-making forum for the Group and is responsible for achieving the Group's strategic objectives and delivering sustainable growth. Directors act in a way they consider will promote the long-term success of the Company, by constructively challenging and supporting the development of the Group's strategy, for the benefit of shareholders as a whole, having regard to the interests of the workforce, the impact of the business on the community and environment, the interests of other stakeholders including the Company's suppliers and contributing to wider society. The Board manages the overall control of the Group's affairs with reference to the formal schedule of matters reserved for the Board. This schedule is available on the Company's website at: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**.

B. Purpose, Values and Strategy

The Group's purpose is to support global financial stability and sustainable economic growth by enabling businesses and economies to fund innovation, manage risk and create jobs. More information on the Company's purpose, values and strategy can be found on pages 21–23 of the Strategic Report. The Board supports and promotes a culture based on our core values of Partnership, Integrity, Innovation and Excellence. The Board receives periodic updates from management on matters relating to culture. This includes regular presentation of a culture dashboard tracking metrics around: recruitment and onboarding, performance and development, talent and mobility, diversity and inclusion and leavers, allowing the Board to measure and assess culture to ensure full alignment to the Group's values and behaviours and assess progress over time. The Board also reviewed the results of the latest employee engagement survey "Have Your Say" at its December Board meeting. More information on the Company's culture and programme of work around workforce engagement undertaken during the year can be found in section D and on pages 43–46 of the Strategic Report.

C. Resources and Control Framework

The Board sets the strategic aims of the Group and ensures necessary resources are in place to meet its obligations and reviews financial and business performance. It discharges its responsibilities by overseeing the execution of the Group's strategy holding executive management to account for its delivery. The Board approves the Group's annual operating and capital expenditure budgets, business plans and any material changes to them. The Board has oversight of the Group's operations ensuring: competent and prudent management is in place, sound planning is undertaken, an effective risk management framework has been established, an adequate system of internal control is maintained, adequate accounting and other records are kept and compliance with statutory and regulatory obligations

D. Engagement with Shareholders and Stakeholders

Shareholders

The Company maintains an active shareholder engagement programme, managed through the Group's IR function. The IR programme provides regular opportunity for executive management contact with existing and potential shareholders. In addition to shareholder meetings, with executive management the Chair met with major shareholders in order to understand their views on governance and performance against the Company's strategy. The Chair of the Remuneration Committee also consulted with a number of shareholders on remuneration matters. For further information on the Group's Investor Relations activities please see page 83 of this Corporate Governance Report.

Other Stakeholders

The Board views customers, regulators and the workforce as key stakeholders. Members of the Board have engaged directly with stakeholders and the Board also receives indirect feedback via management reporting to the Board. Please see page 51 of the Strategic report for further information about stakeholder engagement. During the year the Board looked at additional ways it could engage with the LSEG workforce and Board consultations with employee forums have been established alongside other more informal consultation methods (see page 80 of this Governance Report). These consultations provide the Board with new opportunities to seek the views of colleagues across the Group and respond to this feedback.

E. Workforce policies and practices

The Board reviews the Group's key policies on a periodic basis, ensuring that such policies are consistent with the Company's values, supporting long-term sustainable success. The Board has delegated authority to the Audit Committee to routinely review the adequacy and security of the Group's arrangements for its workforce to raise concerns, in confidence, about possible wrongdoing in financial reporting or other matters (the "Whistleblowing Policy"). In 2018, a "Speak Up" campaign was conducted across the Group to increase the workforce's awareness about the Group's Whistleblowing Policy, the Audit Committee and the Board receives periodic updates in relation to this.

Complying with the provisions of the Code (continued)

2. Division of Responsibilities

F. Division of Responsibilities

The roles of the Chair and the Chief Executive Officer are distinct and separate with a clear division of responsibilities. The Chair leads the Board and is responsible for its overall effectiveness as well as promoting a culture of openness and debate. The Chair takes the lead in the development of the Group's culture by the Board and providing an environment in which the Directors can discharge their duties effectively and in compliance with the law. He is responsible for setting the tone of the Company consistent with the high standards of behaviour demanded of the workforce. He performs representative duties on behalf of the Group with a wide range of stakeholders including governments and regulators. The Board should appoint a Senior Independent Director and Paul Heiden was the Senior Independent Director during the year. Stephen O'Connor will become the Senior Independent Director following the AGM in April 2020. A full description of the responsibilities of the Chair and Chief Executive Officer (as well as the Senior Independent Director) is available on the Company's website: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**.

G. Board Composition

The Board is comprised of an appropriate combination of Executive and Non-Executive Directors. There is a strong non-executive element on the Board with 10 independent Non-Executive Directors (nine following the 2020 AGM) and a Chair who was independent on appointment. The Board has three Executive Directors. Non-Executive Directors are responsible for scrutinising and holding to account the performance of management and individual Executive Directors against agreed performance objectives.

H. Board responsibilities and time commitment

The other significant appointments of the Board are set out on pages 75–77. The Board is satisfied that these do not conflict with their duties and time. The Board has established procedures for the approval of additional appointments of Board Directors.

The following significant appointments were approved during the year. Approval of each appointment was only made after consideration of existing appointments of each Director and a review of potential conflicts including an independent review by the Group compliance function taking into account the time commitments of the new roles and the ability of each Director to remain committed to their role on the Board. Taking account of these factors it was considered appropriate to approve the appointments:

- Kathleen DeRose's appointment as a Non-Executive Director of Voya Financial, Inc
- Andrea Sironi's appointment as a Non-Executive Director of Intesa SanPaolo S.p.A.

The Company has robust procedures around the recording of interests and, under the Company's Conflicts of Interest Policy, the appropriate level of discretion, to take mitigating actions, where required.

I. Board support

The Directors have full access to the advice and services of the Group Company Secretary, who is responsible for advising the Board on corporate governance matters. Directors also have access to independent professional advice if they judge it necessary to fulfil their responsibilities as Directors. The appointment and removal of the Company Secretary is a matter for the whole Board.

Section 3: Composition, Succession and Evaluation

J. Board appointments

The Nomination Committee is responsible for monitoring the balance of skills, knowledge and experience, and diversity of Board, making recommendations to the Board of new appointments to the Board and overseeing executive succession planning. Appointments to the Board are subject to a formal, rigorous and transparent procedure. An effective succession plan is maintained for the Board and senior management. Both appointments and succession plans are based on merit and objective criteria. The Company uses external search consultancies when looking to make appointments to Board positions. More information on the appointment of Directors can be found in the Report of the Nomination Committee on pages 88–89.

K. Board skills, experience and knowledge

The Board is comprised of an appropriate combination of Executive and Non-Executive Directors who have an appropriate combination of skills, experience and knowledge. The Non-Executive Directors provide deep corporate experience and knowledge which they apply to their understanding of the Group, its purpose, values and strategy. The Board has delegated to its Committees responsibility for maintaining effective governance in relation to: Audit, Nomination, Remuneration and Risk. The Chair of the Company (who was independent on appointment), chairs the Nomination Committee and is a member of the Remuneration Committee. Full details of the Committees' responsibilities are detailed within the respective Committee reports on pages 82–128. The Nomination Committee considers the length of service of the Board as a whole and the membership and more information on matters considered by the Committee during the year can be found in the Report of the Nomination Committee at pages 88–89.

L. Annual Board Effectiveness Review

The Board undertakes an annual Board Effectiveness review. As part of this review the Board and the Committees consider a wide range of matters including composition, diversity and how effectively Board members work together. As part of the 2019 review, the Senior Independent Director led a separate meeting without the presence of the Chair to discuss the Chair's performance. The Chair also met with Directors individually to discuss their performance. More detail on the 2019 review and the progress made against the actions identified from the 2018 review can be found on page 82.

Section 4: Audit, Risk and Internal Control

M. Role of the Audit Committee in ensuring independence and effectiveness of financial controls

The Audit Committee is responsible for monitoring of the integrity of the Group's financial reporting including the effectiveness of the Group's internal control and risk management systems and for monitoring the effectiveness and objectivity of internal and external auditors. The Board receives regular updates from the chair of the Audit Committee at every Board meeting and between meetings, where requested. The Audit Committee report on pages 90–95 sets out details of composition of the Committee including the expertise of members, and at least one member of the Committee has recent and relevant financial experience. The report also outlines how the Committee has discharged its responsibilities during 2019 including: the review undertaken by the Committee of the annual and half yearly reports, the effectiveness of the Group's internal control and risk management systems and the monitoring of relevant Company's policies and procedures. The Committee's Terms of Reference can be accessed on the Company's website: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**.

N. Fair, balanced and understandable reporting

The Audit Committee reviews the content of the Company's annual report and accounts and advises the Board on whether, taken as a whole, it is fair, balanced and understandable providing the information necessary for shareholders to access the Company's performance, business model and strategy.

O. Risk management and oversight

The Risk Committee is responsible for providing leadership, direction and oversight of the Group's overall risk appetite, risk tolerance and strategy. The Committee advises the Board on the current and future risk exposures of the Group (including emerging risks) and carries out a robust assessment of the Company's emerging and principal risks. It reviews and approves the Group's risk management framework, monitoring its effectiveness and adherence to various risk policies. The responsibility and authority of the Committee covers the whole of the Group's businesses. Where there is a perceived overlap of responsibilities between the Audit and Risk Committees, the respective committee chairmen will have the discretion to agree the most appropriate committee to fulfil any obligation. The reports of the Audit and Risk Committees can be found on pages 90–97 of this Report. The Committee's Terms of Reference can be accessed on the Company's website: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance.**

Section 5: Remuneration

P. Remuneration policies and practices

The Remuneration Committee is responsible for determining and implementing the Remuneration Policy for the Group, including setting the remuneration of the Chair, Executive Directors and senior management. The Committee also oversees the arrangements for the wider workforce. Executive remuneration is aligned with the Company's purpose and values and linked to the delivery of the Company's long-term strategy and culture. The remuneration of Non-Executive Directors is determined by the Board and reflects the time commitment and responsibilities of the role. Remuneration for Non-Executive Directors does not include share options or other performance related elements. The Report of the Remuneration Committee can be found at pages 98–128. The Committee's Terms of Reference can be accessed on the Company's website: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**.

Q. Development of Remuneration policy

The Company has a formal and transparent procedure for developing policy on executive remuneration. In determining the policy, the Remuneration Committee takes into account a range of factors including: clarity, simplicity, risk, predictability, proportionality and alignment to culture. No Director is involved in setting their own remuneration outcome. Details of the Remuneration Policy and its implementation can be found in the Report of the Remuneration Committee (pages 103–128).

R. Remuneration outcomes

Directors exercise independent judgement and discretion when authorising remuneration outcomes, taking account of company and individual performance and wider circumstances.

Report of the Nomination Committee

Don Robert
Chair
Nomination Committee

On behalf of the Board I am pleased to present the report of the Nomination Committee for the year ended 31 December 2019.

Board composition and succession planning for Non-Executive Directors and identifying a new Audit Committee Chair were key areas of focus for the Committee. The Committee also reviewed succession plans for senior management.

This report describes the work of the Committee.

2019 Priorities
The four priorities set by the Committee at the start of the year are summarised below:

1. Reviewing Board composition and succession planning in light of the number of changes to the Board in 2018 and future changes
2. Identifying a new Audit Committee Chair
3. Reviewing Senior Management succession plans including in particular in relation to the enlarged Group's needs following the Refinitiv transaction
4. The need for a continued focus on inclusion and diversity (including gender and ethnic diversity)

Committee Membership
During the year, the Committee's membership was extended to include all Non-Executive Directors to enable them to be able to participate in discussions relating to Board composition and succession planning. The names and biographies of the Non-Executive Directors who sit on this Committee can be found on pages 75–77 of this report.

The Group Company Secretary is the Secretary to the Committee and attends all meetings. The Group Chief Executive Officer, Head of Human Resources and external advisers attend where requested by the Committee.

Committee Purpose and Responsibilities
The Nomination Committee is responsible for monitoring the balance of skills, knowledge and experience as well as the diversity of the Board. It is also responsible for making recommendations of new appointments to the Board and overseeing Board and senior management succession planning. The Committee's Terms of Reference can be found on the Company's website: **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance.**

The Committee met four times during the year, and in addition, Committee members also met with director candidates. I am pleased to confirm that these efforts have resulted in the Committee's priorities being met, as described in this report.

Board Succession Planning and Board Appointments
During the year, the Committee reviewed the structure, size and composition of the Board and its Committees, to ensure critical skills and experience were refreshed. In carrying out its review the Committee took account of recent and likely future Board changes, Board expertise, diversity and tenure to help it identify Board succession requirements. A skills-map was used to help identify skills gaps and to support the Committee's recommendations to the Board.

Board Appointments
Appointments to the Board are subject to a formal, rigorous and transparent procedure described below:

Process for Board appointments
When making Board appointments, the Committee reviews and approves an outline brief and role specification, and appoints an external search consultancy for the assignment.

The Committee meets with the external search consultancy to discuss the specification and search as well as the Group's need for diversity. The external search consultancy prepares an initial long list of candidates from which the Committee produces a shortlist. Interviews are held with the Chair, Group CEO and a selection of Non-Executive Directors as well as in some cases the Group CFO.

The Committee makes a recommendation to the Board for its consideration. Following Board approval, the appointment is announced in line with requirements of the FCA's Listing Rules. In due course, a tailored induction programme is developed for the new director.

Appointment of a new Audit Committee Chair
The Board announced on 21 November 2018 that Paul Heiden would resume the role of Audit Committee Chair (following the departure of the previous Committee Chair) but that a search would be commenced for a successor. The Committee developed a role description with key experience requirements including that the candidate be a serving executive with experience as a CFO who ideally would have previously chaired an Audit Committee at a large or listed company. Dominic Blakemore was appointed as a Non-Executive Director on 1 January 2020. He will become Chair of the Audit Committee at the end of the AGM on 21 April 2020. The Board considers that Dominic met all of the key experience requirements and the role description criteria. Dominic brings deep financial and commercial expertise to the Board, gained from his current role as CEO of Compass and also from previous roles as CFO of Compass, Birds Eye and Cadbury. He also has experience of chairing an Audit Committee having chaired the Shire plc Audit, Risk and Compliance Committee between 2014 and 2017. As the Group seeks to integrate the Refinitiv business the Board will benefit from his strong experience in managing international businesses as well M&A, change management and risk.

Other Board Appointments
Cressida Hogg was appointed as a Non-Executive Director of the Company during the year. The criteria for this appointment included experience as a FTSE 100 director as well as the need for continued focus on inclusion and diversity of the Board (including gender and ethnic diversity). Cressida chairs FTSE 100 company Land Securities Group plc, having been a Non-Executive Director since 2014. She has also sat on the Board of Associated British Ports Holdings Limited (from 2015 to 2018) and Anglian Water Group Limited (from 2007 to 2018). She spent nearly 20 years at 3i Group Plc, becoming Managing Partner in 2009, where she gained a deep understanding of large, long-term infrastructure projects and businesses as well as considerable experience of investment returns, management and leadership. Cressida was also Global Head of Infrastructure at Canada Pension Plan Investment Board (from 2014 to 2018).

Board Committees
The Board also refreshed membership of each of its Committees during the year. The following changes were made during 2019:

Audit and Risk Committees	Kathleen DeRose was appointed to both Committees. Following his appointment to the Board on 1 January 2020, Dominic Blakemore also became a member of the Audit and Risk Committees
Nomination Committee	In order to ensure all Non-Executive Directors are able to participate in discussions relating to succession planning and Board composition, all Non-Executive Directors were appointed to the Nomination Committee
Remuneration Committee	Paul Heiden stepped down from the Remuneration Committee and Cressida Hogg was appointed to the Committee

Senior Management Succession Planning
During the year, the Committee (with the Group Chief Executive Officer) reviewed the detailed succession plans prepared for the Group's Executive Committee as well as other key senior management roles. The Committee also received information to allow it to track progress against gender diversity targets. A number of internal and external appointments were made to the Executive Committee throughout the year and these are described in the CEO's statement. The names and biographies of the members of the Group Executive Committee can be found on pages 24–25 of this report. Review of information on gender diversity forms part of the Committee's review of Senior Management succession planning.

Group Chief Financial Officer
In October 2019, David Warren, Group Chief Financial Officer, informed the Company of his intention to retire and step down from the Board and the Group Executive Committee by the end of 2020. He will continue in his current role as Group Chief Financial Officer and a member of the Board through to the close of the Refinitiv transaction to ensure a smooth transition to his successor. The Committee commenced a global search for his successor supported by external search consultancy, Odgers Berndston.

Board Effectiveness
The results of the 2018 Board Effectiveness Review are described on page 82. Succession planning for Non-Executive Directors was previously identified as a key focus for the Board in 2019 and this is reflected in the actions taken by the Nomination Committee during 2019. This year's results and agreed areas of focus for the Board are described on page 82. The Board will ensure that these focus areas are acted on to further improve Board performance.

Diversity and Inclusion
The Board's membership reflects a wide range of skills and business experience, drawn from a number of industries, which is critical for bringing both the expertise required and to enable different perspectives to be brought to Board discussions. The combination of these factors means that the Board benefits from a diverse range of competencies, perspectives and thoughts, providing an ability to challenge on strategic issues and a dynamic environment for decision making.

The Board supports the proposals of the Hampton-Alexander Review to achieve 33% female representation by the end of 2020. The 2019 Hampton-Alexander Report recognised that the Company had made significant improvements in female representation on the Board, rising 47 places to 50th position in the FTSE 100 rankings with women comprising 30.8% of the Board. During 2019, the Board's gender diversity increased with the appointment of one additional female Non-Executive Director, Cressida Hogg, taking the number of female Board directors to 4 out of 13. The Board currently has 4 female directors out of 14 although this will fall back to 4 out of a total of 13 following the AGM in April 2020 after the transition period for the Audit Committee Chair.

The Board supports the recommendations of the Parker Review on Ethnic Diversity and recognises it has more work to do in terms of increasing the ethnic diversity of the Board.

In 2016, the Group's Executive Committee formed the Diversity and Inclusion (D&I) committee. The D&I Committee is chaired by the Group Chief Risk Officer and is comprised of Divisional Business Heads and senior leaders. Gender is one key focus of our diversity agenda and the Committee oversees the Group's investment in developing diversity including our female talent and succession pipeline. Members of the Executive Committee and line managers have D&I measures built into their performance objectives and these form an important element of their performance review. Diversity is integral to our LSEG Culture Dashboard and this data is regularly reviewed by our Executive Committee and Board to track progress and act as necessary. More information on the Committee's key initiatives to support diversity can be found in the supporting sustainable growth section of this report on pages 43–46.

All appointments and succession plans are based on merit and objective criteria and the Company uses external search consultancies when making appointments to key positions. These firms are required to provide a diverse list of candidates for senior roles. In particular, the Board's succession and appointment approach aims to secure balanced shortlists for new appointments.

Gender Balance in senior management and their direct reports
The Group was an early signatory of HM Treasury's Women in Finance Charter in the UK, and we set ourselves a stretch target of reaching 40% female representation in our senior leadership (Executive Committee plus two levels) population by 2020.

Female representation amongst LSEG's most senior management population (Executive Committee and their immediate direct reports) stands at 29%. The table below summarises the progress made since 2018 for this population.

	31 December 2019		31 December 2018	
Female	**25**	**(29%)**	19	23%
Male	**60**	**(71%)**	63	77%

We continue to make progress at all levels within the organisation and you can read more about this in the section titled Supporting Sustainable Growth on pages 43–46 of this report.

Board appointments: Use of External Search Consultancies
External search consultancy Inzito supported the Board on the appointments of Dominic Blakemore and Cressida Hogg. Odgers Berndston is supporting the Board in the search for a Chief Financial Officer.

Inzito does not have any additional connection with LSEG. Odgers Berndston also provides general recruitment services to London Stock Exchange Group.

Don Robert
Chair
28 February 2020

Report of the Audit Committee

Paul Heiden
Chair of the
Audit Committee

The Audit Committee members as at 31 December 2019 were: Paul Heiden (Senior Independent Director), Jacques Aigrain, Dr Ruth Wandhöfer, Stephen O'Connor and Professor Kathleen DeRose. We believe that the Committee, as a whole, continues to have competence relevant to the sector in which the Group operates. The Committee's effectiveness was assessed as part of the 2019 board effectiveness internal review. The evaluation process was conducted by the Group Company Secretary using a detailed questionnaire provided by an external provider. More details on the Committee's effectiveness review can be found in the "Corporate Governance" section of this report on page 82.

This report is intended to give an overview of the role and activities of the Audit Committee in assisting the Board to fulfil its oversight responsibilities relating to the monitoring of the effectiveness of the system of internal control and risk management, the independence and effectiveness of the external auditor and the integrity of the Group's financial statements. It details the activities, discussions and decisions that enabled the Audit Committee to fulfil its responsibilities effectively during 2019.

During the year, as part of its key priorities, the Committee:

- Discussed the proposed acquisition of Refinitiv extensively, reviewed the information produced by the various external parties involved in the due diligence efforts and approved the financial information included in the shareholder circular published 6 November 2019
- Reviewed and discussed the Group's formal response to the Kingman Review of the Financial Reporting Council (FRC) and the creation of the Audit, Reporting and Governance Authority (ARGA) and the response to the Independent Review into the Quality and Effectiveness of Audit chaired by Sir Donald Brydon
- Received and discussed the external audit management letter from EY LLP. The letter highlighted areas for improvement, in particular regarding the sales cycle management in the Information Services Division These were noted by the Committee for follow-up
- Reviewed the effectiveness of the external auditor based on their qualifications, expertise, resources, level of independence, execution of their audit plan and the quality of their conclusions and recommendations. On the basis of their own interaction with EY and that of management, the Audit Committee confirmed that the services provided by EY were appropriate and in compliance with relevant auditor independence and integrity rules
- Received and discussed a report from Executives on the cyber security programme
- Discussed a number of internal audit reports during the year and satisfied itself that management action plans were in place to address the recommended improvements within reasonable deadlines
- Approved the 2020 internal audit universe, internal audit plan, internal audit risk appetite and budget and resources for the Internal Audit function. The Committee also approved the updated internal audit charter and continued to review alternatives to improve the coordination of all assurance functions
- Discussed the impact on the Group's financial accounts of the acquisition of Beyond Ratings, a Paris based provider of sovereign sustainability assessments and of minority investments in Euroclear and Nivaura
- Continued to monitor the alignment of the control environment of recent acquisitions with the Group internal control framework. It satisfied itself that these acquisitions were being integrated according to plan and were meeting the financial objectives of the Group. Where gaps were identified, the Committee requested remediation plans to be put in place
- Discussed the quality of earnings in relation to the Group's Adjusted Operating Profit (AOP)
- Discussed the Group's position regarding the decision by the EU that the UK had breached EU state aid rules with regard to its Controlled Foreign Companies (CFC) rules
- Discussed the accounting treatment of IFRS 15 for London Stock Exchange admission fees. Approved the new data model to calculate the average life of listing on the exchanges and the impact on the Group's financial accounts
- Approved a parent guarantee from the Group for a selection of direct and indirect subsidiaries in order to obtain audit exemption for the subsidiaries under section 479A-479C of the Companies Act 2006
- Continued to closely monitor the effectiveness and independence of the enhanced whistleblowing arrangements of the Group including a review of the status and resolution of the whistleblowing reports received during the year

Priorities in the forthcoming year will include:

- Continuing to closely monitor the progress of the proposed acquisition of Refinitiv and in particular the changes in financial projections and synergies for the combined group resulting from potential actions from regulatory and antitrust reviews
- Overseeing the completion of the Refinitiv transaction and ensuring that the transaction is accurately represented in the financial accounts and the annual report of the combined Group
- Receiving assurance that the control environment remains robust to support the continued growth and diversification of the Group's activities, including all major projects, as well as key processes such as resiliency and cyber security programmes
- Monitoring the progress of the alignment of assurance activities across the internal audit, risk and compliance functions and third party assurance providers
- Monitoring the progress of the integration of newly acquired businesses
- Monitoring the progress of management actions recommended within the external audit management letter from EY
- Receiving early and continuous understanding of the impact of the Group's acquisitions and divestitures on financial and tax accounting
- Continuing to assess the impact of developments in accounting standards
- Continuing to monitor progress on the key IT and infrastructure projects of the Group

Paul Heiden
Chair of the Audit Committee
28 February 2020

Role and responsibilities of the Audit Committee

1. Financial reporting

The Committee recommends the financial statements of the Group to the Board, including the annual and half-yearly reports, preliminary results announcements and any other formal announcement relating to its financial performance, reviewing the significant financial reporting judgements that they contain.

2. Internal controls and Risk Management systems

The Committee keeps under review the effectiveness of the Group's system of Internal Control and Risk Management. The Audit Committee makes recommendations to the Board regarding the effectiveness of the Group's Internal Control and Risk Management systems and recommends to the Board the statements to be included in the Annual Report concerning internal controls and Risk Management (in collaboration with the Risk Committee). The Committee also monitors and reviews the effectiveness of the Group's Internal Audit function, ensuring that it has adequate resources and appropriate access to information to perform its function independently from executive management.

3. External auditor

The Committee oversees the relationship with the external auditor. The Committee reviews and approves the annual audit plan, ensures that it is consistent with the Committee's view of the scope of the audit engagement and reviews the findings of the audit with the external auditor. The Committee monitors and reviews the objectivity and independence of the external auditors including the non-audit activities performed by the auditors for the Group (see the external auditors fees section below for more details). The Committee ensures that the external audit services contract is put out to tender on a periodic basis in line with existing best practices and regulation (the current external auditor was appointed in 2014 following a tender process overseen by the Audit Committee). The Committee oversees the selection process for new auditors and if an auditor resigns the Committee investigates the issues leading to this and decides whether any action is required.

4. Other matters

Whistleblowing and fraud

The Committee reviews the Group's arrangements for its employees to raise concerns, in confidence, about possible wrongdoing in financial reporting or other matters. The Committee ensures that these arrangements allow proportionate and independent investigation of such matters and appropriate follow up action. The Committee also reviews annually the Group's procedures for detecting fraud and for the prevention of bribery.

Report of the Audit Committee (continued)

Composition and meetings
The Committee meets the requirements of the Code. Dominic Blakemore joined the Committee on 1 January 2020 and the Committee now comprises six independent Non-Executive Directors. It is chaired by Paul Heiden who is a qualified chartered accountant with a career in a variety of senior finance roles. Following the Group's AGM in April 2020, Paul Heiden will step down from the LSEG Board and he will be succeeded as Chair of the Committee by Dominic Blakemore (see page 77 of this report for Dominic's biography). The skills and experience of each Committee member are provided in the Board of Directors section on pages 75–77.

The Chief Financial Officer, Group Financial Controller, Group Head of Internal Audit, Group Chief Risk Officer and the external auditor are standing invitees to all Audit Committee meetings. In addition, various other members of management are invited from time to time to present specific matters relevant to the Committee's remit. The Chair of the Board also attends the Committee on a regular basis.

Further details on the functions and responsibilities of the Audit Committee can be found in the Committee's Terms of Reference (dated 1 January 2019) which are reviewed annually and available from the Group Company Secretary or in the corporate governance section of the Group's website at: **www.lseg.com/about-london-stock-exchange-group/corporate-responsibility/governance**.

Activities in 2019
The Committee met five times during the year. The Committee maintains a formal agenda which ensures that all matters for which the Committee is responsible are considered at the appropriate meeting. The agenda for each meeting was determined by the key events of the annual financial reporting cycle, the risks identified by the Committee and the standing items under its Terms of Reference. The following provides details on how the Committee discharged its responsibilities during the year as set out in its Terms of Reference:

Financial matters:
With regards to financial matters, the Committee reviewed, discussed and approved the half-year and full-year financial results. It reviewed, discussed and approved key accounting judgements, the annual review for goodwill impairment and assessment of indicators of impairment on purchased intangible assets, management's view of commitments and contingencies and the adequacy of the proposed disclosures. For more details on the main discussions and decisions reached by the Committee on financial matters, see the section below entitled 'Significant matters impacting the financial statements' and 'Other topics of discussion in respect to the financial statements'.

Internal controls:
The Committee continued to exercise disciplined oversight of the effectiveness of the Group's internal controls throughout the year. It fulfilled its responsibilities by reviewing and discussing regular reports from the external auditor, the Internal Audit and Risk Management functions as well as from external experts, including:

- Reports on compliance with the Code – internal controls (including whistleblowing) at half year and year end
- Quarterly updates on internal audit plans including internal control issues raised and management actions to remedy the deficiencies
- Annual report on the performance of the Internal Audit function at the first Audit Committee of the year

The Committee obtained additional comfort by meeting with the Group Head of Internal Audit at each Audit Committee meeting without executive management present.

The activities of the Committee related to internal controls enabled it to satisfy itself that the Internal Audit function is independent, objective and adequately staffed to perform its duties. In addition, the Committee assessed the effectiveness of the Internal Audit function throughout the year using qualitative and quantitative indicators including:

- Completeness of the audit universe and the audit plan
- Quality of the methodology (updated at least once a year)
- Quality of the audit reports and the issues raised
- Consistency of the audit issues raised and their ratings
- Feedback from executive management on specific audits
- Key performance indicators such as percentage of the audit plan completed, duration of audits, distribution of audit ratings, percentage of past due actions and percentage of self-identified issues

The Committee relied on the assurance process throughout the year to recommend to the full Board that it could report to shareholders on the effectiveness of the Group's internal control system. The Board statement can be found on page 84.

Oversight of the external auditor:
The Committee assessed the effectiveness of the external audit process including the independence and quality of the Group's external auditor (EY) throughout the year. The Committee relied on its own judgement supported by the following evidence:

- The Committee received a report from management on their own evaluation of the effectiveness of the external auditor
- It received reports from EY on the status of their 2019 plan and the results of their work. The external auditor's reports were discussed at each Committee meeting and their views and opinions used to challenge decisions by Group Finance
- Evidence of matters referred for specialist review, technical review, and quality control
- The Committee also held separate meetings with EY at each Committee meeting without management being present.

Based on all evidence presented, the Audit Committee satisfied itself that the external audit has been conducted independently and effectively with the appropriate rigor and level of testing.

Having considered the performance of EY for the past five years, the Audit Committee recommended to the Board in 2019 that a resolution for the reappointment of EY as the Company's external auditor for the year ending 31 December 2020 be proposed to shareholders at the AGM in April 2020.

EY were appointed as our external auditors in 2014. The Group intends to put the external audit out to tender every 10 years and no later than 2023. The lead audit partner and other key partners identified are required to rotate every five years. Other partners are required to rotate every seven years. Maurice McCormick took over as lead audit partner in 2018. The Committee approved the EY audit plan, the methodology used, the scope of the audit by location, the risks and areas of focus as well as the materiality threshold for the Group and the threshold for reporting unadjusted audit differences. The Committee has complied with the relevant parts of the Competition and Markets Authority Final Order on the statutory audit market for the year ended 31 December 2019.

Report on external auditor's fees and safeguards on non-audit services
The Committee has a formal policy governing the engagement of the auditors to provide non-audit services which is reviewed on an annual basis.

This policy prohibits certain activities from being undertaken by the auditors such as: accounting/bookkeeping services, internal auditing, certain tax and payroll services, executive recruitment and remuneration services and more generally any work where a mutuality of interest could compromise the independence of the auditors. The policy also places restrictions on the employment of former employees of the auditors. Recognising however that the auditors are best placed to undertake certain work of a non-audit nature, the policy permits the provision of audit-related services and permitted non-audit services with the prior approval of the Committee.

A breakdown of audit and non-audit service fees paid and payable to the external auditor for the year ended 31 December 2019 and prior year is provided below and in Note 36 to the financial statements.

	Year ended 31 December 2019 £m	Year ended 31 December 2018 £m
Services		
Audit of parent and consolidated financial statements	**1**	1
Audit of subsidiary companies	**3**	2
Non-audit services	**1**	1
Total	**5**	4

Note: EY LLP provided non-audit services of £0.4m, 8% of total fees (2018: £0.6m, 15% of total fees). This comprised of audit related assurance services of £0.3m (2018: £0.5m) and other non-audit services of £0.1m (2018: £0.1m)

The Committee reviewed each of these individual appointments on their merits. Prior to EY being engaged, the review process involved considering management's assessment of:

- The threats to independence and objectivity resulting from the provision of such services
- Which accounting firms had the appropriate experience and expertise to undertake the work
- Whether there were any conflicts of interest for EY
- Whether the conflicts of interest that existed for other potential firms, who were either advising other parties to the transactions or were auditors of the other company, could be appropriately managed
- The quantum of non-audit fees in the context of the overall audit fee and relative significance to EY in the context of its total client fees

In each case, the Audit Committee concluded, on the balance of risks, that the appointment of EY to perform certain non-audit services represented the most effective, secure and efficient way of obtaining the necessary advice and services, given their knowledge of our business and the Group's structure and accounting and tax affairs, together with their wider knowledge of our industry sector.

Other matters:
As part of its regular annual activities, the Committee assessed its own effectiveness. See page 82 for further detail.

Report of the Audit Committee (continued)

Significant matters impacting the financial statements

Significant matters for January – December 2019	How the Committee reviewed these matters and what decisions were taken
Revenue recognition	The Audit Committee reviewed the external auditors' comments on the recognition of revenues in the secondary capital markets trading area, fees or revenue share clearing arrangements and the revenue accruals for FTSE Russell (see EY audit opinion on page 137). The Audit Committee was satisfied that sufficient analysis had been performed in this area to demonstrate that there was no evidence that any manipulation of revenues had taken place.
Capitalisation and impairment of internally developed software	The activity of the Group in relation to the internal development of software has expanded significantly over time. The capitalisation of software development expenses involves management judgment against criteria set out in IFRS. Where indicators of impairment are identified or where an asset has not been brought into use, a full impairment assessment is performed at the reporting date. The Audit Committee reviewed the methodology used by Group Finance to capitalise software development expenses and satisfied itself that it was adequate and in conformity with IFRS. The Audit Committee also considered possible indicators of impairment for the significant internally developed software and came to the conclusion that no impairment should be recorded.
Debtors	The Audit Committee reviewed the trade receivables profiles of the Group (mostly FTSE and LSE businesses) and concluded along with management that the ageing of receivables continued to improve. The Audit Committee also satisfied itself that the carrying value of trade debtors was accounted for correctly.
Valuation of goodwill and acquired intangibles impairment assessment	The Audit Committee considered the approach and methodology applied to performing the detailed annual goodwill impairment assessment as well as the assessment for indicators of impairment of other purchased intangible assets as required under IAS 36, including the key assumptions for short and long-term growth rates, cash flow expectations and the discount rates used for the Group's cost of capital as well as key business indicators. The impairment review was also an area of focus for the external auditors, who reported their findings to the Committee. Details of the impairment review can be found in Note 14 to the financial statements on pages 173–175.

Other topics of discussion in respect to the financial statements:

Acquisition of Beyond Ratings

On 3 June 2019, LSEG announced the acquisition of Beyond Ratings. The Audit Committee reviewed the accounting entries of the transaction to satisfy itself that the impact of the transaction was appropriately reflected in the Group accounts.

Quality of earnings

The Audit Committee discussed the quality and profile of the Group's earnings across all its businesses in relation to the Adjusted Operating Profit (AOP) measure. The two main topics were the accounting of net investment hedges and the application of the IFRS 15 accounting standard. The Committee satisfied itself that the appropriate accounting entries were reflected in the AOP measure.

IFRS 15 treatment for admission and listing services fees

The Audit Committee discussed the clarification guidance from the IFRS Interpretations Committee (IFRIC) regarding the impact of adopting IFRS 15 on admission and listing services provided by the Capital Markets Primary Markets business. The IFRIC recommended that a stock exchange's admission fees should be deferred under IFRS 15 and recognised as revenue in the income statement over the period in which the Group provides the listing services. The Audit Committee satisfied itself that it understood the implications of IFRS 15 on the Group's financial statements.

EU State Aid challenge

The Audit Committee continues to discuss the petition by the Group of the EU General Court to annul the EU Commission's findings that the UK had breached EU State Aid rules with regards to its CFC exemption known as the Finance Company Partial Exemption (FCPE). Following the Groups' information submission to HMRC, which includes its view that it expects to have no exposure, HMRC have issued a determination, as required by EU law regardless of the appeal process, focusing on one of the Group's two potentially exposed subsidiaries for 2015 only, for the amount of £1.2 million.

The Group made payment to HMRC for the determination, as required by the recovery process in January 2020 but did so having submitted an appeal to HMRC against the determination. The Group recognised a receivable for the determination to reflect management assessment of no exposure. It is likely that all taxpayers' appeals against the determinations will be stayed by HMRC until the resolution of the appeals to the EU general court by both the UK government and affected taxpayers. The exposure range to the Group remains between £0 and £65 million. However, considering the appeals made by the UK PLCs (including the Group), UK Government and management's internal view, the Group does not consider any provision is required in relation to this investigation.

Commitments and contingencies
The Audit Committee considered the facts and circumstances surrounding commitments and contingencies for the Group. The Committee agreed that no provision is needed to be recorded in the financial statements. See Note 28 to the financial statements on page 194.

Non-underlying items
The Committee discussed and agreed on the classification of non-underlying items in the financial statements for the year. In particular, the Audit Committee discussed the nature and amounts of the provisions to be made for the ongoing cost restructuring programme and the fees linked to the proposed acquisition of Refinitiv.

The non-underlying items are presented in Note 8 to the financial statements on page 169.

Financial viability statement
In order to meet the requirements of the UK Corporate Governance Code, the Board needs to explain how it has assessed the prospects of the Group taking into account the current position and principal risks, and over what period they have done so along with why they consider that period to be appropriate.

The Audit Committee discussed the key elements required to make the statement, i.e.:

- Deciding on the appropriate period to cover
- Identifying and describing the relevant evidence and assumptions and ensuring that the various planning scenarios were realistic, taking into account the business, industry and macroeconomic factors
- Making an assessment that is appropriate to the Company's circumstances
- Applying appropriate stress testing and reverse stress testing

The Audit Committee satisfied itself that the Board of Directors was in a position to make the statement using the Group Stress testing methodology. The Financial viability statement can be found within the Directors' Report on page 132.

Fair, balanced and understandable Annual Report
The Audit Committee satisfied itself that the Annual Report is fair, balanced and understandable and has presented its conclusions to the Board. In order to reach its conclusions, the Committee examined the following criteria:

- Fair:
  - The Annual Report does not omit important or sensitive elements necessary to understand the strategy, performance and business model of the Group
  - Segmental reporting accurately describes the various activities of the Group and their relative contributions to the strategy, performance and business model of the Group
  - The messages in the Strategic Report and the CEO and Chair's reports are consistent with the financial reporting section
- Balanced:
  - There is an appropriate balance between the required statutory accounting metrics and Group-specific adjusted measures
  - The messages in all sections appropriately balance the favourable and less favourable events and trends affecting the strategy and performance of the Group
  - The principal risks presented in the Strategic Report on pages 60–73 accurately reflect the risk registers which are used to set the risk appetite and the strategy of the Group, including those risks which would threaten its business model, future performance, solvency and liquidity
- Understandable:
  - There is a clear and comprehensive framework for the Annual Report
  - The key messages are adequately highlighted in simple language avoiding specialised terms and acronyms wherever possible
  - There is a glossary of technical terms and acronyms used frequently across the report
  - The relevant information for shareholders is easy to find and appropriately cross-referenced where necessary without additional clutter (the 2019 Annual Report comprises 208 pages compared to the 180 pages of the 2018 report)
  - The various sections taken together present a consistent and easy to comprehend overview of the strategy, performance and business model of the Group

Report of the Risk Committee

Stephen O'Connor
Chair of the
Risk Committee

The Risk Committee members as at 31 December 2019 were Stephen O'Connor (Chair), Professor Kathleen DeRose, Paul Heiden, Val Rahmani, Andrea Sironi and Dr Ruth Wandhöfer. Dr Stuart Lewis (Chief Risk Officer, Deutsche Bank AG) acts as a special adviser to the Committee and is a standing invitee to meetings of the Risk Committee.

This report is intended to give an overview of the role of the Risk Committee in assisting the Board to fulfil its oversight responsibilities relating to risk management and the adequacy of the systems of internal controls in place to mitigate key risks.

During the year ended 31 December 2019, the Committee met six times. In addition to its regular reviews of the Group's risk profile, risk appetite, and emerging risks, the Committee focused on programmes to further strengthen the information security framework. The Committee also monitored specific operational incidents and resilience programmes in place. It also monitored the Group's transformation projects including M&A activities.

The Committee closely monitored the continued implementation of the Group resilience strategy during the year including enhancements made to the cyber security framework and vendor management framework strategy. It also took into consideration the risks and opportunities related to the use of new technologies and of new operating models. The monitoring of the Group's risk culture, which represents the foundation of the strong risk management capabilities within the Group, is considered at each meeting.

In order to avoid potential duplication of coverage and, more importantly, to reduce the potential for non-coverage of important risk matters, by either the Audit or the Risk Committees, there is a cross membership of both chairmen of the Audit and of the Risk Committees.

Priorities in the forthcoming year will involve the monitoring of geopolitical risks, cyber security and overall operational resilience, Environmental Social and Governance (ESG) risks, behaviour and culture throughout the Group and the monitoring and delivery of the Group's Brexit plans as the UK defines its future relationship with its key partners. The Committee will also monitor closely the level of readiness for managing the risks of an enlarged Group following the potential completion of the Refinitiv acquisition.

The Committee will continue to review, on a rotational basis, the risk profile and execution risks of each of the Group's main lines of business and key subsidiaries.

The Committee will also continue to oversee the evolution of the Group's risk culture across the Group and its subsidiaries to ensure the Board maintains highly effective risk management oversight and controls.

Stephen O'Connor
Chairman of the Risk Committee
28 February 2020

Composition and responsibilities
The Committee is chaired by Stephen O'Connor who provides extensive and substantial financial and risk management experience developed during a career in a variety of senior executive and non-executive roles in the financial services industry. In addition, the Board is satisfied that each member of the Committee has the skills and experience necessary to enable the Committee to discharge its responsibilities effectively. The names, skills and experience of the members of the Risk Committee are provided on pages 75–77.

The Chief Financial Officer, the Chief Risk Officer and the Group Head of Internal Audit are standing invitees to all Risk Committee meetings. The Committee's terms of reference, which are approved by the Board and reviewed on an ongoing basis, are available from the Group Company Secretary or in the corporate governance section of the Group's website at **www.lseg.com/about-london-stock-exchange-group/corporate-responsibility/governance**.

The Committee maintains non-executive responsibility for high level risk-related matters and risk governance. As part of its mandate, the Committee reviews the risk profile of the Group on a regular basis and comments on the adequacy of the processes in place to identify and report on key risks. It also reviews the risk profile of the major Group subsidiaries/divisions on an individual basis. It advises the Board on the Company's overall risk appetite, tolerance and strategy and keeps under review the adequacy of the Enterprise Risk Management Framework and its use in the decision-making process, which includes the review of parameters used in the models and methodology adopted. It sets the standards for the accurate and timely reporting of key risks and risks of critical importance, such as risks relating to technology, cyber security, business continuity and disaster recovery, CCP operations, counterparty and reputational risks. It also receives reports on compliance with relevant regulatory requirements for each regulated entity of the Group.

Activities
The Committee maintains a formal agenda which ensures that all matters for which the Committee is responsible are considered at the appropriate meeting. During the year, the Committee discharged its responsibilities as set out in its terms of reference by:

- Providing robust reviews of principal risks
- Monitoring strategy, planning and preparations for Brexit
- Reviewing risk exposures of the Company and emerging risks, including climate-related risks
- Reviewing and recommending to the Board the Group Risk Appetite, including stress tests and challenging the scenario results
- Reviewing the Vendor Risk Management framework
- Review of the Treasury activities and adequacy of policy
- Monitoring of the cyber security framework and enhancement programmes and approval of related policies
- Monitoring the delivery of actions to manage risks within risk appetite
- Reviewing and monitoring matters relating to operational resilience
- Reviewing regulatory compliance reports and the actions in place to ensure ongoing compliance
- Reviewing the adequacy and effectiveness of the systems of the internal controls in place to manage key risks including the review of management's assessment of information security, financial crime, cyber-crime and data management risks as well as management's mitigating actions
- Ensuring the effectiveness of the Group's Enterprise Risk Management Framework and of the Risk function
- Overseeing the adequacy of the counterparty limits and ad hoc counterparty credit risk analysis performed as required
- Reviewing detailed reports of the risk profiles of the Group's material businesses
- Monitoring compliance with the Group risk management procedures as described in the section on internal controls on page 83
- Reviewing the adequacy of the Group's Business Continuity Management plans and management programme
- Approving and recommending for approval key policies relating to risk and the terms of reference for the Risk Committee
- Monitoring the Executive performance report on risk culture (awareness, transparency and accountability) which is also shared with the Remuneration Committee
- Monitoring the roll out of the mandatory training programme on ethics, risks, controls and compliance

Risk Management function
The Risk Management function is headed by the Chief Risk Officer who oversees all aspects of risk management in the Group. She reports to the Chief Executive Officer and, for independence purposes, to the Chair of the Risk Committee. The Committee approves the remit of the Risk Management function and ensures it has adequate independence to perform its duty. The Committee must be consulted on the appointment or the dismissal of the Chief Risk Officer.

Directors' Remuneration Report

Statement by the Chair of the Remuneration Committee

Jacques Aigrain
Chair of the Remuneration Committee

Remuneration Committee members (as at 31 December 2019)
Jacques Aigrain (Chair)
Marshall Bailey
Cressida Hogg
Don Robert
Dr. Val Rahmani

On behalf of the Board, I am pleased to present the Directors' Remuneration Report for the financial year ended 31 December 2019.

This year's disclosure is subject to two shareholder votes at our 2020 AGM:

- **the Remuneration Policy Report (pages 104–113) is subject to a binding vote; and**
- **our Annual Report on Remuneration (pages 114–128) is subject to an advisory vote.**

Context

Our Remuneration Policy was last presented to shareholders for a vote in April 2017 and as such, we are presenting a revised Remuneration Policy for shareholder approval at our 2020 AGM. During 2019 and early 2020 we continued to engage with shareholders and institutional investor bodies and undertook a thorough review of our policy and performance measures, with shareholder expectations, the proposed transformative transaction with Refinitiv and corporate governance best practice in mind.

On 26 November 2019, shareholders voted almost unanimously in favour of the Refinitiv transaction, which is anticipated to close in the second half of 2020. The proposed transaction is a compelling opportunity to create a global financial markets infrastructure leader with significant multi-asset class capital markets capabilities, a leading data and analytics business and a broad post trade offering, well positioned for future growth in an evolving landscape.

The Committee has developed a policy that is aligned to market practice, corporate governance developments and which continues to promote the long-term success of the Group; both for LSEG as a standalone company and in the event that the transaction completes.

Remuneration Policy

Our Remuneration Policy was last subject to a binding shareholder vote at the 2017 AGM and was passed with 98.5% support. Overall, the Committee believes the policy is operating well and as intended. We are proposing a number of changes to the policy being put forward to shareholders for approval to ensure that our policy continues to align executive remuneration and shareholders' long-term interests, adheres to evolving best practice and that our remuneration outcomes are appropriate in the context of the business model going forward.

In formulating the revised policy, we undertook an extensive shareholder consultation exercise with our major shareholders and investor bodies and are grateful for the valuable feedback provided, which was generally very positive and supportive of the Committee's approach. As part of the process, we consulted on the introduction of a post-employment shareholding requirement. The Committee's initial proposal was to introduce a requirement for Executive Directors to hold 100% of their Minimum Shareholding Requirement ("MSR") for the first year following departure and to hold 50% of their MSR for the second year. However, further to feedback received during consultation, it has been determined to strengthen this further such that Executive Directors will be required to hold up to 100% of their MSR for two years post-departure.

The key policy and implementation changes are summarised below:

Item	Change
Pension alignment	– Pension contributions for new Executive Directors are limited to 10% of salary in line with the UK workforce average of 11% of salary. – The incumbent CEO's pension contribution will be reduced from 15% to 10% of salary, effective April 2020. – The Committee does not intend to amend the contribution for the CFO, who has stated his intention to retire from the company by the end of 2020, nor the CEO of Borsa Italiana, who accrues mandatory state pension benefits in Italy.
Bonus deferral	– Mandatory bonus deferral into shares has been extended from 2 to 3 years for all Executive Directors.
LTIP	– Absolute TSR has been replaced by relative TSR. – The weighting of performance measures has been adjusted from 50%:50% to 60% against Adjusted EPS performance and 40% against relative TSR performance.
Malus and clawback	– The Committee's ability to enforce malus and clawback has been enhanced in the event of a 'material failure of risk management' for awards granted from 2020. – This enhancement supplements previous enhancements made in 2019 to strengthen the provisions in respect of individual conduct and behaviour.
Post-employment shareholding requirement	– A formal post-employment shareholding policy has been introduced, requiring Executive Directors to hold the lower of their actual shareholding and 100% of their MSR for 2 years post-departure.
NED shareholding requirement	– A formal shareholding requirement has been introduced for Non-Executive Directors of 1x basic annual fees to be built up within 3 years of appointment.
NED travel allowance	– An intercontinental travel allowance has been introduced for Non-Executive Directors to reflect the global nature of the company's business and the additional time commitment required for travel.

The Committee considered in detail the performance measures for the LTIP to ensure they continue to provide strong alignment with our long-term strategy. Within our LTIP framework, we have replaced absolute TSR as a performance measure with relative TSR, in accordance with the market-standard approach and in response to shareholder feedback.

An extensive review was carried out to determine the most suitable comparator group for the relative TSR measure and the Committee deemed the FTSE100 index to be the most appropriate comparator sector at this time, as it provides a broad range of firms across all sectors with a similar size and complexity to LSEG. Given current corporate activities at LSEG, our comparator group will be kept under review to ensure that it remains appropriate for future awards.

The Committee has determined to increase the weighting of the Adjusted EPS ("AEPS") measure from 50% to 60%. AEPS growth targets have historically challenged management to deliver stretching growth and placing a greater emphasis on AEPS is deemed appropriate as it reflects a key focus of the transaction; to deliver against ambitious growth and synergy targets. At 40% weighting, TSR remains a core component of our LTIP and combined with AEPS ensures a balance of absolute and relative measures.

The Committee will continue to review the LTIP measures, weightings and targets on an annual basis, to ensure their continued suitability and to ensure they are stretching both for LSEG as a standalone company and the combined business should the Refinitiv transaction complete.

Performance in the year
The Committee continues to place great importance on ensuring that there is a clear link between pay and performance, including a focus on culture, adherence to the Group's risk framework, and that our remuneration outcomes are reflective of this wider context.

The Group has continued to execute our strategy against a continued uncertain political and macroeconomic backdrop in 2019 and achieved a good financial performance while working closely with our customers to deliver new products and services. LSEG announced the proposed acquisition of Refinitiv on 1 August 2019, which, if completed, will accelerate our strategy, while continuing to progress financially, strategically and operationally across our core businesses of Information Services, Post Trade and Capital Markets.

Total income from continuing operations rose to £2,314 million, up 8%. AOP increased by £134 million (14%) to £1,065 million while operating profit decreased by £13 million (2%) to £738 million.

This performance reflects strong growth in our FTSE Russell Indices and LCH OTC clearing businesses, supported by a robust Capital Markets performance against challenging market conditions.

- Our Information Services Division's revenue for FY2019 was £902 million (2018: £841 million), within which FTSE Russell Indices has continued to perform strongly with a 10% increase in revenue to £649 million (2018: £592 million).
- LCH's income for FY2019 increased 14% to £756 million (2018: £662 million). SwapClear saw a 14% increase in clearing volumes, clearing a total US$1,229 trillion (2018: US$1,077 trillion) for its members and their clients.
- Income for Post Trade services in Italy increased 5% to £152 million (2018: £145 million).
- In our Capital Markets business, revenue increased 5% to £426 million (2018: £407 million) and 109 new companies were admitted to our markets in the year, down 38% on 2018, reflecting challenging economic conditions.
- FY2019 revenue for the Technology Services division was £66 million (2018: £65 million).

The Group produced these financial results as it executes its strategy to deliver best-in-class capabilities, drive global growth and develop our partnership approach.

Bonus outcomes for Executive Directors
As a result of the Group's performance and individual contribution, the Committee determined that the Executive Directors will be awarded bonuses of between 64% and 75% of their maximum opportunity.

Application of discretion
These outcomes are reflective of overall Group financial and strategic performance, including a reduction in the overall rating of the strategic deliverables assessment from 40% to 35% in recognition of the resiliency and technology issues in the Group in 2019. In addition, where the Committee have deemed appropriate, formulaic bonus outcomes for certain individuals have been adjusted. Further detail is shown on page 117.

Directors' Remuneration Report

Statement by the Chair of the Remuneration Committee

Share plan vesting

The LTIP awards made in 2016 vested at 89.6% overall during 2019. AEPS increased from 129.4p to 173.8p over the period to the end of December 2018, resulting in 79.2% of the AEPS element vesting. TSR increased by 88% over the period to March 2019, resulting in 100% of the TSR element vesting.

As shown in our 'Single total figure of remuneration' table, the AEPS element of the LTIP awards made in 2017 will vest at 100%. Based on performance to date it is forecast that the TSR element will vest in full, however this will be confirmed following the end of the performance period in March 2020 and will be disclosed in our FY2020 DRR. The achievement of stretching targets year on year has delivered significant value. These vesting outcomes reflect AEPS growth of 15.2% year on year and 15.6% compound annual growth rate ("CAGR") over the 3 year performance period; and annualised TSR performance to date for these 2017 grants is 37% p.a., incorporating share price growth of 88% in 2019.

Salary review for Executive Directors

During the year, the Committee conducted its annual review of the base salary levels of our Executive Directors.

The Committee has decided to increase Mr Schwimmer's base salary for his role as CEO to £800,000. This increase, effective April 2020, is considered appropriate in recognition of Mr Schwimmer's performance and development since joining the Group as well as the scale, scope and responsibilities of his role.

At the time of Mr Schwimmer's appointment as CEO, the Committee set his base salary at a level below the previous incumbent to reflect that this was his first CEO role. Since joining, Mr Schwimmer has established himself successfully, demonstrating strong core leadership values and role-modelling the desired culture and behaviours of the Group. Under his leadership, the Group has produced strong financial and strategic results and has grown to become a far larger business with a broader scope of products and services.

The Committee has decided not to increase the salaries of Mr Warren, Chief Financial Officer or Mr Jerusalmi, Chief Executive Officer of Borsa Italiana and Director of Capital Markets.

Given the transformative nature of the proposed transaction with Refinitiv, the Committee will review the CEO's salary upon completion in the context of the significantly larger, more international and complex business and the increased responsibilities and demands of the role.

Should the transaction complete, the combined business would be the largest publicly-listed financial markets infrastructure company by revenue globally and would offer significant customer benefits across the full range of LSEG's businesses by: extending its trading capabilities across asset classes; expanding its data content, management and distribution capabilities; increasing its global footprint and range of customer offerings; and enabling LSEG, Refinitiv and their customers to benefit from future data and technology-enabled innovation and growth opportunities.

Any increase would be effective from 2021 and presented to shareholders in next year's report.

LTIP awards to be made in 2020

LTIP awards will be granted in 2020 under our 2014 shareholder-approved plan in line with our revised policy, subject to shareholder approval.

David Schwimmer will be granted a LTIP award of 300% in 2020, reflecting his importance to the Group and providing strong alignment to its performance. Raffaele Jerusalmi will be granted a LTIP award of 200% of salary in 2020, in recognition of his ongoing importance to Borsa Italiana in particular. No LTIP award will be granted to David Warren, who has stated his intention to retire from the company by the end of 2020.

The Committee has given extensive consideration to the LTIP target ranges applicable to the 2020 grant, in particular for AEPS growth, and sought the views of shareholders and shareholder governance bodies during the year.

Further detail is provided in the Annual Report on Remuneration on page 120.

Operation of 2020 annual bonus

The operation of the 2020 annual bonus will continue to focus on financial targets, strategic initiatives and personal contribution. In line with our commitment to ensure a greater focus on the development of the Group's culture, an individual scorecard was implemented for the Executive Directors and the Group Executive team for 2019 onwards. Within this scorecard a greater proportion is placed on assessing cultural objectives and behavioural performance, including 360° feedback, to allow for a stronger emphasis on how the individuals achieved their targets. This scorecard will be maintained in 2020.

For FY2020, the 'strategic' element will incorporate sustainability initiatives, reflecting our commitment to ensure the long-term viability of the Group through managing environmental and social impacts and practicing good governance.

Further detail is provided in the Annual Report on Remuneration on page 120.

Corporate governance developments
The Committee extensively reviewed the new principles of the UK Corporate Governance Code. Although our existing policy is already substantially compliant, in our enhanced policy the Committee has taken steps to further align to the requirements.

The Code calls for Remuneration Committees to review wider workforce remuneration and the alignment of incentives with culture. Executive remuneration in the context of the wider workforce and the link between the Group's culture with incentives are important considerations for the Committee and detail of how we consider these factors is included in the following section.

The Committee also reviewed the legislative changes requiring UK listed companies to report on the ratio of CEO pay to the wider workforce and other miscellaneous reporting requirements in relation to the disclosure of Directors' remuneration. The Committee welcome these developments and have adopted the requirements in this report.

Wider workforce considerations
The Committee has responsibility for overseeing arrangements for all employees and reviews broader workforce policies and practices in order to support decisions on executive pay. Our Group-wide reward framework establishes the compensation structure, elements and leverage for each career stage in the organisation. This facilitates greater oversight of the Committee of remuneration for the wider workforce.

Engagement with employees is an ongoing focus with a range of formal and informal channels available for colleagues to share ideas and concerns with members of the LSEG Board. Our Employee Board consultation process facilitates direct discussions between employee nominated representatives and members of our Board on executive remuneration and how it aligns with the wider company pay policy. In 2019, employee representatives provided feedback that colleagues do not have any concerns regarding the quantum of executive remuneration at LSEG. There is, however, an overall desire for more transparency on wider company pay. In response to this feedback, we have further developed our reward framework and are strengthening our communication and disclosure of this across the Group to enhance employee understanding.

Culture continues to be a key strategic focus and we place great importance on ensuring our pay policies and incentives support the desired culture and behaviours of the Group. The individual scorecard implemented in 2019 for our Group Executive team and Executive Directors provides the Committee with greater structure in determining the bonus of senior management as well as allowing for a greater focus on culture and behaviours. In addition, for the 2020 performance year, our bonus deferral scheme will be extended below Group Executive level to the Managing Director population. This reinforces the alignment of the pay of senior management with shareholder interests and the Group's long-term performance.

In line with the new regulations, we have disclosed our CEO to employee pay ratio on page 124. Paying our employees fairly relative to their role, skills, experience and performance is central to our approach to remuneration, and our reward framework and policies support us in doing this. Equal pay is also critical, and we review our pay levels on an ongoing basis to ensure that men and women are paid equally for doing equivalent work. Driven by our commitment to progressing gender diversity globally, we have chosen to disclose our global gender pay figures from this year. Further information is provided in our Gender Pay Report which is available at: **www.lseg.com**.

During 2019, almost 600 employees across six countries benefited from Sharesave maturities including share price appreciation of 137%, reflecting the Group's performance over the previous three years. Participation was extended further, with almost 1,100 employees joining the 2019 scheme, increasing overall participation to over 59% of eligible employees.

We are committed to fostering an inclusive environment for all our colleagues and believe everyone should be able to share in the success of the Group. In 2019, we launched SharePurchase, a new all-employee share ownership scheme, to permanent employees in Australia and Romania, with 34% of eligible employees now participating. Sharesave has been offered in several countries for a number of years now; the introduction of SharePurchase ensures many more employees around the globe have access to similar financial benefits that align to the Group's future success.

Directors' Remuneration Report

Statement by the Chair of the Remuneration Committee

Summary of key executive remuneration decisions

Role		Chief Executive Officer	Chief Financial Officer	Executive Director, CEO of Borsa Italiana & Director of Capital Markets
Name		David Schwimmer	David Warren	Raffaele Jerusalmi
Previous salary (with effect from 1 April 2019)		£775,000	£500,000	€525,000
Annual salary (with effect from 1 April 2020)		£800,000 (+3%)	£500,000 (+0%)	€525,000 (+0%)
Bonus for financial year ending 31 December 2019	% of salary	169% of salary	146% of salary	128% of salary
	% of maximum	75%	73%	64%
	£ total amount	£1,310,000	£732,000	€670,000[3]
	Of which 50% is deferred[1]	£655,000	£366,000	€335,000
Max. bonus opportunity (% of salary)		225%	200%	200%
LTIP award (subject to performance)		*300% of salary (£2,400,000)*	*0% of salary (£0)*[2]	Sterling equivalent of 200% of salary (€1,050,000) *(at prevailing rate at time of grant)*

1. Executive Directors must compulsorily defer 50% of bonus into shares for a period of two years under the outgoing policy except the CEO who, under the terms of his appointment, must defer for a period of 3 years. For performance year 2020 onwards, deferral is extended to three years for all Executive Directors under the revised policy
2. No LTIP award will be granted to Mr Warren, who has stated his intention to retire from the company by the end of 2020
3. Incorporates an adjustment to the formulaic bonus outcome of Mr Jerusalmi, in light of the technology outage in LSE plc in August 2019 when he was Director of Capital Markets.

Board changes

As announced on 18 October 2019, Mr Warren has stated his intention to retire from the company and step down from the Board by the end of 2020. He will continue in his current role as Group CFO and a member of the Board through the close of the Refinitiv transaction to ensure a smooth transition to his successor. LSEG is undertaking a global search, led by the Board's Nomination Committee. As Mr Warren has announced his retirement from the company, the Committee will not be amending his pension contribution, nor will the Committee be granting him a LTIP award for 2020. The new Group CFO, once appointed, will be employed on terms consistent with the revised policy and with reference to the size and complexity of the combined business, in the event that the transaction completes.

Share plan rules and approvals

We will seek shareholder approval for our Deferred Bonus Plan at our forthcoming AGM, reflecting our continued commitment to alignment with shareholder interests through employee share ownership. Specifically, our policy of mandatory deferral of a portion of bonus into shares for Executive Directors and the Executive Committee is being extended to senior management across our business for performance year 2020 onwards. Further detail is provided on page 119.

Concluding remarks

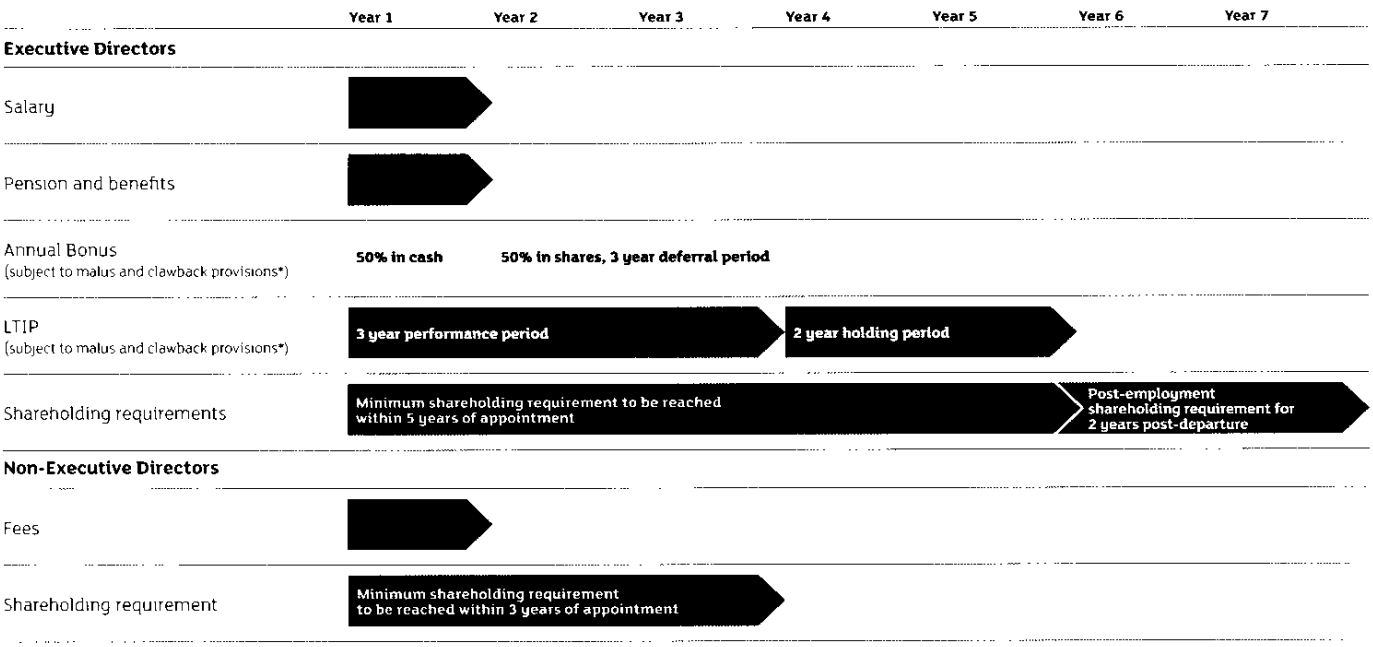
The Committee continues to ensure the Group's approach to remuneration takes into account best practice and market trends in the financial services sector and wider market while continuing to support the commercial needs of the Group, the interests of shareholders and of all other stakeholders. We look forward to your support for these proposals at the forthcoming AGM.

Jacques Aigrain
Chair of the Remuneration Committee
28 February 2020

This report has been prepared in accordance with Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended), and the relevant sections of the Listing Rules.

At a glance

Full details of our revised Remuneration Policy are set out on pages 104–113. The table below illustrates the structure and time horizons of each key remuneration element, demonstrating the long-term focus of our revised policy.



* The Committee has discretion to enforce malus and clawback in certain circumstances, including: misstatement, negligence, fraud, serious misconduct, significant reputational damage, certain misbehaviour, material failure of risk management or any other circumstances the Committee deem similar in nature or effect. Clawback will normally apply for a period of 3 years following vesting of shares/deferred cash bonus and/or payment of bonus, unless the Committee determines otherwise.

Directors' Remuneration Report (continued)

Remuneration Policy Report

Our Remuneration Policy was last subject to a binding shareholder vote at the 2017 AGM and was passed with 98.5% support. This section sets out our revised policy which will be subject to shareholder approval at the AGM in April 2020, and if approved, is intended to be in effect for the following three years from the date of the AGM.

Remuneration Policy table

The revised policy is set out in the following table and includes the following changes to our existing policy. The rationale for the proposed changes is provided in the Statement by the Chair of the Remuneration Committee, set out on page 98–99.

- Pension contributions for new hires will be limited to 10% of salary (reduced from up to 25%) in line with the wider workforce.
- The period of mandatory deferral of 50% of bonus into shares will be extended from 2 years to 3 years for all Executive Directors.
- Within the LTIP framework, absolute TSR will be replaced as a performance measure with relative TSR. Any one measure will not exceed two thirds of the award.
- For awards granted from 2020, express provisions will be added to enhance the Committee's ability to enforce malus and clawback in the event of a 'material failure of risk management'. This enhancement supplements previous enhancements made in 2019 to strengthen the provisions in respect of individual conduct and behaviour.
- A post-employment shareholding policy will be introduced requiring Executive Directors to hold 100% of the lower of their MSR and their actual shareholding for 2 years post-departure.
- A shareholding requirement for Non-Executive Directors will be introduced of 1x basic annual fees to be built up within 3 years of appointment.
- An intercontinental travel allowance will be introduced for Non-Executive Directors to reflect the global nature of the company's business, with an increasing focus on business in countries in the US and Asia and the additional time commitment required for travel.

The Remuneration Policy is designed to support the long-term interests of the Group. The Group is committed to paying for performance, rewarding the senior management team only when its goals are achieved. Each year the remuneration framework and the packages of the Executive Directors and members of the Executive Committee are reviewed by the Committee to ensure that they continue to achieve this objective. The Committee takes into account multiple reference points when setting pay including companies in the FTSE 100, the broader Financial Services sector and other international exchange groups and financial markets infrastructure companies.

During the year, the Committee conducted an extensive review of our Remuneration Policy in consultation with our shareholders and their representative bodies and has taken the following areas into account in developing the revised policy.

- a focus on shareholder value;
- the continued global expansion of the Group;
- the need to attract and retain senior management from the international finance and technology sectors;
- corporate governance developments;
- remuneration arrangements for the wider workforce;
- the Group's intent to be mindful of best practice as expressed by institutional shareholders and their representative bodies;
- the unique position of the Group at the heart of capital markets; and
- the transformative transaction with Refinitiv.

The principles prescribed by the UK Corporate Governance Code were also taken into account by the Committee in determining the revised policy. Details of how these were addressed are provided below

Principle	How the Committee has addressed this under the Remuneration Policy
Clarity	The Committee is satisfied that the remuneration arrangements in the revised policy are transparent, comprising elements that are commonplace in the market and best practice remuneration provisions.
Simplicity	No significant structural changes to incentive plans are proposed. The Committee concluded that the operation of the Annual Bonus and LTIP would remain easy for stakeholders to understand. The replacement of absolute TSR as a performance measure within our LTIP framework with relative TSR aligns to the UK market-standard approach.
Risk	The Committee is satisfied that the Remuneration Policy ensures that the risks from excessive rewards and target-based incentive plans are mitigated by: – Setting defined limits on the maximum awards which can be earned – Requiring the deferral of a substantial proportion of the incentives in shares for a material period of time – Aligning the performance conditions of incentives with the strategy and business model of the Company – Ensuring the Committee has overriding discretion to depart from formulaic outcomes and the ability to apply malus and clawback to incentives where appropriate Furthermore, the malus and clawback provisions have been enhanced to include express provisions for the material failure of risk management or any other circumstance that the Committee deems similar, in exercising its discretion
Predictability	Illustrations of the potential outcomes under the Policy are provided on page 113. Defined limits on the maximum awards which can be earned are also disclosed on pages 107–108.
Proportionality	The Company's performance-based remuneration is clearly linked to the implementation of the Company's strategy with key KPIs used as performance measures for incentive plans. The Committee also has overriding discretion to adjust incentive outcomes based on a broad set of factors to ensure they fairly and accurately reflect the Company's performance over the relevant period and wider circumstances.
Alignment to culture	The Group bonus pool assessment will continue to be based on the achievement of financial and strategic goals of the Group, including cultural objectives. The Committee place great importance on ensuring our pay policies and incentives support the desired culture and behaviours of the Group. The individual scorecard implemented from 2019 for our Group Executive team and Executive Directors provides the Committee with greater structure in determining the bonus of senior management. Within this scorecard there is a greater proportion assessing cultural objectives and behavioural performance, including 360° feedback, to allow for a stronger emphasis on how the individuals achieved their targets. For more information about our culture please see the supporting sustainable growth section of this report on pages 40–50.

The enhancements to our policy ensure that it continues to align executive remuneration and shareholders' long-term interests, adheres to evolving best practice and that our remuneration outcomes are appropriate in the context of the business model going forward.

The Committee recognises and manages any conflict of interest when receiving views from executive directors or senior management on executive remuneration and no individual is involved in deciding their own remuneration.

We will continue to consult with shareholders and investor bodies as we implement the revised policy over the following years.

Policy table for Executive Directors

Salary

Purpose and link to strategy

Provides a core element of remuneration which reflects the responsibilities of the role.

Enables the recruitment and retention of individuals of the calibre required to execute the Group's strategy.

Operation

Base salaries are normally reviewed annually by taking into account a range of factors, including:

- size and scope of the role;
- size, complexity and global breadth of the organisation;
- skills and experience of the individual;
- market competitiveness/relative positioning;
- performance of the Group and of the individual;
- wider market and economic conditions; and
- level of increases being made across the Group.

Any changes are normally effective from 1 April each year.

Maximum Opportunity

There is no defined maximum salary

Increases are determined based on the factors described in the Operation column.

The Committee's normal approach is to initially consider increases within the range awarded to other employees. More significant increases may be awarded in certain circumstances, such as where there is a significant change in the scale, scope or responsibility of a role, where the organisation has undergone significant change, development within a role and/or significant market movement.

The annual base salaries in FY2019 and for FY2020 for each Executive Director are set out in the Annual Report on Remuneration.

Performance Measures

N/A

Benefits

Purpose and link to strategy

- Provide local market competitive benefits and support the well-being of employees.

Operation

A flexible benefits plan is offered, in which individuals have certain core benefits (such as private medical, life assurance, income protection and, additionally in Italy only, disability, accident, car, fuel allowance and luncheon vouchers) together with (in the UK) a taxable cash allowance which can be spent on elective benefits (such as additional medical, life or dental cover).

Car transportation may also be provided for Executive Directors where appropriate.

Due to the high profile of the Group, the Committee reserves the right to provide our Executives with the appropriate level of security arrangements to allow them to perform their duties in the safest possible conditions.

Benefits are reviewed periodically to ensure they remain affordable and competitive. The Committee retains the discretion to provide reasonable additional benefits as appropriate – for example, relocation and other allowances including expatriate assistance, housing and school fees for a finite period, tax preparation and filing assistance and flights back to the home country for the Executive and their family. Repatriation costs are met by the Company if employment is terminated by the Company, other than for just cause.

Where necessary any benefits may be grossed up for taxes.

Executives are eligible to participate in the Group's HMRC tax favoured Save As You Earn Option Scheme (or international equivalent) on the same basis as other employees.

Executive Directors are covered by the Directors' and Officers' insurance and indemnification.

Maximum Opportunity

There is no defined maximum.

Benefits plans are set at (what are in the Committee's opinion) reasonable levels in order to be market competitive for their local jurisdiction and are dependent on individual circumstances.

Participation in the Save As You Earn Option Scheme (or international equivalent) is capped at the same level as all other participants, which is determined by the Company within the parameters of applicable legislation.

Performance Measures

N/A

Retirement benefits

Purpose and link to strategy

Provide Executives with retirement benefits.

Support recruitment and retention of high-calibre people.

Operation

Provision of annual pension allowance, invested in the Company's defined contribution plan or taken as a cash allowance.

In certain jurisdictions, more bespoke pension arrangements may be provided. In such circumstances, the Committee will give appropriate consideration to local employment legislation, market practices and the cost of the arrangement

Maximum Opportunity

The maximum annual pension contribution/cash allowance for Executive Directors is 10 per cent of salary (except where determined by local market practice or where an Executive Director has given notice to retire at the time this policy takes effect).

In Italy, Mr Jerusalmi accrues mandatory state pension (INPS) benefits which are calculated on salary, benefits and annual bonus. Actual benefit due at retirement is set out by the applicable Italian legislation in force from time to time. Under the Italian Trattamento di Fine Rapporto (TFR), he receives contributions which are funded by the Group at a rate fixed by local law and which are paid to Mr Jerusalmi's private pension plan. TFR is calculated on salary, capped benefits, annual bonus and LTIP.

Performance Measures

N/A

Annual Bonus

Purpose and link to strategy

Rewards annual performance against challenging financial, strategic and individual targets linked to Group strategy.

Deferral reinforces retention and enhances alignment with shareholders by encouraging longer-term focus and sustainable performance..

Operation

The Group operates a Group-wide bonus pool which is funded based on the achievement of financial and strategic goals of the Group. Allocations to individual Executive Directors are made from this pool based on the Committee's assessment of their individual performance, taking into account the Group's financial and strategic performance and the achievement of any individual objectives related to their role

Performance targets are reviewed and set by the Committee at the beginning of each performance year.

Awards are determined by the Committee after the year end based upon the actual performance against these targets.

The Committee applies judgement where necessary to ensure approved pay-out levels are reflective of actual, overall performance and has the ability to exercise discretion in adjusting the formulaic outcome of incentives to ensure the outcome is reflective of the performance of the Company and the individual over the period.

- 50 per cent of the annual bonus will be subject to mandatory deferral, normally for a period of three years.
- Bonus deferral will be 100 per cent into shares.
- Dividends (or equivalent) may be paid in respect of deferred shares on vesting.
- Deferred awards are subject to malus provisions as described below. Paid bonuses and vested awards are subject to clawback as described below.

Maximum Opportunity

Maximum annual bonus opportunity of 225 per cent of salary for CEO and 200 per cent of salary for other Executive Directors for maximum performance.

Performance Measures

Based on a combination of financial (e.g. adjusted operating profit), strategic and individual performance targets. Strategic objectives include key targets under the strategic pillars of developing our partnership approach, driving global growth and delivering best in class capabilities. These strategic objectives also impact financial results in the medium term.

The Committee will set the detail and mix of performance measures, targets and weighting based on the strategic objectives at the start of each year. At least 50 per cent of the targets relating to the annual bonus pool in any year will be subject to financial measures.

No bonuses are paid for below threshold performance. The Committee may award any amount between zero and 100 per cent of the maximum opportunity.

The performance measures are applied in the performance year only.

Directors' Remuneration Report (continued)

Remuneration Policy Report

LTIP (Long Term Incentive Plan) 2014

Purpose and link to strategy

Incentivises performance over the longer term through the award of performance related shares.

Aligns reward with long-term, sustainable Group performance and a focus on shareholder value.

Operation

- Under the LTIP 2014, which was approved by shareholders at the 2014 AGM, awards of shares (or equivalent) are granted annually subject to performance conditions.
- Awards normally vest subject to performance targets assessed over a performance period, normally of at least three financial years with an additional holding period of two years. The Committee has discretion to set different performance periods if it considers them to be appropriate.
- The Committee shall determine the extent to which the performance measures have been met. The Committee may make adjustments to performance targets if an event occurs that the Committee determines that an adjustment is appropriate. The performance targets will be at least as challenging as the ones originally set.
- The Committee has the ability to exercise discretion in adjusting the formulaic outcome of incentives to ensure the outcome is reflective of the performance of the Company and the individual over the period.
- Dividends (or equivalent) may be paid on vesting. Unvested awards are subject to a malus provision and vested awards are subject to clawback, as described below.

Maximum Opportunity

Although there is a facility for maximum awards of up to 400 per cent of salary under the plan rules in exceptional cases, it is expected that awards under this plan will normally be up to 300 per cent of salary.

Performance Measures

The Committee determines performance targets each year to ensure that the targets are stretching and support value creation for shareholders while remaining motivational for management.

Vesting of awards is subject to achievement of total shareholder return and other financial performance targets. Any one measure will not exceed two thirds of the award

For each performance element, achievement of the threshold performance level will result in no more than 25 per cent of the maximum award paying out. For achievement of the maximum performance level, 100 per cent of the maximum pays out. Normally, there is straight-line vesting between these points.

Share ownership

Purpose and link to strategy

Ensures alignment with shareholders' interests.

Operation

Executive Directors are expected to build up share ownership over a period of five years and maintain holdings of at least 3x base salary.

Executive Directors are expected to hold 100 per cent of their minimum shareholding requirement for two years post-departure.

In cases where the individual has not had sufficient time to build up share ownership to meet the minimum shareholding requirement, the post-employment shareholding requirement will be based on their actual level of shareholding on departure.

The Committee has discretion to vary or waive part or all of the post-employment shareholding requirement in exceptional circumstances.

Maximum Opportunity

N/A

Performance Measures

N/A

Notes to the Policy Table

Selection of performance measures

Performance targets are set by the Committee to be both stretching and achievable, taking into account the Group's strategic priorities and the economic landscape.

The performance measures that are used for our annual bonus and Long Term Incentive Plan (LTIP) have been chosen to support the Group's strategy. For the annual bonus plan, the Committee continues to believe that it is appropriate to use a balance between financial targets, strategic objectives and individual performance objectives.

The Committee considers that the measures to be used for the LTIP, i.e. TSR and adjusted EPS, are currently the most appropriate measures of long-term performance for the Group. The Committee will continue to review the LTIP measures, weightings and targets on an annual basis, to ensure their continued suitability and to ensure they are stretching both for LSEG as a standalone company and the combined business, should the Refinitiv transaction complete.

Malus and clawback provisions

A malus provision applies to awards granted under the 2014 LTIP and to unvested awards under the Deferred Bonus Plan. This would allow the Committee in its absolute discretion to determine, at any time prior to the vesting of an award, to reduce, cancel or impose further conditions in certain circumstances, including (i) where there is a material misstatement or restatement of the results of the Group in its audited accounts, (ii) the negligence, fraud or serious misconduct of the individual which results in significant reputational damage to the Group or which has a material adverse effect on the financial position of the Group or the business opportunities of the Group, (iii) if the individual is a member of a business unit in the Group which suffers significant reputational damage or material adverse effect on its financial position or on its business opportunities, (iv) where behaviour of the individual is considered to breach the standards of the Group's Code of Conduct, or where there is serious misconduct that has significant reputational consequences for the Group or a relevant business unit, (v) where there is a material failure of risk management in the Company or any member of the Group or a relevant business unit, (vi) where an error in assessing any performance conditions is discovered, or (vii) any other circumstances that the Committee deems to be similar in nature or effect to those above.

A clawback provision applies to vested awards granted under the 2014 LTIP, vested awards under the Deferred Bonus Plan and annual bonuses paid previously. This would allow the Committee in its absolute discretion to claw back from individuals some or all of the vested awards or paid bonus in certain circumstances, including (i) if there is a material misstatement or restatement of the results of the Group in its audited accounts, (ii) the negligence, fraud or serious misconduct of the individual which results in significant reputational damage to the Group or a material adverse effect on the financial position of the Group or the business opportunities of the Group, (iii) if the individual is a member of a business unit in the Group which suffers significant reputational damage or material adverse effect on its financial position or on its business opportunities, (iv) where behaviour of the individual is considered to breach the standards of the Group's Code of Conduct, or where there is serious misconduct that has significant reputational consequences for the Group or a relevant business unit, (v) where there is a material failure of risk management in the Company or any member of the Group or a relevant business unit, (vi) where an error in assessing any performance conditions is discovered, or (vii) any other circumstances that the Committee deems to be similar in nature or effect to those above. Clawback will normally apply for a period of 3 years following vesting of shares/deferred cash bonus and/or payment of bonus, unless the Committee determines otherwise.

Recruitment policy

When determining the remuneration package for a newly appointed Executive Director, the Committee would seek to apply the following principles:

- The package should be market competitive to facilitate the recruitment of individuals of sufficient calibre required by the Group. Consistent with the UK Corporate Governance Code, the Committee would intend to pay no more than it believes is necessary to secure the required talent.
- The ongoing remuneration package would normally include the key elements on the same terms as those set out in the policy table for Executive Directors.
- The maximum level of variable remuneration which may be awarded on recruitment (excluding any buy-outs referred to below) is 625% of salary. Incentive awards made in the first year of appointment may be subject to different performance measures and targets appropriate to the newly recruited Executive Director.
- Recognising that the Group competes for talent in the international financial services sector, on an exceptional basis, the Committee has the ability to include other elements of pay which it feels are appropriate taking into account the specific commercial circumstances (e.g. for an interim appointment). However, this would remain subject to the limit on variable remuneration set out above. The rationale for any such component would be appropriately disclosed.
- In addition, where an individual forfeits arrangements as a result of appointment, the Committee may offer a buy-out, in such form as the Committee considers appropriate taking into account all relevant factors which may include the vehicle, expected value and timing of forfeited opportunities. Any such buy-out will be limited to the commercial value of payments and awards forfeited by the individual.
- Where an Executive Director is required to relocate from their home location to take up their role, the Committee may provide reasonable relocation assistance and other allowances including expatriate assistance. Global relocation support (normally for up to five years) and any associated costs or benefits (including but not limited to housing, school fees, tax preparation and filing assistance and flights back to the home country) may also be provided if business needs require it. Should the Executive's employment be terminated without cause by the Group, repatriation costs will be met by the Group.
- In the event that an internal candidate was promoted to the Board, legacy terms and conditions would normally be honoured, including pension entitlements and any outstanding incentive awards.
- The remuneration package for a newly appointed Non-Executive Director would normally be in line with the structure set out in the policy table for Non-Executive Directors (see page 112).

Directors' Remuneration Report (continued)
Remuneration Policy Report

Service contracts and payments for departing Directors
The Group's current policy is that Executive Directors' service agreements should have notice periods that are no longer than 12 months. The Group may terminate an Executive Director's service agreement by making a payment in lieu of notice of a sum equal to 12 months' salary, pension, flexible benefits allowance, life and medical insurance (but excluding bonus and share incentives) plus any accrued unused holiday entitlement. Consideration will be given to appropriate mitigation terms to reduce payments in lieu of notice made on termination in the event of the Executive Director commencing alternative employment, being appointed as a Non-Executive Director or providing services pursuant to a consultancy agreement in the 12 months following the Executive Director's departure.

The Group may pay an Executive Director's reasonable legal fees for receiving advice in connection with their employment.

The lawful termination mechanisms described above are without prejudice to the Group's ability in appropriate circumstances to terminate in breach of the notice period referred to above, and thereby to be liable for damages to the Executive Director. Liquidated damages clauses are not used.

In the event of termination by the Group, each Executive Director may have an entitlement to compensation in respect of his statutory rights under employment protection legislation in the UK and potentially elsewhere. Directors' and Officers' liability insurance and an indemnity to the fullest extent permitted by the law and the Group's Articles of Association are provided to the Executive Directors for the duration of their employment and for a minimum of 7 years following termination.

The Committee considers that this is consistent with current best practice and this approach will generally be adopted for new appointments. Where appropriate and when recruiting non-UK based Directors, the Committee may agree different terms based on local legal requirements or market practice.

Treatment of variable incentives
Annual bonus
Individuals may be considered for an annual bonus in respect of the period prior to cessation. Any award would be at the discretion of the Committee, subject to the Executive Director's performance and period of employment.

Deferred Bonus Plan
For good leavers, awards will usually vest at the normal vesting date, although the Committee may determine that awards vest on cessation of employment. The award will usually vest in full, or on a prorated basis at the Committee's discretion. Good leavers are those who cease to be an employee of a member of the Group by reason of death, injury, disability, ill-health, redundancy, the sale of the individual's employing business or the transfer of the Company out of the Group, or any other reason which the Committee decides in its discretion, having regard to a range of relevant factors including the Executive Director's performance, length of service and circumstances of their departure.

Where an individual is not considered to be a good leaver, unvested awards will lapse. Where an individual is summarily dismissed, all awards will lapse.

Deferred awards are subject to malus and vested awards are subject to clawback as detailed above.

We are seeking shareholder approval for the Deferred Bonus Plan at our forthcoming AGM. Formal approval of the plan and its rules is being sought in connection with the extension of mandatory deferral, beyond the Executive Directors and Executive Committee, to senior management across our business.

Long-Term Incentive Plan 2014
For good leavers, awards will normally vest at the normal vesting date and following the end of the performance period, unless the Committee determines that awards should vest following cessation of employment. Vesting will be subject to performance and unless the Committee determines otherwise (or that another basis of reduction is appropriate) prorated for time in employment. Good leavers are those who cease to be an employee of a member of the Group by reason of death, injury, disability, ill-health, redundancy, and the sale of the individual's employing business or transfer of the Company out of the Group, or any other reason which the Committee decides in its discretion, having regard to a range of relevant factors including the Executive Director's performance, length of service and circumstances of their departure.

Where an individual is not considered to be a good leaver, unvested awards will lapse.

Unvested awards are subject to malus and vested awards are subject to clawback as detailed above.

Detailed share plan provisions
Share awards are subject to the terms of the relevant plan rules under which the award has been granted. The Committee may adjust or amend awards only in accordance with the provisions of the plan rules. This includes making adjustments to awards to reflect certain corporate events, including a variation in the Company's share capital, a demerger or a special dividend. In change of control circumstances, all LTIP awards will normally vest on an accelerated basis to the extent that the performance conditions are satisfied, and, unless the Committee determines otherwise, subject to time pro-rating. Deferred Bonus awards will normally vest in full. The Committee may also allow or require some or all of an award to be exchanged if not yet vested.

Individual terms
David Schwimmer entered into a service agreement with the Group on 12 April 2018 and was appointed with effect from 1 August 2018. David Schwimmer's service agreement may be terminated by either party giving at least 12 months' notice. Alternatively, the Group may terminate the contract by payment in lieu of notice of a sum equal to 12 months' salary, pension, flexible benefits allowance, life and private medical insurance (but excluding bonus, share incentives and car transportation). Any payment in lieu of notice will be paid in equal monthly instalments from the date of termination of the employment. Should Mr Schwimmer commence alternative employment, be appointed as a Non-Executive Director or provide services pursuant to a consultancy agreement in the relevant period (of 12 months) following his departure from the Group, the instalments will be reduced by one-twelfth of the annual remuneration earned from the alternative employment, directorship or consultancy. Payments of the instalments may be required to be deferred until six months after termination by US tax rules applying to Mr Schwimmer. To the extent that any payment or benefits payable to Mr Schwimmer under his service agreement or under any bonus or share incentive plan would be subject to US excise tax, the payments and benefits may be reduced if this would result in Mr Schwimmer receiving a greater after tax amount than if the benefits were not reduced. On termination (other than by reason of summary dismissal) Mr Schwimmer will be eligible to receive a pro-rata bonus for the year in which his employment is terminated subject to company and individual performance.

David Warren entered into a service agreement with the Group on 11 June 2012 and was appointed with effect from 2 July 2012. David Warren's service agreement may be terminated by either party giving at least 12 months' notice. Alternatively, the Group may terminate the contract by payment in lieu of notice of a sum equal to 12 months' salary, pension, flexible benefits allowance, life and private medical insurance (but excluding bonus and share incentives). Any payment in lieu of notice will be paid in 12 equal monthly instalments from the date of termination of the employment. Alternatively, the Group may in its discretion continue to provide pension and life and private medical insurance for the 12 months following termination. Should Mr Warren commence alternative employment, be appointed as a Non-Executive Director or provide services pursuant to a consultancy agreement in the relevant period (of 12 months) following his departure from the Group, the instalments will be reduced by one-twelfth of the annual remuneration earned from the alternative employment, directorship or consultancy. Payments of the instalments may be required to be deferred until six months after termination by US tax rules applying to Mr Warren. To the extent that any payment or benefits payable to Mr Warren under his service agreement or under any bonus or share incentive plan would be subject to US excise tax, the payments and benefits may be reduced if this would result in Mr Warren receiving a greater after tax amount than if the benefits were not reduced. On termination (other than by reason of summary dismissal) Mr Warren will be eligible to receive a pro-rata bonus for the year in which his employment is terminated subject to company and individual performance.

Raffaele Jerusalmi entered into a service agreement with Borsa Italiana on 1 October 2001, amended on 3 May 2011, and a service agreement with LSEG Holdings (Italy) on 3 May 2011, which reflects his period of continuous service from 1 October 2001. On 1 April 2013, Raffaele Jerusalmi's employment contract transferred from LSEG Holdings (Italy) to LSEG Holdings Italia S.p.A. If Raffaele Jerusalmi is dismissed, his notice period will be equal to 12 months. If Raffaele Jerusalmi resigns, he is required to give three months' notice. On termination of either employment for any reason, Raffaele Jerusalmi is entitled to severance payments under Italian law equal to: (i) Trattamento di Fine Rapporto (TFR) which Raffaele Jerusalmi has elected to transfer to his private pension plan on a monthly basis since August 2007. He will therefore not be entitled to further TFR benefits post-employment. The TFR contributions currently equate to 7.407% (including solidarity tax at the current rate of 0.5%, which does not count towards Raffaele Jerusalmi's contributions to his private pension plan) of base salary, benefits, annual bonus and LTIP paid to Raffaele Jerusalmi during his employment; (ii) prorated supplementary monthly payments (the annual salary is normally paid in 12 instalments plus two supplementary monthly payments); and (iii) a payment in lieu of untaken holidays, if any. Where no just cause for termination exists, a payment in lieu of notice is payable if the employment is terminated with immediate effect. The payment in lieu of notice is in addition to the payments at (i), (ii) and (iii) above and is equal to the total compensation due to Raffaele Jerusalmi during the notice period. In addition, under the banking/credit sector collective bargaining agreement, Raffaele Jerusalmi would be entitled upon termination without reasonable cause to a supplementary indemnity payment ranging between 7 and 22 months' total compensation. For these purposes total compensation includes base salary, average of any variable pay and TFR contributions paid during the last 36 months of the employment, and benefits in kind.

Remuneration policy for other employees and consideration of wider employee remuneration
The Committee has responsibility for overseeing arrangements for all employees and reviews broader workforce policies and practices in order to support decisions on executive pay.

Paying our employees fairly relative to their role, skills, experience and performance is central to our approach to remuneration, and our reward framework and policies support us in doing this. Our Group-wide reward framework establishes the compensation structure, elements and leverage for each career stage in the organisation, providing the Committee with oversight of workforce remuneration.

The Committee place great importance on ensuring our pay policies and incentives support the desired culture and behaviours of the Group. As detailed in the 'Annual bonus operation' section on page 120, an individual scorecard was implemented from 2019 for our Group Executive team as well as our Executive Directors. This provides the Committee with greater structure in determining the bonus of senior management as well as allow for a greater focus on culture and behaviours.

The remuneration policy for senior Executives and other employees is determined based on similar principles to Executive Directors. For roles below the main Board, the exact structure and balance are tailored based on various factors including the scale, scope or responsibility of the role, development within a role and/or significant market movement. The Committee reviews and comments on the salary, bonus and LTIP awards of the senior Executives immediately below Board level and approves the overall design and distribution of incentive awards available to all employees, including share-based plans.

The approach in respect of base salary and benefits is generally consistent across the organisation. Executive Directors' and other senior managers' remuneration includes a greater proportion of performance related pay when compared to other employees. The Committee considers this is essential to differentiate levels of responsibility and align pay to sustainable long-term performance and shareholders' interests.

All employees are eligible to participate in the annual bonus plan which is subject to similar metrics to those used for the Executive Directors. Opportunities vary by organisational level. Some sales employees are eligible to participate in sales compensation plans rather than the annual bonus plan.

50% of the annual bonus for our Executive Directors and Group Executive team is deferred into shares. For the 2020 performance year, our bonus deferral scheme will be extended below Group Executive level to the Managing Director population. This reinforces the alignment of the pay of our senior employees with shareholder interests and the Group's long-term performance.

The malus provision on unvested awards applies automatically to all awards granted under the Deferred Bonus Plan and the 2014 LTIP. The Committee also exercises discretion at each grant date to apply clawback rules to all awards granted, including participants other than Executive Directors.

In setting remuneration for Executive Directors, the Committee considers the overall approach to rewarding employees across the Group taking into account the scale, scope or responsibility of the role, development within a role and/or significant market movement.

Salary increases of Executive Directors in percentage terms are normally in line with those of employees in their local jurisdictions. Engagement with employees on executive remuneration and how it aligns with wider company pay policy is undertaken through our Employee Board consultation process.

The Committee receives ongoing regulatory updates and information on external market practices from its independent external advisers who provide additional context for decisions.

Consideration of shareholders' views

The Committee is mindful of shareholder views when setting and evaluating ongoing remuneration principles and commits to consulting with shareholders prior to any significant changes to the remuneration policy.

In formulating the revised policy, we undertook an extensive shareholder consultation exercise with our major shareholders and investor bodies and are grateful for the valuable feedback provided, which was generally very positive and supportive of the Committee's approach. As part of the process, we consulted on the introduction of a post-employment shareholding requirement. The Committee's initial proposal was to introduce a requirement for Executive Directors to hold 100% of their MSR for the first year following departure and to hold 50% of their MSR for the second year. However, further to feedback received during consultation, it has been determined to strengthen this further such that Executive Directors will be required to hold 100% of their MSR for two years post-departure.

Policy for Non-Executive Directors:

Approach to setting fees	Basis of fees	Other items
The fees for Non-Executive Directors are set at a level which is considered appropriate to attract individuals with the necessary experience and ability to make an important contribution to the Group's affairs. The Chair's fee is determined by the Remuneration Committee, and the Board is responsible for determining all other Non-Executive Director fees. Fees are reviewed periodically to ensure they remain appropriate in the context of: the role scope; company size, complexity and global breadth; and wider market conditions. The Committee retains the flexibility to increase, adjust and make one-off payments to Non-Executive Directors based on their remit. Fees are set taking into account the level of responsibility of each Non-Executive Director and fees at other companies of a similar size and complexity. The aggregate fees payable to all Non-Executives combined (excluding the Chair and excluding fees paid for any appointments on subsidiary boards) are capped as set out in the Group's Articles of Association as they may be amended by a resolution of shareholders from time to time. The current limit on the aggregate fees that are payable is £1,500,000 per financial year.	Non-Executive Directors receive a basic annual fee with additional fees payable for services such as committee chairmanship. Certain Non-Executive Directors are also entitled to receive fees from subsidiary companies. The Non-Executive Chair of the Group receives an all-inclusive fee for the role. Fees are neither performance-related nor pensionable. Non-Executive Directors are not eligible to participate in the annual bonus or LTIP plans and are not entitled to any payments on termination.	Non-Executive Directors receive an allowance for any Board meeting involving intercontinental travel. Travel and other appropriate expenses with associated taxes (including fees incurred in obtaining professional advice in the furtherance of their duties) incurred in the course of performing their duties are reimbursed to Non-Executive Directors. Non-Executive Directors are covered by the Directors' and Officers' insurance and indemnification. Non-Executive Directors are required to build up share ownership of at least 1x basic annual fees within three years of appointment.

Non-Executive Directors have letters of appointment with no notice period except for the Group Chair who has a notice period of 6 months unless he is not re-elected by shareholders in which case his appointment will terminate immediately. The Non-Executive Directors' appointments are for an initial period of 3 years from the date of appointment and are also subject to re-election by shareholders.

Amendments to the Remuneration Policy Report

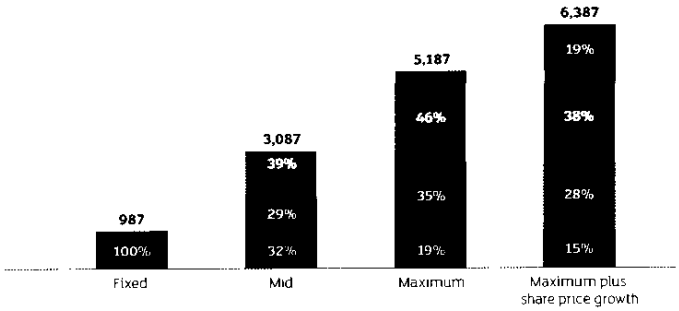
The Committee remains mindful that regulation of companies in the financial services sector continues to evolve. The Committee recognises that remuneration arrangements may need to be amended in order to comply with any new regulations which become applicable to the Group. The Committee reserves the right to make changes to the Policy described above in order to comply with any such regulatory requirements which apply to the Group including any changes required under the UK Corporate Governance Code or for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation without obtaining shareholder approval for that amendment. Where this results in a major structural change, the Committee would expect to present a revised policy to shareholders for approval at the following AGM.

Illustration of the application of the remuneration policy for Executive Directors

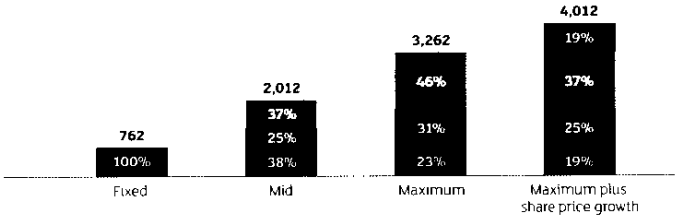
The chart on the right illustrates how much the current Executive Directors could receive under four different performance scenarios in the first year of this policy taking effect i.e. 2020: minimum, mid-range, maximum and maximum assuming a 50% increase in share price for LTIP awards during the vesting period. Note that London Stock Exchange Group plc does not have a stated 'target' level for share awards, so we have assumed 50% of maximum awards to illustrate a mid-range scenario.

Element of remuneration	Detail of assumptions
Fixed remuneration	This comprises: – Base salary with effect from 1 April 2020 – Benefits as they applied on 31 December 2019 and set out in the single figure table in the Annual Remuneration Report but excluding the CEO's fixed term relocation allowance (£150,000 p.a.) which ceases in July 2021. – Pension
Annual Bonus	Assumes maximum opportunity of 225% of salary for CEO and 200% of salary for other Executive Directors For mid-range scenario: assumes payment of 50% of the maximum opportunity For maximum: assumes payment of 100% of the maximum opportunity
Long Term Incentive Plan	Assumes maximum opportunity of 300% of salary in conditional shares For mid-range scenario assumes 50% of the maximum opportunity For maximum: assumes vesting of 100% of the maximum opportunity plus a second scenario assuming a 50% increase in share price during the performance period

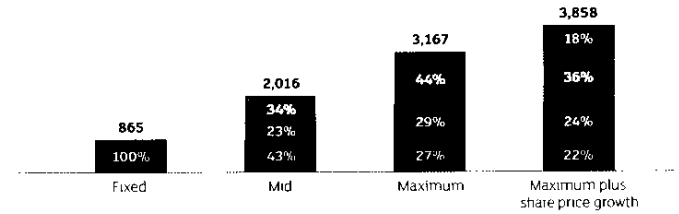
David Schwimmer



David Warren



Raffaele Jerusalmi



● Fixed remuneration ● Annual variable remuneration
● Long term remuneration ● Share price growth

Absolute values are £k

Legacy arrangements

The Committee may make any remuneration payments and payments for loss of office (including exercising any discretions available to it in connection with such payments) where the terms of the payment were agreed/granted (i) before the policy came into effect or (ii) at a time when the relevant individual was not a Director of the Group and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a Director of the Group.

Directors' Remuneration Report (continued)

Annual Report on Remuneration

This section sets out how remuneration arrangements have operated during the past financial year (FY2019), and also provides details on how we intend to operate our policy during the coming year (FY2020). This report will be put to an advisory vote at the 2020 AGM. The information from this page 114 to page 128 has been audited where required under the regulations and is indicated as audited where applicable.

Single total figure of remuneration for Executive Directors (Audited)

	David Schwimmer				David Warren				Raffaele Jerusalmi[14]			
Single total figure of remuneration	**FY2019 £000**	**% of total**	**FY2018 £000**	**% of total**	**FY2019 £000**	**% of total**	**FY2018 £000**	**% of total**	**FY2019 £000**	**% of total**	**FY2018 £000**	**% of total**
Fixed pay												
Salary	775		323		500		617		460		463	
Flexible benefits allowance	15		6		20		20					
Benefits	240[3]		174[3]		108[6]		90[6]		41[10]		28[10]	
Pension	116[4]		48[4]		125[7]		124[7]		174[11]		267[11]	
Other			1,050[5]						190[12]		205[12]	
Total fixed pay	1,146	47%	1,601	74%	753	16%	851	23%	865	21%	964	30%
Pay for performance												
Annual bonus	1,310		552		732		931[8]		588		683	
Long term incentive–performance[1,2]					1,464[2]		1,146[9]		1,214[2]		974[13]	
Long term incentive–share price growth[1,2]					1,814[2]		751[9]		1,505[2]		638[13]	
Total pay for performance	1,310	53%	552	26%	4,010	84%	2,827	77%	3,300	79%	2,295	70%
Total remuneration	**2,456**		**2,153**		**4,763**		**3,679**		**4,172**		**3,258**	

Notes to the table:

1. Value for Long Term Incentives shown for FY2019 represents estimated value of share awards granted in 2017 that vest in April 2020. The estimate is based on the confirmed 100% vesting of the EPS element and forecast 100% vesting of the TSR element, which will be confirmed in April 2020.
2. The value delivered through performance is calculated as the number of shares forecast to vest in April 2020 multiplied by the share price on the date of grant. The value delivered through share price growth is calculated as the same number of shares multiplied by the difference between the average share price in the last 3 months of the financial year, being £71.01 and the share price on the date of grant. The Committee does not intend to amend the outcome or make any adjustments in regard to share price growth over the period, on the basis that this reflects our view of the Group's underlying performance and returns for shareholders over the performance period.

David Schwimmer

3. Benefits include the cash value of private medical, income protection and life assurance plus expatriate allowances and commuting expenses (including car transportation where appropriate) with associated taxes.
4. Annual pension allowance of 15% of salary.
5. A one-off payment of £1,050k was made in March 2019 to compensate for the forfeiture of cash compensation for 2018 from his previous employer. There were no other buy-outs.

David Warren

6. Benefits include the cash value of private medical, income protection and life assurance plus expatriate allowances and commuting expenses (including car transportation where appropriate) with associated taxes.
7. Annual pension allowance of 25% of salary.
8. FY18 bonus calculated per 7 months as Interim CEO (including step-up allowance) plus 5 months as CFO.
9. 39,922 Performance shares vested on 17 March 2019 at £47.50 per share. This equates to £1,896,295.

Raffaele Jerusalmi

10. Benefits represent the cash value of private medical, disability and life insurance cover, luncheon vouchers, car and fuel benefit.
11. Pension: mandatory INPS contributions calculated on salary, benefits and bonus for the 12-month period.
12. Trattamento di Fine Rapporto mandatory arrangements calculated on salary, capped benefits, bonus and shares and paid into Mr Jerusalmi's pension plan for the 12-month period.
13. 33,923 Performance shares vested on 17 March 2019 at £47.50 per share. This equates to £1,661,343.
14. FY2019 rate of £1 = €1.14 and FY2018 rate of £1 = €1.13.

Additional notes to the Single total figure of remuneration (Audited)
Fixed pay
Base salary
When reviewing Executive Director salaries, and in line with our policy, the Committee considers multiple reference points including companies in the FTSE 100, the broader Financial Services sector and other international exchange groups.

Benefits
A flexible benefits plan is offered, in which individuals have certain core benefits (such as private medical, life assurance, income protection and, additionally in Italy only, disability, illness, accident, car, fuel allowance and luncheon vouchers) together with (in the UK) a taxable cash allowance which can be spent on elective benefits (such as additional medical, life or dental cover). Where received as a cash supplement, this allowance is not used to calculate bonus payments or pension contributions.

Benefits are reviewed periodically to ensure they remain affordable and competitive. Executives are eligible to participate in the Group's HMRC tax-favoured SAYE Scheme (or international equivalent).

David Schwimmer receives a flexible benefits allowance of £15,000 per annum. In addition, he receives benefits in kind which include private health care, permanent health insurance and life assurance arrangements. Mr Schwimmer is also provided with car transportation where appropriate.

As an expatriate from the US to UK, David Schwimmer receives the following:

- For the first three years of employment, an annual allowance of £150,000 in respect of accommodation expenses.
- Tax preparation and filing assistance in the US and the UK.
- The Group will meet the costs of repatriating Mr Schwimmer's effects back to the US if it terminates his employment other than in circumstances such as serious misconduct which would justify summary termination.
- For the first five years of employment, an annual allowance of up to £50,000 to cover flights between London and the US for Mr Schwimmer and his family.

David Warren receives a flexible benefits allowance of £20,000 per annum, which is unchanged since last year. In addition, he receives benefits in kind which include private health care, permanent health insurance and life assurance arrangements.

As an expatriate from the US to UK, David Warren receives the following:

- Tax preparation and filing assistance in the US and the UK.
- The Group will meet the costs of repatriating Mr Warren's effects back to the US if it terminates his employment other than in circumstances such as serious misconduct which would justify summary termination.
- An annual allowance of up to £30,000 net per annum to cover flights between London and New York for Mr Warren and his family.

Raffaele Jerusalmi receives benefits in kind that include private medical, disability and life insurance cover, luncheon vouchers, car and fuel. He also contributes towards the Italian mandatory national insurance system.

There are no contractual malus or clawback provisions in place in relation to benefits.

Executive Directors are covered by the Directors' and Officers' insurance and indemnification.

Retirement Benefits
In the UK, pension provision for our Executive Directors takes the form of a non-consolidated cash allowance; only base salary is used to calculate pension entitlement and no other pension supplements apply.

David Schwimmer received an allowance equivalent to 15% of base salary as a taxable cash supplement. For 2020, this will be reduced to 10%.

David Warren receives an allowance equivalent to 25% of base salary as a taxable cash supplement. The Committee do not intend to amend Mr Warren's allowance as he has announced his retirement from the company.

Raffaele Jerusalmi accrues mandatory state pension (INPS) benefits in Italy. Actual benefit due at retirement is set out by the applicable Italian legislation in force from time to time. Under the Italian TFR, he receives contributions which are funded by the Company at a rate fixed by local law and which are paid to Mr Jerusalmi's private pension plan. Both INPS and TFR contributions are included in the Single total figure of remuneration table on the previous page.

Bonus awarded for FY2019
Executive Directors are eligible to receive an annual bonus based on meeting or exceeding bonus targets that are set at the beginning of the year, looking at the Group's financial performance, strategic deliverables and their personal contribution.

The Committee also receives input from the Risk Committee with regard to performance related to risk culture (awareness, transparency and accountability) when assessing remuneration decisions.

The operation of the FY2019 annual bonus is as per last year. The Group bonus pool continues to be assessed against 60% financial performance and 40% against strategic deliverables. The Committee considers AOP to be of particular significance for the Group and believes it should continue to be the main financial measure for annual bonus plan purposes. As per 2018, the maximum bonus opportunity is 225% of salary for the Chief Executive Officer and 200% of salary for other Executive Directors.

The Executive Directors' awards are funded from the Group bonus pool. For FY2019 onwards the performance of the Executive Directors and Group Executive team is assessed as part of a scorecard. This scorecard aligns the bonus assessment with the construct of the Group bonus pool: 60% against Group AOP; 40% against strategic deliverables. The 'strategic' element includes key Group strategic initiatives as well as personal and divisional objectives.

Further to our commitment to ensure a greater focus on the development of culture for the Group, the Committee determined that within this scorecard there should be a greater proportion assessing behavioural performance, to allow for a stronger emphasis on how the individuals achieved their targets. A 360° feedback process informs part of the assessment of the personal element of the scorecard.

Directors' Remuneration Report (continued)

Annual Report on Remuneration

Determination of Bonus for FY2019

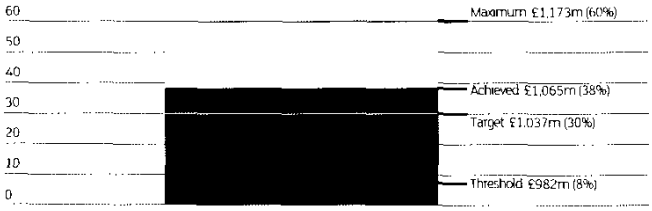
The Committee determined the overall Group bonus pool with reference to the 12-month performance period ending 31 December 2019. The performance measures and targets are set out below:

		Actual performance	Target	Performance relative to target	Maximum percentage of bonus	Actual percentage of bonus
FY2019 Group Bonus Pool	**Group AOP**	FY2019 AOP of £1,065m.	FY2019 AOP of £1,037m.	Above target	60%	38%
	Strategic Deliverables	– Identification, negotiation, planning and agreement of the strategically transformational acquisition of Refinitiv; – Arrangement of a Bridge Facility, providing debt re- financing capacity relating to the proposed acquisition; – *Robust management and substantial growth of core business during preparation for* the proposed transaction; – Strategically targeted investments that facilitate expansion and innovation, including *the acquisition of Beyond Ratings, a 4.92% stake in Euroclear and an equity interest in* Nivaura that supports innovation in the capital raising process; – Substantial progress in driving the cultural agenda, including significantly improved employee engagement results; leadership capability and development programmes; and the 360° feedback process successfully embedded across the leadership population; – Following a focus on a number of gender diversity initiatives, the proportion of female candidates hired externally at senior manager level was 41% in 2019, including the appointment of the Head of Government Relations and Regulatory Strategy; – The formation of a unified Post Trade division, combining our leading clearing and settlement businesses with regulatory reporting services; – Robust navigation of the regulatory landscape and stakeholder engagement during a period of macroeconomic and political uncertainty including Brexit; – Organisational enhancements to strengthen our ability to deliver the medium-term strategic agenda, including the formation of a Group Compliance function and the Chief Integration Officer and Chief Operating Officer appointment; – Innovation across our post trade businesses that continue to drive growth, including substantial NTI revenues, and the securing of an updated Swapclear agreement; – Continued product and market innovation in relation to sustainability and emerging markets, in particular across our Information Services and Capital Markets divisions; and – *Embedding cyber resilience tools, processes and a risk-averse culture to ensure the* strongest possible protection across the Group, whilst recognising there have been some shortfalls in operational resilience and technology.		Above target	40%	35%
	Total				***100%***	***73%***

1. AOP excludes amortisation of purchased intangibles, non-underlying items
2. For the FY2019 Group AOP bonus measure, Threshold was set at Target minus 5% and Maximum was set at Target plus 13%
3. Target adjusted for IFRS15

Group adjusted operating profit performance

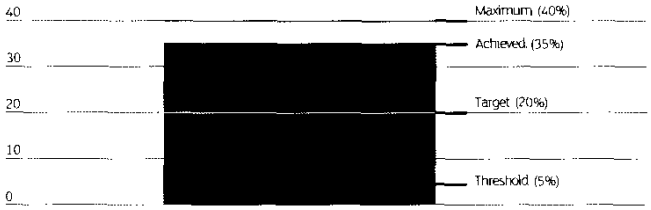
% of total bonus



1. Actual result for Group AOP performance is 63% of maximum

Strategic deliverables performance

% of total bonus



2. Actual result for Strategic Deliverables performance is 87.5% of maximum

Application of discretion
The Committee has carefully considered the resiliency and technology of the Group in 2019. It is acknowledged that there have been some shortfalls in these areas. Therefore, in recognition of an otherwise exceptional transformative year, the Committee determined that the overall rating of the strategic deliverables should be reduced from 40% to 35%. As the bonuses of Executive Directors and other Group Executives are hard-wired to LSEG performance, this discretion has directly reduced their 2019 bonus outcomes. In addition, where the Committee have deemed appropriate, the formulaic bonus outcomes for certain individuals have been reduced further.

Chief Executive Officer
The Group produced strong financial results as it executes its strategy to deliver best-in-class capabilities, drive global growth and develop our partnership approach.

David Schwimmer continued in his role as CEO and has overseen strong growth in a challenging macroeconomic and geopolitical environment, continuing the Group's Open Access and customer partnership approach to deliver innovative solutions, demonstrated by the launch of several new products, services and initiatives.

On 1 August 2019, the Group announced a proposed transaction to acquire Refinitiv, a leading provider of data, analytics and financial markets solutions. David led the identification, negotiation and agreement of this strategically transformational acquisition that, should it complete, will provide highly complementary capabilities and significantly accelerate the Group's strategy to be a leading global financial markets infrastructure provider. David has also ensured the strong management and substantial growth of the Group's core business alongside the preparation for the proposed transaction, including the Board's response to the unsolicited approach from Hong Kong Exchanges and Clearing Ltd. Reflected in the strong shareholder support for the proposed Refinitiv transaction, David has formed good relationships with investors and his leadership in developing strategic priorities to deliver further value have been well received.

Furthermore, the Group announced the acquisition of a 4.92% minority stake in EuroClear, with a seat on the Board. The acquisition further strengthened the existing commercial relationships between the two businesses, to the benefit of our respective customers.

David has continued to build strong relationships with key regulators and government officials in the major territories where the Group operates and carefully navigated the regulatory landscape and stakeholder engagement during a period of macroeconomic and political uncertainty, ensuring the Group was well prepared for any outcome related to the UK's exit from the European Union. He has carefully managed complex change projects while minimising the impact to customers, markets or revenue streams, such as the formation of a Group Post Trade division that combines our leading clearing and settlement businesses with regulatory reporting services. This will enable LSEG to drive further collaboration and innovation for our customers, while continuing to operate on an Open Access basis and maintaining local governance and regulatory oversight.

David has led and been a visible role model for the greater focus on culture and behaviour for the Group and has demonstrated strong core leadership values as well as the importance of the principles of collaboration, innovation and integrated execution for the Group. Under David's direction, LSEG has taken a number of steps to help us achieve our culture goals, including: the launch of our global Inclusion Network; our leadership teams have continued to receive development over the year; and the 360° feedback process has been successfully embedded across our leadership team.

David has also initiated a greater focus on sustainability to ensure the Group plays a strong role in enabling positive changes in our markets, such as the development of a Sustainable Bond Market and a Green Economy Mark to promote companies with 50% or more revenues from defined green economy activities.

To strengthen our ability to deliver the medium-term strategic agenda, David has driven organisational enhancements, including the formation of a Group Compliance function and the appointments of a Chief Integration Officer and Chief Operating Officer and other critical roles across the Group's Executive and leadership teams.

Chief Financial Officer
David Warren continued in his position as CFO, providing financial support for growth across the core businesses and strong leadership with respect to the Refinitiv acquisition.

David has led the Group's strong financial performance in 2019, supporting new growth opportunities while maintaining a focus on investment discipline and cost control, including the delivery of the cost savings programme announced in March 2019. In August 2019, the Group arranged a Bridge Facility in connection with its proposed acquisition of Refinitiv. The Bridge finance offers the Group greater certainty of availability of funds to potentially refinance the debt it takes on at completion as a result of the acquisition. During the period the Group maintained its long-term credit rating, although both agencies moved their ratings to a negative outlook in anticipation of the impact of the Refinitiv transaction on net leverage. Both agencies are positive on the strategic rationale of the Refinitiv transaction. The Group's financial position improved during the year, with both interest cover and net debt improving over the 12 months to 31 December 2019.

David was also central to the Group's M&A activities and strategically targeted investments in the year that facilitate expansion and innovation, including the proposed acquisition of Refinitiv; the acquisition of Beyond Ratings; and purchase of a 4.92% minority stake in EuroClear. David has continued to develop strong relationships with shareholders, as reflected by the positive market support for Group development and acquisitions.

The Committee recognises that there is further work to be done in improving diversity in the leadership positions within our Finance function.

Executive Director, CEO of Borsa Italiana & Director of Capital Markets
In addition to his responsibilities as an Executive Director for the Group, Raffaele Jerusalmi has led the Group's Capital Markets division and Post Trade division in Italy. Both segments have grown revenue against a challenging macroeconomic backdrop and low levels of volatility. Raffaele has continued to promote innovation through new initiatives.

The Group welcomed 109 companies to our markets in the year, raising a combined total of £23.4 billion (2018: £28.7 billion) in new and further issues. This is a good performance against a backdrop of significant levels of uncertainty in our key UK market, which has required significant engagement with key stakeholders. Over a third of the £6.9 billion total capital raised by investment funds through IPOs and further issues this year has been raised by green funds. Borsa Italiana's third Italian Sustainability Day welcomed a record number of participants amidst the growing focus on sustainable investment.

Other notable achievements in 2019 include: Borsa Italiana welcoming Nexi in April 2019, the largest IPO in Europe for money raised last year; Huatai Securities was welcomed as the first issuer of GDRs on Shanghai-London Stock Connect in June, a significant achievement in our relationship with China; and the acquisition of a minority stake in Nivaura, supporting capital markets innovation through the use of emerging technologies.

Directors' Remuneration Report (continued)

Annual Report on Remuneration

Based on the above context and an assessment of individual performance, the Remuneration Committee awarded bonuses to each of the Executive Directors as follows:

Role		Chief Executive Officer	Chief Financial Officer	Executive Director, CEO of Borsa Italiana & Director of Capital Markets
Bonus for FY2019	**% of salary**	169% of salary	146% of salary	128% of salary
	% of maximum	75%	73%	64%
	£ total amount	£1,310,000	£732,000	€670,000[1]
	Of which 50% is deferred	£655,000	£366,000	€335,000
Bonus Component	**Financial Performance (60%)**	63% of maximum	63% of maximum	63% of maximum
	Strategic Deliverables (20%)	87.5% of maximum	87.5% of maximum	87.5% of maximum
	Personal/ Divisional Objectives (20%)	100% of maximum	90% of maximum	60% of maximum

1. Incorporates an adjustment to the formulaic bonus outcome of Mr Jerusalmi, in light of the technology outage in LSE plc in August 2019 when he was Director of Capital Markets.

Compulsory deferral under existing Remuneration Policy

Executive Directors must compulsorily defer 50% of their bonus into shares. In relation to performance year 2019 deferral is for a period of two years except for the CEO who, under the terms of his appointment, must defer for a period of three years. For performance year 2020 onwards, in accordance with the enhancements made under our revised policy, Executive Directors must compulsorily defer 50% of their bonus into shares for a period of three years. Dividend equivalents will be paid in respect of deferred shares on vesting.

Awards granted in March 2016 with a performance period ending in FY2019

The performance period for the absolute TSR element of the Performance Share awards ended in March 2019. The awards granted in 2016 were based on absolute TSR performance in the 3 years from grant, and adjusted EPS performance in the 36-month performance period to December 2018. Over the period, annualised absolute TSR performance in the 3 years to March 2019 was 23% per annum and therefore vested at 100% for this element. The Company also delivered average adjusted EPS growth of 1.3% per annum over the performance period and therefore vested at 79.2%. The vesting price as at 17 March 2019 was £47.50.

Awards granted in March 2017 with a performance period ending in FY2020

The value shown in the single figure table on page 114 for the financial year ending December 2019 represents the estimated value of the 2017 awards which will vest in March 2020. The estimate is based on the confirmed 100% vesting of the EPS element and forecast 100% vesting of the TSR element, which will be confirmed in April 2020. The estimated value is based on the average share price in the final 3 months of the financial year. The Committee does not intend to amend the outcome or make any adjustments in regard to share price growth over the period, on the basis that this vesting reflects our view of the Group's underlying performance and returns for shareholders over the performance period.

The final vesting outcome (including the actual share price at vesting) following the end of the performance period will be disclosed in the next Annual Report on Remuneration covering FY2020.

The performance conditions applying to awards granted in March 2017 are as follows:

EPS element (50%) – average adjusted EPS growth	TSR element (50%) – absolute TSR growth	Proportion of relevant element which vests
Less than 6% p.a.	Less than 6% p.a.	0%
6% p.a.	6% p.a.	25%
12% p.a. or more	14% p.a. or more	100%
Straight-line pro-rating applies between these points		

LTIP Awards Granted in FY2019 (Audited)

Awards during FY2019 were granted in March under the LTIP and were made with a value of 300% of salary for David Schwimmer, 275% of salary for David Warren and 250% of salary for Raffaele Jerusalmi (at rate of £1 = €1.17). The same EPS and TSR performance conditions and vesting schedules described above for 2017 awards also apply to these 2019 awards.

		Chief Executive Officer	Chief Financial Officer	Executive Director, CEO of Borsa Italiana & Director of Capital Markets
2014 LTIP (Nil-cost performance options) granted on 22 March 2019[2]	**% of salary**	300% of salary	275% of salary	250% of salary
	Face value	£2,325,000	£1,375,000	£1,120,933 (being sterling equivalent of €1,312,500 on date of grant)
	Share price[1]	£46.42	£46.42	£46.42
	Number of LTIP shares granted	50,086	29,620	24,147

1. The share price of £46.42 was determined using the closing price (MMQ) on 21 March 2019 as approved by the Share Scheme Committee (a sub-committee of the Remuneration Committee).
2. TSR is measured over a 2 month trailing average at the start and end of the 3-year performance period which will end on 21 March 2022. EPS is measured over three financial years ending 31 December 2021 and compared to the FY2018 baseline

Other share plans (SAYE, SharePurchase)
All UK employees, including Executive Directors, are eligible to participate in the HM Revenue & Customs tax-favoured Save As You Earn Scheme (SAYE). Under the rules of the SAYE, participants can save up to £500 each month, for a period of three years. At the end of the saving period, savings may be used to acquire ordinary shares by exercising the related option.

The options may be granted at an exercise price which represents a discount of up to 20% to market value at the date of invitation. No performance conditions are attached to SAYE options. There is also an International Sharesave Plan (ISP), which is designed to provide share options to Group employees, including Executive Directors, who are not based in the UK on similar terms to the options that are available to UK employees through the SAYE. Employees in France, Hong Kong, Italy, Malaysia, Sri Lanka and the US participate in the ISP. As a core component of our employee proposition and benefits offering it acts as a modest retention tool with 59% of eligible employees participating globally.

In 2019, we launched SharePurchase to permanent employees in Australia and Romania, with one-third of eligible employees choosing to participate. Under this plan, colleagues can purchase up to an equivalent of £500 per month of ordinary shares and are then awarded additional shares which vest after the completion of a 3 year plan cycle. No performance conditions are attached to the award.

Share plan rules and approvals
We are seeking shareholder approval for our Deferred Bonus Plan at our forthcoming AGM, reflecting our continued commitment to alignment with shareholder interests through employee share ownership. Formal approval of the plan and its rules is being sought in connection with the extension of mandatory deferral of a portion of bonus into shares beyond the Executive Directors and Executive Committee to senior management across our business for performance year 2020 onwards.

Implementation of the Remuneration Policy during 2020 (1 January 2020 to 31 December 2020)
Base salary operation:
During the year, the Committee conducted its annual review of the base salary levels of our Executive Directors.

The Committee has decided to increase Mr Schwimmer's base salary for his role as CEO to £800,000. This increase, effective April 2020, is considered appropriate in recognition of Mr Schwimmer's performance and development since joining the Group as well as the scale, scope and responsibilities of his role.

At the time of Mr Schwimmer's appointment as CEO, the Committee set his base salary at a level below the previous incumbent to reflect that this was his first CEO role. Since joining, Mr Schwimmer has established himself successfully, demonstrating strong core leadership values and role-modelling the desired culture and behaviours of the Group. Under his leadership, the Group has produced strong financial and strategic results and has grown to become a far larger business with a broader scope of products and services.

The Committee has decided not to increase the salaries of Mr Warren, Chief Financial Officer, who has stated his intention to retire from the company by the end of 2020, or Mr Jerusalmi, Chief Executive Officer of Borsa Italiana.

Base salaries effective from 1 April 2020, are set out in the table below:

Annual salary	With effect from 1 April 2019	With effect from 1 April 2020
David Schwimmer	£775,000	£800,000 (+3%)
David Warren	£500,000	£500,000 (+0%)
Raffaele Jerusalmi	€525,000	€525,000 (+0%)

Given the transformative nature of the proposed transaction with Refinitiv, the Committee will review the CEO's salary upon completion in the context of the significantly larger, more international and complex business and the increased responsibilities and demands of the role. Should the transaction complete, the combined business would be the largest publicly-listed financial markets infrastructure company by revenue globally and would offer significant customer benefits across the full range of LSEG's businesses by: extending its trading capabilities across asset classes; expanding its data content, management and distribution capabilities; increasing its global footprint and range of customer offerings; and enabling LSEG, Refinitiv and their customers to benefit from future data and technology-enabled innovation and growth opportunities. Any increase would be effective from 2021 and presented to shareholders in next year's report.

Pension operation:
The Committee has extensively reviewed the new principles of the UK Corporate Governance Code, including in relation to pensions. The average LSEG employer contribution for UK employees is 11% of salary and we will reduce pension contributions for new Executive Directors to 10% of salary in line with the wider workforce in our revised policy.

The CEO's pension contribution will be reduced from 15% to 10% of salary from April 2020.

The Committee do not intend to amend the contribution for the CFO, who has stated his intention to retire from the company by the end of 2020, nor the CEO of Borsa Italiana, who accrues mandatory state pension benefits in Italy. This arrangement will continue to apply going forward irrespective of the new policy limits.

Directors' Remuneration Report (continued)
Annual Report on Remuneration

Annual bonus operation:

- As per prior years, for FY2020 the Group bonus pool will be determined based on performance measures weighted 60% Group AOP and 40% strategic deliverables to be assessed over a 12-month performance period.
- For FY2020, the 'strategic' element will incorporate sustainability initiatives, reflecting our commitment to ensure the long-term viability of the Group through managing our environmental and social impacts and practicing good governance.
- The Executive Directors' awards are funded from the Group bonus pool. As per 2019, the performance of the Executive Directors and Group Executive team is assessed as part of a scorecard. This scorecard aligns the bonus assessment with the construct of the Group bonus pool: 60% against Group AOP; 40% against strategic deliverables. The 'strategic' element includes key Group strategic initiatives as well as personal and divisional objectives.
- Further to our commitment to ensure a greater focus on the development of culture for the Group, the Committee determined that within this scorecard there should be a greater proportion assessing behavioural performance, to allow for a stronger emphasis on how the individuals achieved their targets. A 360° feedback process informs part of the assessment of the personal element of the scorecard.
- 50% of any bonus payment for Executive Directors and the Group Executive team will be paid in March 2020. The remaining 50% will be deferred into shares for a period of three years.
- Deferred awards are subject to malus and clawback provisions (e.g. in cases of material misstatement, gross misconduct, misbehaviour or material failure of risk management) with judgement applied by the Committee.
- For good leavers, awards will usually vest at the normal vesting date and in full, unless the Committee determines to scale back the award based on any factors deemed relevant. Where an individual is not considered to be a good leaver, unvested awards will lapse.
- The implementation of the scorecard for the Group Executive team and extension of the bonus deferral scheme below Group Executive level to the Managing Director population provides greater alignment with the Executive Directors. In addition, it is in accordance with the revised UK Corporate Governance Code which calls for remuneration committees to determine remuneration for 'senior management' and to more closely align incentives with culture.

Long Term Incentive Plan:

Awards are intended to be made in 2020 under the 2014 LTIP in line with our revised Remuneration Policy. The 2020 LTIP awards will be subject to a two year holding period in addition to the three year vesting period, resulting in a total five year period from the date of grant.

Malus and clawback provisions will apply to these awards, allowing the Committee to reduce subsisting awards for Executive Directors or request the refund of already paid or vested awards in certain circumstances (e.g. material misstatement, gross misconduct, misbehaviour or material failure in risk management). The 2020 awards will vest three years after the grant date subject to relative TSR and adjusted EPS performance measures as follows:

EPS element (60%) – average adjusted EPS growth	TSR element (40%) – relative TSR growth	Proportion of relevant element which vests
Less than 6% p.a.	Less than median	0%
6% p.a.	Median ranking	25%
12% p.a. or more	Upper quartile ranking	100%
Straight-line pro-rating applies between these points		

The Committee has given extensive consideration to the LTIP metrics and target ranges, and sought the views of shareholders and shareholder governance bodies during the year. Relative TSR provides strong alignment with our long-term strategy and aligns to the market-standard approach. We carried out a comprehensive review to determine the best comparator group for the relative TSR measure and deemed the FTSE100 index to be the most appropriate comparator sector at this time. The FTSE100 index provides a broad range of firms across all sectors with a similar size and complexity to LSEG. Given current corporate activities at LSEG, we will keep our comparator group and LTIP metrics more broadly under review to ensure they remain appropriate for future awards. Any adjustments that are deemed appropriate by the Committee will be made in line with the revised policy.

The Committee will continue to review the LTIP measures, weightings and targets on an annual basis, to ensure their continued suitability and to ensure they are stretching both for LSEG as a standalone company and the combined business should the transaction complete.

Awards to be made during 2020

Based on the context and an assessment of individual performance, the Remuneration Committee intends to make grants to each of the Executive Directors under the 2014 LTIP as set out below.

Role		Chief Executive Officer	Chief Financial Officer	Executive Director, CEO of Borsa Italiana & Director of Capital Markets
2020 LTIP award (subject to performance)	% of salary	300% of salary	0% of salary	200% of salary
	Amount	£2,400,000	£0[1]	Sterling equivalent of €1,050,000 (at prevailing FX rate at time of grant)

1. No LTIP award will be granted to Mr Warren, who has stated his intention to retire from the company by the end of 2020.

Shareholding requirements

The minimum shareholding requirement for Executive Directors is 3x base salary and 2x base salary for the Group Executive team. Executive Directors will also be required to hold the lower of their actual shareholding and 100% of their MSR for two years post-departure.

Non-Executive Directors' fees for 2020

The Committee reviewed Non-Executive Director fees during 2019. The base fee was last revised in 2018. To reflect the increased scope, time commitment and complexity of Non-Executive Director and Senior Independent Director roles, the base fee and Senior Independent Director fee has been increased, with effect from 1 January 2020.

The fee schedule for 2020 is therefore as follows:

Fees	With effect from 1 May 2019[1]	With effect from 1 Jan 2020
Group Chair	£525,000	£525,000
Senior Independent Director	£145,000	£150,000
Non-Executive Director base fee (inclusive of Committee memberships)	£75,000	£80,000
Audit / Remuneration / Risk Committee Chair	£30,000	£30,000

1. Non Executive Director fees were last revised with effect from 1 January 2018. The Group Chair's fee was set at £525,000 from his appointment to the role on 1 May 2019.

Non-Executive Directors will also be required to build up a shareholding requirement of 1x basic annual fees, to be built up within three years of appointment.

Non-Executive Directors' Remuneration

Non-Executive Directors' remuneration is determined by the Board and is neither performance-related nor pensionable. The Chair's fee is determined by the Remuneration Committee. The fees for Non-Executive Directors are set at a level which is intended to recognise the significant responsibilities of Directors and to attract individuals with the necessary experience and ability to make an important contribution to the Company's affairs. Comparisons are made with fees paid at FTSE 100 companies.

A travel allowance of £4,000 per intercontinental trip will be introduced for Non-Executive Directors to reflect the global nature of the company's business and the additional time commitment required for travel. The Group Chair will not be eligible for this allowance as he receives an all-inclusive fee for his role.

Travel and other appropriate expenses with associated taxes (including fees incurred in obtaining professional advice) incurred in the course of performing their duties are reimbursed to the Chair and to the Non-Executive Directors.

The Chair and the Non-Executive Directors do not participate in any of the Company's annual bonus or LTIP plans and are not entitled to any payments on termination.

Certain Non-Executive Directors are entitled to receive fees from subsidiary companies, details of which are set out below.

The original date of appointment as Directors of the Company is as follows:

Name	Date Appointed	Date of letter of appointment	Time to expiry	Notice period	Date of resignation	LSEG Committee membership/chairmanship	Other subsidiaries/ committees
Paul Heiden	04/06/2010	04/06/2019	End of AGM 2020	None		SID, Audit Chair, Nomination, Risk	
Jacques Aigrain	01/05/2013	01/05/2019	30/04/2022	None		Audit, Nomination, Remuneration Chair	LCH (Remuneration Committee)
Stephen O'Connor	12/06/2013	12/06/2019	11/06/2022	None		Audit, Nomination, Risk Chair	LSE plc
Professor Andrea Sironi	01/10/2016	01/10/2019	30/09/2022	None		Risk, Nomination	Borsa Italiana Chair, LSEGH Italia Chair
Dr. Val Rahmani	20/12/2017	20/12/2017	19/12/2020	None		Risk, Nomination, Remuneration	
Marshall Bailey	25/09/2018	25/09/2018	24/09/2021	None		Nomination, Remuneration	LCH Group Chair
Dr. Ruth Wandhöfer	22/10/2018	22/10/2018	21/10/2021	None		Audit, Nomination, Risk	
Professor Kathleen DeRose	28/12/2018	28/12/2018	27/12/2021	None		Audit, Nomination, Risk	
Don Robert	01/01/2019	01/01/2019 as Director, 01/05/2019 as Chair	01/01/2022	6 months		Group Chair, Nomination Chair, Remuneration	LSE plc Chair
Cressida Hogg	08/03/2019	08/03/2019	07/03/2022	None		Nomination, Remuneration	
Directors who stood down from the Board during the Year:							
Sir Donald Brydon CBE	19/06/2015	19/06/2015 as Director; 01/07/2015 as Chair	End of AGM 2019	6 months	01/05/2019	Group Chair, Nomination Chair, Remuneration	LSE plc Chair

Directors' Remuneration Report (continued)

Annual Report on Remuneration

Non-Executive Directors' Remuneration Table (Audited)

	FY2019 LSEG Fees £000	FY2019 Other Fees[1] £000	FY2019 Total Fees £000	FY2019 Taxable benefits[2] £000	FY2019 Total £000	FY2018 LSEG Fees £000	FY2018 Other Fees[1] £000	FY2018 Total Fees £000	FY2018 Taxable benefits[2] £000	FY2018 Total £000
Paul Heiden	**145**	**–**	**145**	**17**	**162**	145	–	145	18	163
Jacques Aigrain	**105**	**5**	**110**	**6**	**116**	105	5	110	10	120
Stephen O'Connor	**105**	**–**	**105**	**–**	**105**	105	–	105	–	105
Professor Andrea Sironi[3]	**75**	**140**	**215**	**7**	**223**	75	142	217	12	228
Dr. Val Rahmani	**75**	**–**	**75**	**48**	**123**	75	–	75	34	109
Marshall Bailey	**75**	**225**	**300**	**–**	**300**	20	60	80	–	80
Dr. Ruth Wandhöfer	**75**	**–**	**75**	**1**	**76**	15	–	15	–	15
Professor Kathleen DeRose[4]	**76**	**–**	**76**	**38**	**113**	–	–	–	–	–
Don Robert	**375**	**–**	**375**	**46**	**421**	–	–	–	–	–
Cressida Hogg	**61**	**–**	**61**	**–**	**61**	–	–	–	–	–
Directors who stood down from the Board during the year:										
Sir Donald Brydon CBE	**135**	**–**	**135**	**–**	**135**	400	–	400	1	401
Total Non-Executive Directors' fees	**1,301**	**370**	**1,672**	**162**	**1,834**	1,151	427	1,578	221	1,799

1 Other fees relate to subsidiaries and other committees
2. Taxable benefits relate to travelling expenses, including grossed up taxes where applicable.
3. Professor Andrea Sironi received a combined annualised fee of €160,000 (£140,351) for his roles as Chair and Director of Borsa Italiana and Chair and Director of LSEGH Italia
4. Professor Kathleen DeRose received an additional payment in 2019 from her appointment on 28 December 2018.

Outside appointments

Executive Directors are allowed to accept appointments as Non-Executive Directors of other companies with the prior approval of the Chair. Approval will only be given where the appointment does not represent a conflict of interest with the Company's activities and where the wider exposure gained will be beneficial to the development of the individual. Executive Directors may retain fees to encourage them to seek out the development opportunities and valuable experience afforded by these appointments and in recognition of the personal responsibility Executives assume in such roles and we would disclose these fees.

At present, none of the Executive Directors are in receipt of additional fees.

No payments were made for loss of office during the year and no payments were made to past directors.

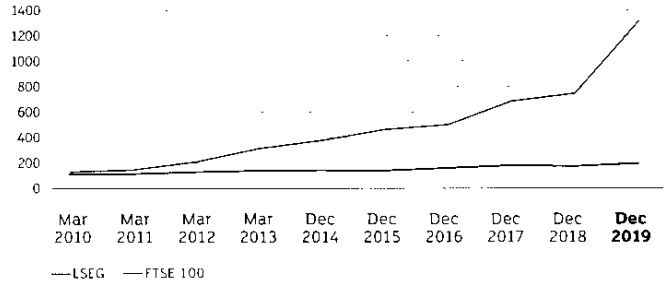
Alignment between pay and performance

Total Shareholder Return (TSR) performance

The following graph shows, for the financial period ended 31 December 2019 and for each of the previous ten financial periods, the TSR on a holding of the Company's ordinary shares of the same kind and number as those by reference to which the FTSE 100 is calculated. The TSR graph represents the value, at 31 December 2019, of £100 invested in London Stock Exchange Group plc on 31 March 2010, compared with the value of £100 invested in the FTSE 100 Index over the same period. As a member of the FTSE 100, we have chosen the FTSE 100 Index as it is currently the most relevant index for benchmarking our performance over the ten financial periods.

TSR chart v FTSE 100 over 10 financial periods

Total Return rebased Apr-10 = 100



Historic levels of CEO pay

Period ended: (12 months unless otherwise stated)	CEO	CEO Single total figure of remuneration £000	Annual bonus payout against maximum opportunity %	Long-term incentive vesting rates against maximum opportunity %
31 December 2019	David Schwimmer	2,456	75%	–[5]
31 December 2018	David Schwimmer[1]	2,153	76%	–[5]
29 November 2017	Xavier Rolet[2]	5,799[4]	79%	100%
31 December 2016	Xavier Rolet	6,880	91%	91%
31 December 2015	Xavier Rolet	6,526	95%	94%
9 months ended 31 December 2014	Xavier Rolet	4,587	89%	50%
31 March 2014	Xavier Rolet	6,383	93%	100%
31 March 2013	Xavier Rolet	6,015	89%	100%
31 March 2012	Xavier Rolet	5,245	100%	65%
31 March 2011	Xavier Rolet	2,134	89%	–
31 March 2010	Xavier Rolet	1,873	71%	–
.	Clara Furse[3]	400	49%	0%

1. David Schwimmer was appointed as CEO on 1 August 2018 and his data is as per the Single total figure table. David Warren operated as interim CEO from 29 November 2017 until 1 August 2018 and his data is shown in the Single total figure table
2. Xavier Rolet was in the role of CEO from 20 May 2009, appointed to the Board 16 March 2009 until he stepped down on 29 November 2017, data therefore represents 11-month figures
3. Clara Furse was in the role of CEO until 20 May 2009. She resigned from the Board on 15 July 2009
4. Value shown for the period ended 29 November 2017 represents the actual vesting of the LTIP award granted in 2015, that vested on 3 April 2018 (91,949 shares at £40.86). An award also vested on 10 March 2018 over 27,874 shares previously granted under the LSEG Deferred Bonus Plan
5. Forecast for LTIP awards to vest in April 2020 is 100%. This grant is not applicable to David Schwimmer

Directors' Remuneration Report (continued)

Annual Report on Remuneration

CEO to employee pay ratio (Audited)

Paying our employees fairly relative to their role, skills, experience and performance is central to our approach to remuneration, and our reward framework and policies support us in doing this. The Committee consider pay ratios as a useful reference point to inform pay decisions, but also take into account a number of other internal and external factors when determining executive pay outcomes, including:

- Our reward framework which establishes the compensation structure, elements and leverage for each career stage in the organisation, providing the Committee with oversight of workforce remuneration;
- The Group's financial and strategic performance, including consideration of risk;
- Each individual's performance, including conduct and behaviour, against personal objectives;
- External market surveys; and
- Wider context and the views of shareholders and investor bodies.

The table below shows the ratios of the CEO single total figure of remuneration (as disclosed on page 114) to the total pay and benefits of UK employees at the 25th, 50th and 75th percentile.

Year	Method	25th percentile pay ratio	50th percentile pay ratio	75th percentile pay ratio
2019	C	31:1	21:1	19:1

The Committee has reviewed the ratios and pay data for the individuals identified at each of the relevant quartiles and believe they are a fair reflection of the company's wider pay policies. The remuneration received by each of each of the individuals is in line with our reward framework. Executive Directors' and other senior managers' remuneration include a greater proportion of performance related pay when compared to the identified employees. The Committee considers this is essential to differentiate levels of responsibility and align pay to sustainable long-term performance and shareholders' interests.

Mr Schwimmer was first granted an LTIP award in August 2018 following his appointment as CEO and has therefore not exercised any LTIPs in respect of 2019. Next year, given that the performance period of his first LTIP award will be substantially completed, we expect that the pay ratio will be higher. As a significant proportion of the CEO's remuneration is linked to performance and share price over the longer-term, it is expected that annual changes in the pay ratio will be significantly influenced by LTIP outcomes each year and will fluctuate accordingly. It is expected that the first LTIP award vesting to the CEO will be in 2021.

Notes to the calculation:

- We have chosen to use Option C in the regulations to determine the pay ratios. The best equivalents for the UK employees at the 25th, 50th and 75th percentiles were determined using the hourly rate from our additional gender pay disclosure, which goes beyond the UK statutory disclosure requirements. This option leverages the comprehensive analysis we have completed as part of our UK gender pay gap reporting exercise and includes our entire UK population and all compensation awards in the financial year to ensure that the best equivalents determined are a fair and true representation of workforce pay at the relevant percentiles. Further information on our additional gender pay disclosure is provided in our Gender Pay Report which is available at: **www.lseg.com**.
- The 2019 total pay and benefits of the identified employees was determined based on data as at 31 December 2019.
- The 2019 total pay and benefits for the 25th, 50th and 75th percentile employees are as follows: £79,292, £114,401, £128,917.
- The 2019 base salary for the 25th, 50th and 75th percentile employees are as follows: £51,600, £85,750, £92,363.

Percentage change in remuneration of CEO and employees

The table below shows the percentage year-on-year change in salary, benefits and annual bonus for the CEO compared to the average of the representative sample of UK employees (all LSEG UK employees). Where appropriate, amounts have been annualised to provide a like-for-like comparison.

	Salary %	Benefits %	Annual Bonus %
Executive Directors			
CEO	0%	6%[2]	-1%
Average pay of Group UK employees[1]	2.5%	1%	-4%

Notes:

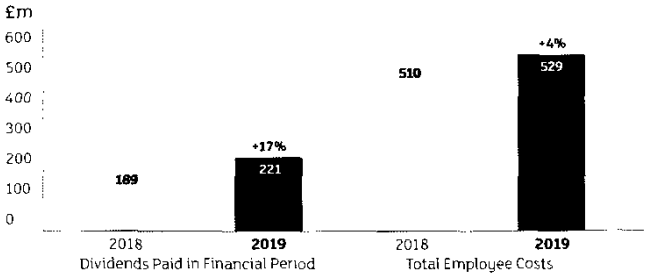
1. This group has been selected to reflect the jurisdiction in which the CEO is based
2. This data refers to the CEO's core UK benefits to provide a like-for-like comparison, plus taxable expenses and reflects the reduced pension and benefits allowances now applicable; it excludes expatriate allowances, which are of a finite duration, and one-off costs

Relative importance of spend on pay

The table below shows the relative FY2019 versus FY2018 expenditure of the Group on Dividends versus Total Employee Costs. These figures are underpinned by amounts from the Notes to the Financial Statements at the back of this report.

Year-on-year increases (%)	FY2019 £m	FY2018 £m	Annual Increase %
Dividends Paid In Financial Period	£221m	£189m	+17%
Total Employee Costs	£529m	£510m	+4%

Relative importance of spend on pay



Statement of Directors' shareholdings and share interests as at 31 December 2019 (Audited)

David Warren and Raffaele Jerusalmi currently own shares outright and at a level exceeding their revised minimum required shareholding of 3x base salary based on a share price of £77.50 (being the closing share price on 31 December 2019). Current shareholdings are summarised in the following table:

	Shares held	Options held[1]					
	Owned Outright	Unvested and subject to performance conditions	Unvested and subject to continued employment[2]	Vested but not exercised	Requirement (% salary)	Shareholding as at 31 December 2019 (% salary)[3]	Requirement met
Executive Directors							
David Schwimmer	–	101,308	5,945	–	300	32	N/A[4]
David Warren	122,541	110,892	19,705	–	300	2,061	Yes
Raffaele Jerusalmi[5]	52,130	91,980	7,101	–	300	943	Yes
Non-Executive Directors							
Paul Heiden	3,818	–	–	–	–	–	N/A
Jacques Aigrain	1,400	–	–	–	–	–	N/A
Stephen O'Connor	–	–	–	–	–	–	N/A
Professor Andrea Sironi	–	–	–	–	–	–	N/A
Dr. Val Rahmani	–	–	–	–	–	–	N/A
Marshall Bailey OBE	–	–	–	–	–	–	N/A
Dr. Ruth Wandhöfer	–	–	–	–	–	–	N/A
Professor Kathleen DeRose	–	–	–	–	–	–	N/A
Don Robert	10,000	–	–	–	–	–	
Cressida Hogg	–	–	–	–	–	–	N/A
Directors who stood down from the Board during the year:							
Sir Donald Brydon CBE[6]	5,000	–	–	–	–	–	N/A

1 No options were exercised by the Directors during the year to 31 December 2019
2 Refers to Deferred Bonus Plan and SAYE.
3. Includes shares held outright plus, on a 'net of expected taxes' basis, share options awarded under the DBP that are unvested and subject to continued employment.
4 MSR required to be reached within five years of appointment – 1 August 2023
5 FY2019 rate of £1 = €1 14
6. Shareholding as at 1 May 2019
Note: There have been no further changes in these interests between 31 December 2019 and 28 February 2020

Directors' Interests in Ordinary Shares – Beneficial, Family and any Connected Persons Interests (Audited)

	Ordinary Shares Held		Options with performance conditions[1]		Options without performance conditions[2,3]		Total Interests	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
Executive Directors								
David Schwimmer	–	–	**101,308**	51,222	**5,945**	–	**107,253**	51,222
David Warren	**122,541**	94,329	**110,892**	125,827	**19,705**	23,063	**253,138**	243,219
Raffaele Jerusalmi[4]	**52,130**	52,130	**91,980**	105,693	**7,101**	–	**151,211**	157,823
Non-Executive Directors								
Paul Heiden	**3,818**	3,818	–	–	**3,818**	–	**3,818**	3,818
Jacques Aigrain	**1,400**	–	–	–	–	–	**1,400**	–
Stephen O'Connor	–	–	–	–	–	–	–	–
Professor Andrea Sironi	–	–	–	–	–	–	–	–
Dr. Val Rahmani	–	–	–	–	–	–	–	–
Marshall Bailey	–	–	–	–	–	–	–	–
Dr. Ruth Wandhöfer	–	–	–	–	–	–	–	–
Professor Kathleen DeRose	–	–	–	–	–	–	–	–
Don Robert	**10,000**	–	–	–	–	–	**10,000**	–
Cressida Hogg	–						–	
Directors who stood down from the Board during the year:								
Sir Donald Brydon CBE[5]	**5,000**	5,000	–	–	–	–	**5,000**	5,000

1. LTIP Performance shares are structured as nil-cost options.
2. Unvested awards in the Deferred Bonus Plan and share options granted under SAYE
3. Deferred Bonus Plan shares are structured as nil cost options subject to continued employment and malus and clawback provisions
4 Raffaele Jerusalmi elected to defer his €415,000 Deferred Bonus Plan award for FY2017 into cash
5. Shareholding as at 1 May 2019
Note: There have been no further changes in these interests between 31 December 2019 and 28 February 2020

Directors' Remuneration Report (continued)
Annual Report on Remuneration

Long Term Incentive Plan table

The 2014 Long Term Incentive Plan has one element applicable to Executive Directors, a conditional award of Performance shares.

The awards are dependent on Absolute TSR performance for 50% of the award, with the remaining 50% dependent on an Adjusted EPS growth target. Details of performance conditions are set out on page 118.

The table below sets out the Executive Directors' Long Term Incentive Plan awards (including the exercise of vested shares in FY2019), as at 31 December 2019.

			Number of shares											
	Date of award	Price at award date (£)	At start of year	Award during the year	Vested during year	Lapsed during year	At end of year	Vesting date	Price at vesting date (£)	Value at vesting date (£)	Exercise date	Price at exercise date[3] (£)	Value at exercise date (£)	Comment
David Schwimmer	08/08/2018	45.39	51,222	–	–	–	51,222	08/08/2021	–	–	–	–	–	–
	22/03/2019	46.42		50,086			50,086	22/03/2022						
			51,222	50,086	–	–	101,308	–	–	–	–	–	–	–
David Warren	17/03/2016	28.70	44,555	–	39,922	4,633	–	17/03/2019[2]	47.50	1,896,295	17/04/2018	48.00[3]	1,916,432	FY2019 Actual
	03/04/2017	31.71	46,168	–	–	–	46,168	03/04/2020	**71.01**	**3,278,390**	–	–	–	**FY2020 Estimate[1]**
	26/04/2018	42.73	35,104	–	–	–	35,104	26/04/2021	–	–	–	–	–	
	22/03/2019	46.42	–	29,620	–	–	29,620	22/03/2022	–	–	–	–	–	
			125,827	29,620	39,922	4,633	110,892	–	–	1,896,295	–	–	1,916,432	FY2019 Actual
										3,278,390				**FY2020 Estimate[1]**
Raffaele Jerusalmi	17/03/2016	28.70	37,860	–	33,923	3,937	–	17/03/2019[2]	47.50	1,611,343	17/04/2018	48.00[3]	1,628,453	FY2019 Actual
	03/04/2017	31.71	38,288	–	–	–	38,288	03/04/2020	**71.01**	**2,718,831**	–	–	–	**FY2020 Estimate[1]**
	26/04/2018	42.73	29,545	–	–	–	29,545	26/04/2021	–	–	–	–	–	
	22/03/2019	46.42	–	24,147	–	–	24,147	22/03/2022	–	–	–	–	–	
			105,693	24,147	33,923	3,937	91,980	–	–	1,611,343	–	–	1,628,453	FY2019 Actual
										2,718,831				**FY2020 Estimate[1]**

1. FY2020 Estimate: Average share price for the last 3 months of the financial year with vesting forecast at 100 per cent.
2. Vesting of shares granted on 17 March 2016 at actual vesting price of £47.50.
3. Price achieved = £48.0044

All estimates are shown separately in bold. They will be fully disclosed in next year's Annual Report on Remuneration.

Remuneration Committee – Governance

The Remuneration Committee is appointed by the Board and comprises the Chair and four independent Non-Executive Directors. The Committee's remit includes the remuneration of the Chair of the Group, Executive Directors and Senior Management, as well as overseeing arrangements for all employees. Please see pages 24–25 for details of the Group's Executive Committee.

Details of the Committee's remit and activities are set out in this Directors' Remuneration Report. The Committee has written terms of reference which are available from the Group Company Secretary or at the corporate governance section of the Company's website at **www.lseg.com/about-london-stock-exchange-group/corporate-sustainability/governance**

During the financial period ending 31 December 2019, the Committee held 4 scheduled meetings and 2 additional meetings. The additional meetings were focused on M&A activity, key management appointments relating to succession planning and malus and clawback considerations.

Here is a summary of the items they discussed:

	Routine	Non-Routine
February 2019 2 meetings were held during this month	– *Governance update* – FY2018 Performance and Bonus approval – FY2019 Bonus considerations – FY2019 LTIP grants and anticipated vesting of previous LTIP and DBP schemes – Performance and determination of CEO and Group Executives' remuneration – FY2018 Directors' Remuneration Report – Gender pay reporting and disclosure – LCH Remuneration Committee proposals	– *Malus and clawback*
June 2019	– Governance update – FY2018 Directors' Remuneration Report – Shareholder feedback – FY2019 Performance and Bonus update – FY2019 LTIP grants and anticipated vesting of previous LTIP and DBP schemes – Regulatory update – *Gender pay update* – LCH Remuneration Committee updates – FY2019 Remuneration Committee calendar	– Remuneration Policy
July 2019	– N/A	– Succession planning – M&A activity (Refinitiv)
October 2019	– FY2019 Performance and Bonus update – Anticipated vesting of previous LTIP and DBP schemes – LCH Remuneration Committee updates – FY2019 Remuneration Committee calendar	– Remuneration Policy – Reward framework – M&A activity (Refinitiv)
December 2019	– Governance update – FY2019 Directors' Remuneration Report key themes – FY2019 Performance and Bonus update – FY2020 Bonus considerations – FY2020 LTIP grants and anticipated vesting of previous LTIP and DBP schemes – 2020 salary review – LCH Remuneration Committee updates – FY2019 Remuneration Committee calendar	– Remuneration Policy – M&A activity (Refinitiv) – Succession planning
February 2020 Meetings which took place during FY2020 will be repeated in next year's report.	– FY2019 Performance and Bonus approval – FY2020 LTIP grants and anticipated vesting of previous LTIP and DBP schemes – Performance and determination of CEO and Group Executives' remuneration – FY2019 Directors' Remuneration Report – Gender pay reporting and disclosure – LCH Remuneration Committee proposals	– Remuneration Policy – M&A activity (Refinitiv)

To assist the Committee, the results of market surveys are made available. Where appropriate, the Committee invites the views of the Chief Executive Officer, Chief Financial Officer, Group Head of Human Resources and the Chief Risk Officer via the Risk Committee. None of these individuals nor the Chair participated in any discussion relating to their own remuneration.

Directors' Remuneration Report (continued)
Annual Report on Remuneration

Statement of shareholder voting

The table below sets out the results of the advisory vote on the Directors' Remuneration Report at the 2019 AGM and the binding vote on the Remuneration Policy Report at the 2017 AGM.

	Votes for		Votes against			
	Number	%	Number	%	Votes cast	Votes withheld
Remuneration Policy Report (2017 AGM)	252,081,916	98.48	3,886,744	1.52	255,968,660	6,200,579
Annual Report on Remuneration (2019 AGM)	277,931,612	96.70	9,475,798	3.30	287,407,410	26,188

Advisors

The Remuneration Committee continues to be mindful of recommendations from key stakeholders, including institutional investor bodies. The Committee consults with major shareholders on any key decisions taken.

Deloitte LLP is the principal advisor appointed by the Committee to provide independent advice on executive remuneration policy and practice, and reviews the implementation of our approved policy against current and emerging corporate governance best practice. During 2015, the Committee undertook a competitive tender process for the role of Remuneration Committee advisor and re-appointed Deloitte as its principal advisor with effect from 1 April 2016.

During the year, Deloitte LLP received £197,090 (excluding VAT) based on actual time spent for these services. In addition, Deloitte received £44,810 (excluding VAT) at the beginning of the year for advice related to the potential transaction with Refinitiv. Separately, other parts of Deloitte LLP also advised the Company during 2019 in relation to tax, internal audit, consulting and transaction support services. Deloitte is a founder member of the Remuneration Consultants Group and, as such, voluntarily operates under the code of conduct in relation to executive remuneration consulting in the UK. The Committee is satisfied that the advice provided by Deloitte LLP is independent and objective.

Signed on behalf of the Board of Directors

Jacques Aigrain
Chair of the Remuneration Committee
28 February 2020

Directors' Report

The Directors of the Company are pleased to present their Annual Report to shareholders, together with the financial statements for the year ended 31 December 2019 with comparatives for the year ended 31 December 2018.

The following sections of the Annual Report are incorporated into this Directors' Report by reference:

- The information that fulfils the requirements of the Strategic Report (including the Financial Review) can be found on pages 2–73
- Board of Directors on pages 75–77

Results
The Group made a profit before taxation from continuing operations, before amortisation of purchased intangible assets and non-underlying items for the year, of £994 million (2018: £865 million). After taking into account amortisation of purchased intangible assets and non-underlying items, the profit of the Group before taxation for the year from continuing operations was £651 million (2018: £685 million). Profit after taxation from continuing operations for the year was £465 million (2018: £553 million).

Dividends
The Directors are recommending a final dividend for the year of 49.9 pence (2018: 43.2 pence) per share which is expected to be paid on 27 May 2020 to shareholders on the register on 1 May 2020. Together with the interim dividend of 20.1 pence (2018: 17.2 pence) per share paid in September 2019, this produces a total dividend for the period of 70.0 pence (2018: 60.4 pence) per share estimated to amount to £244 million (2018: £211 million).

Share capital
As at 31 December 2019, the Company had 350,672,122 ordinary shares in issue with a nominal value of $6^{79/86}$ pence each, representing 100% of the total issued share capital.

The Company holds 929,418 of its ordinary shares in Treasury. Therefore, the total number of voting rights in the company is 349,742,704. The figure 349,742,704 may be used by shareholders as the denominator for the calculations by which they will determine if they are required to notify their interest in, or a change to their interest in, the Company under the FCA's Disclosure Guidance and Transparency Rules.

During the year, the Company issued 68,020 new ordinary shares and transferred 1,505,267 ordinary shares out of treasury, to settle employee share scheme awards.

Share rights
The rights and obligations attached to the Company's ordinary shares are set out in the Company's Articles of Association, copies of which can be obtained from Companies House in the UK or by writing to the Group Company Secretary.

No shareholder shall be entitled to vote at a general meeting, either in person or by proxy, in respect of any share held by him or her unless all monies presently payable by him or her in respect of that share have been paid. In addition, no shareholder shall be entitled to vote, either in person or by proxy, if he or she has been served with a notice under section 793 of the Companies Act 2006 (concerning interests in those shares) and has failed to supply the Company with the requisite information.

Other than restrictions considered to be standard for a UK listed company (for example, restrictions on partly paid certified shares), there are no limitations on the holding, transfer or voting rights of ordinary shares in the Company, both of which are governed and regulated by the Company's Articles of Association and applicable legislation and regulation. The Company is not aware of any agreements between holders of shares that may result in restrictions on the transfer of shares or on voting rights.

Corporate Governance Statement
The Company's Corporate Governance Report and the reports of the Audit, Nomination and Risk Committees are set out on pages 88–97 and are, together with the information on share rights set out above, incorporated into this Corporate Governance Statement by reference.

Articles of Association
The Company's Articles of Association may only be amended by special resolution at a general meeting of the shareholders. The Company's Articles of Association contain provisions relating to the appointment and removal of Directors.

Substantial Shareholders
As at 28 February 2020 the Company had been notified of the following interests amounting to more than 3% in the issued share capital of the Company in accordance with DTR 5 of the FCA's Disclosure Guidance and Transparency Rules:

Qatar Investment Authority	10.3%
Blackrock Inc	6.9%
The Capital Group Companies, Inc	6.8%
Lindsell Train Limited	5.0%

Authority to Issue Shares
Subject to the provisions of the Companies Act 2006 and without prejudice to any rights attached to any existing shares or class of shares, any share may be issued with such rights or restrictions as the Company may by ordinary resolution determine or, subject to and in default of such determination, as the Board shall determine.

Authority to Purchase Shares
The authority for the Company to purchase in the market up to 34,956,941 of its ordinary shares (representing 10% of the issued share capital of the Company as at the latest practicable date before publication of the Notice of the Company's last AGM) granted at the Company's last AGM, expires on the date of the forthcoming AGM. Shareholders will be asked to give a similar authority to purchase shares at the forthcoming AGM.

Authority to Allot Shares
The authority conferred on the Directors at last year's AGM to allot shares in the Company up to a maximum nominal amount of £8,061,775 (representing 33.3% of the issued share capital of the Company (excluding treasury shares) as at the latest practicable date before publication of the Notice of the Company's last AGM) or, in connection with a pre-emptive offer to existing shareholders by way of a rights issue, up to a maximum nominal amount of £16,123,551 (representing 66.6% of the issued share capital of the Company (excluding treasury shares) as at the latest practicable date before publication of the Notice of the Company's last AGM), expires on the date of the forthcoming AGM. Shareholders will be asked to give a similar authority to allot shares at the forthcoming AGM.

Directors' interests
Directors' interests in the shares of the Company as at 31 December 2019, according to the register maintained under the Companies Act 2006, are set out in the Directors' Remuneration Report on page 125. No company in the Group was, during or at the end of the year, party to any contract of significance in which any Director was materially interested.

Directors' indemnity
Details of qualifying third-party indemnity provisions (as defined by section 234 of the Companies Act 2006) in force during the course of the year ended 31 December 2019 can be found on page 83. Such qualifying third-party indemnity provisions remain in force as at the date of approving this Directors' Report.

Employees
Information on the Company's employees including the Company's approach to human rights and diversity; the outcomes relating to the Company's employee engagement survey 'Have Your Say' and further examples of employee engagement can be found in the Sustainability section on pages 43–46 and page 80. Information on the Group's share schemes is provided in the Directors' Remuneration Report on pages 98–128 and in the "Rewarding our People" section on page 46. The Company provides an induction programme for new employees, including training employees on health and safety and a range of development programmes for all employees to develop their skills and knowledge.

The Group gives full consideration to applications for employment from persons with a disability where the candidate's particular aptitudes and abilities are consistent with and adequately meet the requirements of the role. The Group encourages and assists employees with a disability with training, career development and promotion opportunities, and where existing employees become disabled, our policy is to provide continuing employment and training wherever possible. Where changes to working practices or structure affect staff, staff are consulted and given the appropriate support. All employees are provided with information on matters of concern to them in their work, through regular briefing meetings and internal publications. To inform employees of the economic and financial factors affecting our business, regular updates are posted on our intranet and engagement events are hosted, such as 'Townhall' style meetings with members of our Executive Committee, providing a briefing of specific areas of the business.

Environment
We recognise that we must use resources in ways that deliver long-term sustainability and profitability for the business and have regard for impact on the environment. We also take such factors into account in developing our products and services. The Group's primary greenhouse gas (GHG) emissions arise from energy, waste and water in our offices and data centres around the world, from staff travel, and indirectly from our supply chain. We are aware of the risks and opportunities for our business arising from climate change and have developed measures to address them. We actively monitor these changes so that we can adapt and respond as necessary.

Further details of our approach to environmental management, our targets and progress on environmental matters as well as methodology and verification can be found in supporting sustainable growth on page 47–49.

Political Donations
During the year the Group did not make any political donations to EU or non-EU organisations or incur any political expenditure.

It remains the Company's policy not to make political donations or to incur political expenditure; however, the application of the relevant provisions of the Companies Act 2006 is potentially very broad in nature and, as last year, the Board is seeking shareholder authority to ensure that the Group does not inadvertently breach these provisions as a result of the breadth of its business activities, although the Board has no intention of using this authority. As with previous years the Board is proposing that shareholders pass a resolution at the forthcoming AGM to authorise the Group to:

- make political donations to political parties and independent election candidates not exceeding £100,000 in total
- make political donations to political organisations other than political parties not exceeding £100,000 in total
- incur political expenditure not exceeding £100,000 in total, provided that in any event the aggregate amount of any such donations and expenditure made or incurred by the Group shall not exceed £100,000

Notwithstanding the Company's policy not to make political donations, we recognise the rights of our employees to participate in the political process. Their rights to do so are governed by the applicable laws in the countries in which we operate. For example, in the US under the Federal Election Campaign Act, US employees can establish non-partisan political action committees known as 'PACs' that encourage voluntary employee participation in the political process. PACs are a common feature of the US political system and operate independently of any political party or candidate.

LSEG US Holdco, Inc. operates a PAC for US employees. Consistent with US law, LSEG US Holdco, Inc. pays for the PAC's administrative expenses; providing such support is not considered to be a political donation or expenditure under US law. In accordance with the applicable law the PAC is funded entirely by voluntary contributions from eligible employees. All decisions on the amounts and recipients of contributions are directed by a steering committee comprising employees eligible to contribute to the PAC.

During the year, a total of US$29,000 was donated to political organisations by the LSEG US Holdco, Inc. employee operated PAC. All LSEG US Holdco, Inc contributions will be reviewed for legal compliance and will be publicly reported in accordance with US election laws.

Significant agreements

- The following are significant agreements to which the Company is a party that take effect, alter or terminate upon a change of control of the Company following a takeover bid

- **SwapClear**
  LCH, along with a number of investment banks, is party to an agreement for the clearing of OTC interest rate swaps in relation to the SwapClear business. Such arrangements contain certain provisions that entitle the banks to terminate the agreement on a change of control of the Company

- **Facility Agreements**
  The Company has entered into two syndicated, committed, revolving facility agreements dated 9 November 2015 and 11 December 2017; which provide an aggregate £1.2 billion of flexible financing capacity. The facilities are partially drawn and sized to provide comfortable headroom to the Group. The terms of the above agreements are consistent and appropriate for an investment grade borrower including change of control provisions which, if triggered, allow the Facility Agent, upon instructions from the majority lenders, to cancel the facility and declare all outstanding loans under the agreement, together with accrued interest and all other amounts accrued, due and payable

- **Bridge Facility Agreement**
  The Company has entered into a syndicated, committed, term facility agreement dated 1 August 2019; which provides financing capacity related to the Company's proposed acquisition of Refinitiv. The facilities comprise two tranches of US$9.325 billion and €3.58 billion. The facility remains undrawn to date. The terms of the above agreement are consistent and appropriate for an investment grade borrower including change of control provisions which, if triggered, allow the Facility Agent, upon instructions from the majority lenders, to cancel the facility and declare all outstanding loans under the agreement, together with accrued interest and all other amounts accrued, due and payable

- **Notes**
  The Company has issued to the wholesale fixed income market under its Euro Medium Term Notes Programme (the value of which is £2.5 billion), three €500 million tranches of euro notes due in 2024, 2027 and 2029. The notes contain a 'redemption upon change of control' provision which, if triggered by the combination of a change of control and, within 120 days thereafter, a credit rating downgrade to non-investment grade, allows note holders to exercise their option to require the Company to redeem the notes and pay any accrued and unpaid interest due

- **Retail Bond Issue**
  The Company has issued £300 million in Sterling denominated retail bonds, under the Euro Medium Term Notes Programme referred to above, which are due in 2021. The retail bonds contain change of control provisions which, if triggered, by the combination of a change of control and, within 120 days thereafter, a credit rating downgrade to non-investment grade, allow the holder of these bonds to have the option to require the Company to repay early or to purchase the bonds of that holder at their face value together with the accrued interest

- **Employee Share Plans**
  The rules of the Company's employee share plans set out the consequences of a change of control of the Company on employees' rights under the plans. Generally such rights will vest on a change of control and participants will become entitled to acquire shares in the Company (although in certain circumstances the Remuneration Committee has the discretion to defer vesting and to require rights to be exchanged for equivalent rights over the acquiring company's shares)

Events since the balance sheet date

In January 2020 the Group created a Post Trade division. The division includes LCH Group and the post trade businesses in Italy, CC&G and Monte Titoli, which were previously reported separately as part of our financial results. The Post Trade division also includes UnaVista, the trade reporting and reconciliation business that previously reported in Information Services.

The Group will disclose segmental information for the Post Trade division in future financial reporting.

Employee Benefit Trust

As at 31 December 2019, the trustee of the London Stock Exchange Employee Benefit Trust, which is an independent trustee, held 517,563 shares under the terms of the trust for the benefit of employees and former employees of the Company and its subsidiaries. The trust is a discretionary trust and the shares are held to meet employees' entitlements under the Company's share plans. Employees have no voting rights in relation to the unencumbered shares while they are held in trust. The trustee has full discretion to exercise the voting rights attaching to the unencumbered shares or to abstain from voting. Shares acquired by employees through the Company's employee share plans rank equally with the ordinary shares in issue and have no special rights.

Branches outside the UK

Certain of the Company's subsidiaries have established branches in a number of different countries in which they operate.

Financial Risk Management

The use of financial instruments by the Group and the Group's Financial Risk Management have been specifically considered by the Directors, and relevant disclosures appear in Principal Risks and Uncertainties, on pages 60–73 of this Annual Report, and in the Notes to the Financial Statements, on pages 158–163 of this Annual Report, and in each case are incorporated by reference into this Directors' Report.

Directors' statement as to disclosure of information to auditors

In accordance with Section 418(2) of the Companies Act 2006, the Directors confirm, in the case of each Director in office at the date the Directors' Report is approved as listed on pages 75–77, that:

- So far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware

- They have taken all the steps that they ought to have taken as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information

Directors' Report (continued)

Financial viability statement
In accordance with provision 31 of the Code, the Directors confirm that they have a reasonable expectation that the Group will continue to operate and meet its liabilities, as they fall due, for the next three years. A period of three years has been chosen for the purpose of this viability statement, in line with the Group's business plan. The Directors' assessment has been made with reference to the Group's current position and prospects, the Group's three-year business plan, the Group's risk appetite and the expected impact of a selected group of severe but plausible downside scenarios.

The business plan makes certain assumptions about the performance of the core revenue streams and segments, using existing product lines as well as assumptions on take up of new product lines, assumptions on appropriate levels of investment to support expected performance, known inorganic activity, the ability to refinance debt as required, and expected returns to shareholders.

The plan is stress tested using a selected group of severe but plausible downside scenarios as determined relevant by the Group Risk Committee, over the full three-year plan period. Impacts on the performance of core revenue streams and segments are modelled through business inputs, with appropriate mitigating factors also considered.

The impact on the Group's cash-flows, liquidity headroom, and debt covenants are detailed throughout the three-year period in each scenario. No scenario over the three-year period leads to a breach in Group covenants or an inability to meet the Group's obligations through insufficient headroom. Further, a reverse stress test has been completed, to evaluate the financial impacts required to breach the Group Risk Committee's risk appetite.

Further information
Stress testing capabilities are detailed in the risk management oversight supplement that can be found on: **www.lseg.com/about-london-stock-exchange-group/risk-management-oversight**.

Going Concern
The Group's business activities, together with the factors likely to affect its future development, performance and position and its objectives and policies in managing the financial risks to which it is exposed and its capital are set out in the Strategic Report on pages 2–73. The Directors' statement in relation to going concern is set out in the Statement of Directors' Responsibilities on page 133.

Future developments
The Executive Management team monitors future development and market trends affecting the Group and its subsidiaries on an ongoing basis. Details of these developments and trends and the potential implications for the Group can be found in the Market trends and our response section of the Annual Report (pages 14–20).

Auditors
A resolution to reappoint EY LLP as the Company's auditors will be proposed at the AGM.

Strategic Report
The Strategic Report (pages 2–73) was approved by the Board on 27 February 2020 and signed on its behalf.

By Order of the Board

Lisa Condron
Group Company Secretary
28 February 2020

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report, the Directors' Remuneration Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. The Directors have prepared the Group and Company financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and applicable law.

Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of the affairs of the Group and the Company and of the profit or loss for that year.

In preparing those 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
- Make judgements and estimates that are reasonable
- Provide additional disclosures when compliance with the specific requirements in IFRSs as adopted by the EU is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Group and the Company's financial position and financial performance
- State whether the Group and the Company financial statements have been prepared in accordance with IFRSs as adopted by the EU, subject to any material departures disclosed and explained in the financial statements
- Prepare the financial statements on the going concern basis, unless it is inappropriate to presume that the Group and the Company will continue in business

The Directors confirm that they have complied with the above requirements in preparing the financial statements.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and the Group and to enable them to ensure that the financial statements and the Directors' Remuneration Report comply with the Companies Act 2006, other applicable laws and regulations, including the requirements of the Listing Rules and the Disclosure Guidance and Transparency Rules, and, as regards the Group financial statements, Article 4 of the IAS Regulation. The Directors are also responsible for safeguarding the assets of the Company and the Group and for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information on the Company's website.

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

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Overview and Strategic Report sections of the Annual Report on pages 2–73. In particular, the current economic conditions continue to pose a number of risks and uncertainties for the Group and these are set out in Principal Risks and Uncertainties on pages 60–73.

The Financial Risk Management objectives and policies of the Group and the exposure of the Group to capital risk, credit risk, market risk and liquidity risk are discussed on pages 158–163. The Group continues to meet Group and individual entity capital requirements and day-to-day liquidity needs through the Group's cash resources and available credit facilities. The combined total of committed facilities and bonds issued at 31 December 2019 was £2,781 million (2018: £3,103 million) excluding the undrawn Bridge Facility arranged to provide financing capacity relating to the Group's proposed acquisition of the Refinitiv business, with the first maturing in November 2021, described further in the Financial Review on pages 53–59.

The Directors have reviewed the Group's forecasts and projections, taking into account reasonably possible changes in trading performance, which show that the Group has sufficient financial resources. On the basis of this review, and after making due enquiries, the Directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the *going concern basis in preparing the financial statements.*

Each of the Directors, whose names and functions are set out on pages 76–78 of this Annual Report confirms that, to the best of their knowledge and belief:

- The Group and the Company financial statements, which have been prepared in accordance with IFRSs as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the Group taken as a whole
- The report of the Directors contained in the Annual Report includes a fair review of the development and performance of the business and the position of the Company and the Group taken as a whole, together with a description of the principal risks and uncertainties that they face
- They consider that the Annual Report and Accounts 2019, taken as a whole, is fair, balanced and understandable and provide the information necessary for shareholders to assess the Group and the Company's performance, business model and strategy

By Order of the Board

Lisa Condron
Group Company Secretary
28 February 2020

Independent Auditor's Report to the members of London Stock Exchange Group plc

Opinion

In our opinion:

- London Stock Exchange Group plc's (the "Company", the "Group") consolidated financial statements and parent company financial statements (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 2019 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU);
- the parent company financial statements have been properly prepared in accordance with IFRS as adopted by the EU 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, and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements of London Stock Exchange Group plc which comprise:

Group	Parent company
Consolidated balance sheet as at 31 December 2019	Balance sheet as at 31 December 2019
Consolidated income statement for the year then ended	Statement of changes in equity for the year then ended
Consolidated statement of comprehensive income for the year then ended	Cash flows statements for the year then ended
Consolidated statement of changes in equity for the year then ended	Related notes 1 to 36 to the financial statements including a summary of significant accounting policies
Consolidated cash flows statements for the year then ended	
Related notes 1 to 36 to the financial statements, including a summary of significant accounting policies	
Tables within the Directors' Remuneration Report identified as 'audited' on pages 98 to 128.	

The financial reporting framework that has been applied in their preparation is applicable law and IFRSs as adopted by the EU and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the Group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (FRC) Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to principal risks, going concern and viability statement

We have nothing to report in respect of the following information in the annual report, in relation to which the ISAs (UK) require us to report to you whether we have anything material to add or draw attention to:

- the disclosures in the Annual Report set out on pages 60–73 that describe the principal risks and explain how they are being managed or mitigated;
- the directors' confirmation set out on page 131 in the Annual Report that they have carried out a robust assessment of the principal risks facing the entity, including those that would threaten its business model, future performance, solvency or liquidity;
- the directors' statement set out on page 133 in the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them, and their identification of any material uncertainties to the entity's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements
- whether the directors' statement in relation to going concern required under the Listing Rules in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit; or
- the directors' explanation set out on page 132 in the Annual Report as to how they have assessed the prospects of the entity, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the entity will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Overview of our audit approach

Key audit matters	– Risk that goodwill and purchased intangible assets may be impaired – Risk that expenses related to internally developed software are capitalised inappropriately, or that internally developed software is impaired – Risk of fraud in recognition of revenue in secondary capital markets trading, revenue share for clearing arrangements, and information services revenue accruals within the FTSE Russell business
Audit scope	– We performed an audit of the complete financial information of seven components and audit procedures on specific balances for a further 12 components. – The components where we performed full or specific audit procedures accounted for 91% of unadjusted pre-tax profit, 91% of adjusted pre-tax profit, 97% of revenue and 100% of total assets.
Materiality	– Overall Group materiality is £40.7 million which represents 5% of adjusted pre-tax profit from continuing operations, calculated by including the impact of the amortisation of purchased intangible assets, but excluding other non-underlying items as disclosed in note 8 of the financial statements.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Risk that goodwill and purchased intangible assets may be impaired *Balance of £3.9 billion, prior year comparative £4.2 billion* *Impairment charge of £15 million, prior year comparative £Nil.* The Group holds significant intangible assets on its balance sheet, including goodwill, customer relationships, brands, software licenses, and intellectual property. We have determined the valuation of these intangible assets to be a key audit matter due to the size of the goodwill and purchased intangible assets as at 31 December 2019 and the involvement of significant judgement by management in determining the valuation of the intangible assets. On an annual basis, management are required to perform an impairment assessment for goodwill, and to assess for indicators of impairment in respect of purchased intangible assets. Where indicators of impairment of purchased intangible assets are identified, a full impairment assessment is performed. These assessments involve significant management judgement in the application of valuation models and assumptions. The following significant judgements and estimates used in the valuation models could be selected inappropriately: – Weighted-average cost of capital (WACC) – Long-term growth rates (LTGR) – Cash flow forecasts – Amortisation periods for purchased intangible assets – Customer retention rates As a consequence, there is a greater risk of misstatement in these balances, either by fraud or error, including through the potential override of controls by management. *Refer to the Report of the Audit Committee (page 90); Accounting policies (page 151); and Notes 4 and 14 of the Financial Statements (pages 164 and 173–175)* The risk has neither increased nor decreased in the current year.	We have confirmed our understanding of the impairment assessment process and assessed the design effectiveness of key controls, concluding that a substantive audit approach should be adopted. The following procedures were performed in order to determine the acceptable range of the carrying value of goodwill and purchased intangible assets: For material cash generating units (CGU), we examined the cash flow forecasts which support management's impairment assessment and tested compliance with the requirements of IAS 36 'Impairment of Assets'. We tested the reasonableness of those forecasts and the evidence supporting the underlying assumptions, by comparing to Board-approved budgets which were challenged by considering prior periods' budget accuracy, comparing the expected growth rates to relevant market expectations, and considering recent market developments including changes in tax rates. In respect of purchased intangible assets, we tested and challenged management's assessment as to whether indicators of impairment exist as at the balance sheet date, by reference to factors specific to each class of assets and our understanding of the business. Examples included back-testing customer retention rates within specific business lines and the current returns made on intellectual property. We tested the WACC discount rates assigned to each of the CGUs, as well as the LTGR, with reference to our understanding of the business, comparisons to other similar companies and broader market considerations. The WACC discount rates and LTGR applied within each impairment model were critically assessed by EY valuation specialists, including comparison to economic and industry forecasts where appropriate. We considered evidence available to support the WACC discount rates and LTGR used, and assessed consistency with findings from other areas of the audit. Using EY valuation specialists, we assessed specific inputs in the determination of the WACC discount rates, including the risk-free rate, equity beta and market/size premium, along with gearing and cost of debt. We benchmarked the inputs against observed risk rates in the markets where the Group operates. We also obtained the sensitivity analysis prepared by management on the cash flow forecasts and other key inputs to the impairment model (including WACC discount rates, LTGR and customer retention rates), and further sensitised the analysis to understand the impact that reasonably possible changes to key assumptions would have on the overall carrying value of the goodwill and purchased intangible assets at the balance sheet date. We also assessed the appropriateness of the remaining amortisation period by comparing management's forecasts against historic data. In addition to the above procedures, we performed journal entry testing in order to identify and test the risk of misstatement arising from management override of controls. We performed full scope audit procedures over this risk area in nine components, which covered 100% of the risk amount.	We concluded that the WACC discount rates, LTGR, customer retention rates and cash flow forecasts used by management in the impairment assessment are within a reasonable range as at 31 December 2019. We identified that the goodwill allocated to the Turquoise Global Holdings Limited and Mergent Inc. CGUs was impaired by £8 million and £6 million, respectively. The value in use of the Mergent CGU is equal to the carrying value and as such, the remaining carrying value of goodwill is sensitive to changes in revenue from customers. We did not identify any additional factors that would lead to a revision of the amortisation periods applied for purchased intangible assets. We are satisfied that the carrying values of goodwill and purchased intangible assets are reasonable and the related disclosures are compliant with IFRS as adopted by the EU We have completed our procedures and have no material findings to report with the exception of Mergent as outlined above.

Independent Auditor's Report to the members of London Stock Exchange Group plc (continued)

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Risk that expenses related to internally developed software are capitalised inappropriately, or that internally developed software is impaired *Balance of £0.5 billion, prior year comparative £0.5 billion* The capitalisation of expenses to internally developed software involves management's judgement, when making their assessment of capitalisation against criteria set out in IFRS as adopted by the EU. The Group is required to review capitalised software assets for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable, and at least annually, review whether there is any change in their expected useful lives. Where indicators of impairment are identified a full impairment assessment is performed at the reporting date. Such assessments involve management judgement in the application of valuation models and assumptions. In addition, as internally generated assets move closer to the end of their useful life, the risk of impairment may increase. The following significant judgements and estimates used in the valuation models could be selected inappropriately: – Weighted-average cost of capital (WACC) – Long-term growth rates (LTGR) – Cash flow forecasts – Amortisation periods for internally developed software As a consequence, there is a greater risk of misstatement in this balance, either by fraud or error, including through the potential override of controls by management. *Refer to the Report of the Audit Committee (page 90); Accounting policies (page 151); and Note 14 of the Financial Statements (pages 173–175)* The risk has neither increased nor decreased in the current year.	We confirmed our understanding of the capitalisation and impairment assessment processes and assessed the design and operating effectiveness of key controls. We concluded that the controls were designed, implemented and operating effectively, and therefore took a controls-reliance approach. For a sample of additions, we have agreed amounts capitalised to underlying documentation, including, as appropriate, timesheets, invoices and other evidence to confirm that the costs were incurred, and meet the capitalisation criteria of IAS 38 'Intangible Assets'. For a sample of assets not yet brought into use we have tested and challenged management's assessment for indicators of impairment, and where a full impairment assessment had been carried out, we tested the key assumptions used within the assessment, such as the WACC discount rates, LTGR and cash flow forecasts. We have also gained an understanding of the status of related projects through enquiries of management and assessment of recent additions and reviewed project progress reports for potential indicators of impairment. We also reviewed sensitivity analysis performed by management and performed higher degree sensitivity analysis on the cash flow forecasts and other key inputs to the impairment model (including WACC discount rates and LTGR), to understand the impact that reasonably possible changes to key assumptions would have on the overall carrying value of the internally developed software at the balance sheet date. We have tested the appropriateness of the amortisation period based on economic lives and management's best estimates of future performance, amortisation method and residual values. We have, in addition, performed journal entry testing in order to identify and test the risk of misstatement arising from management override of controls. We performed full and specific scope audit procedures over this risk area in nine components, which covered 91.8% of the risk amount.	We concluded that the assessment performed by management met the capitalisation criteria set out in IFRS as adopted by the EU. Where indicators of impairment had been identified and a full impairment assessment had been prepared, we concluded that the WACC discount rates, LTGR, and cash flow forecasts used by management in the impairment assessment are within a reasonable range as at 31 December 2019. We did not identify any material indicators of impairment for internally developed software which had not already been impaired by management. We did not identify any additional factors that would lead to a revision of the remaining useful lives applied for internally developed software. Based on the procedures performed, we are satisfied that the carrying value of internally developed software have been adequately accounted for and disclosed in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Risk of fraud in recognition of revenue in secondary capital markets trading, revenue share for clearing arrangements, and information services revenue accruals within the FTSE Russell business *Secondary capital markets – Balance of £0.2 billion, prior year comparative £0.2 billion* *Revenue share for clearing arrangements – Balance of £(0.1) billion, prior year comparative £(0.1) billion* *Information services revenue accruals – Balance of £0.1 billion, prior year comparative £0.1 billion* Compensation tied to the performance of the entity may create an incentive for management to manipulate results We have determined this to be a key audit matter having identified three revenue streams with heightened risk of misstatement: – Secondary capital markets revenue (for certain business lines) involves multiple pricing structures based on product types, customer activity and volumes. This complexity leads to a heightened risk that revenue may not be recognised appropriately, either as a result of fraud, or error. – Contracts relating to revenue sharing in respect of clearing arrangements, between the Group's central counterparty (CCPs) and third party participants, in some cases, involve complex calculations to determine the appropriate level of revenue to recognise within the Group. – Information services revenue accruals (presented within contract assets) can require estimation, for instance based on prior billings or preliminary usage. As a consequence, there is a greater risk of misstatement in these balances, either by fraud or error, including through the potential override of controls by management. *Refer to the Report of the Audit Committee (page 90); Accounting policies (page 151); and Note 5 of the Financial Statements (pages 164–167)* The risk on information services revenue accruals has been focussed on the accruals within the FTSE Russell business given the increased element of estimation compared to other revenue accruals within the information services division which are based on known amounts. The risk on secondary capital markets trading and revenue share for clearing arrangements has neither increased nor decreased in the current year.	We confirmed our understanding of the secondary capital markets trading, revenue share clearing arrangements and FTSE Russell revenue accruals processes, and evaluated the design effectiveness of key controls. We evaluated whether the revenue recognition policy is appropriate and in accordance with IFRS as adopted by the EU. We also performed cut-off testing to gain assurance that revenue was recognised in the correct period. **Secondary capital markets trading** For the secondary capital markets trading process, we performed testing of the operating effectiveness of key controls in one full scope component. For this component, we concluded that the controls were designed, implemented and operating effectively, and therefore took a controls-based approach. We adopted a substantive audit approach in the other in-scope components. We increased our standard sample size for transactional testing to respond to the risk of fraud. We agreed a random selection of transactions back to supporting audit evidence, such as invoices and cash receipts. We also recalculated the fee charged and checked back to the pricing policy and relevant tariff schedule We reconciled trading platform data to the general ledger and tested material manual journals. We also used analytical tools to identify outliers in large volumes of transactional data for focused follow-up testing. This analysis included comparing the fee per transaction to volume (notional) traded and investigating any particularly high values which were highlighted as outliers to the overall population. **Revenue share for clearing arrangements** We confirmed our understanding of the revenue share clearing arrangement process and accordingly adopted a substantive audit approach for the material revenue share arrangements. We tested revenue sharing calculations for the material business lines by agreeing key terms with the underlying contracts We also used analytical procedures in the analysis of the related revenue streams. This included analysing monthly trading volumes and their correlation with monthly revenue recognised; any anomalies identified were investigated. **Information services revenue accruals within the FTSE Russell business** We adopted a substantive audit approach in relation to the information services revenue accruals process. We selected a sample of revenue accruals using a lower testing threshold when compared to our standard testing approach. For the selected samples, we obtained supporting evidence, including subsequent billing or payment evidence and customer consent, for accrued amounts. For revenue based on assets under management ("AUM"), we tested the calculations on a statistical sample basis and checked back to the supporting agreements. We also validated the AUM used in the calculations to an independent third party source or customer declaration. For Q4 accruals based on Q3 information, we tested the appropriateness of using Q3 information for purposes of the year end accruals. We also performed corroborative testing to invoices raised post year end and cash collected where applicable. For all revenue streams and revenue accruals listed above, we performed analytical procedures and journal entry testing in order to identify and test the risk of misstatement arising from management override of controls. We performed full and specific scope audit procedures over this risk area in seven components, which covered 99.2% of the risk amount.	Based on the procedures performed, we concluded that revenue related to secondary capital markets trading, revenue share for clearing arrangements, and information services revenue accruals within the FTSE Russell business has been recognised appropriately in accordance with IFRS as adopted by the EU.

In the prior year, our auditor's report included a key audit matter in relation to **"Application of IFRS 15 to primary capital markets admission fees"**. As the application of IFRS 15 to primary capital markets admission fees had been fully implemented prior to the start of the current period, the audit team did not assess this to be a key audit matter for the 2019 audit.

Independent Auditor's Report to the members of London Stock Exchange Group plc (continued)

An overview of the scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the Group financial statements. We take into account size, risk profile, the organisation of the Group and effectiveness of Group-wide controls, changes in the business environment and other factors such as recent Internal Audit findings when assessing the level of work to be performed at each entity.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the 96 reporting components of the Group, we selected 19 components covering entities headquartered within the United Kingdom, United States of America, Italy, France and Sri Lanka, which represent the principal business units within the Group.

Of the 19 components selected, we performed an audit of the complete financial information of seven components ("full scope components") which were selected based on their size or risk characteristics. For the remaining 12 components ("specific scope components"), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the Group financial statements either because of the size of these accounts or their risk profile.

Scope	Procedures performed by	Number of components
Full	Primary team	4
Full	Component teams	3
Specific	Primary team	10
Specific	Component team	2
Total		**19**

Details of the five components which were audited by component teams are set out below:

Component	Headquartered location	Scope	Auditor
London Stock Exchange Group Holdings Italy S.p.A.	Italy	Full	EY
LSEG US Holdco Inc.[1]	United States of America	Full	EY
LCH S.A.	France	Full	EY and BDO
LSEGH Inc	United States of America	Specific	EY
Millennium Information Technologies (Private) Limited	Sri Lanka	Specific	EY

1 Some specific accounts within LSEG US Holdco Inc. were audited by the EY primary audit team

The reporting components where we performed audit procedures accounted for 91% (2018: 95%) of the Group's pre-tax profit, 91% (2018: 95%) of the Group's adjusted pre-tax profit measure used to calculate materiality (see page 139 below), 97% (2018: 97%) of the Group's Revenue and 100% (2018: 100%) of the Group's Total assets.

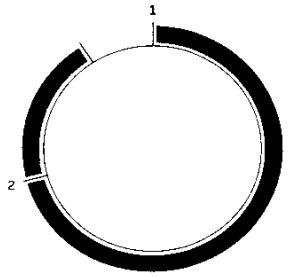
For the current year, the full scope components contributed 71% (2018: 75%) of the Group's pre-tax profit, 70% (2018: 77%) of the Group's adjusted pre-tax profit, 95% (2018: 95%) of the Group's Revenue and 100% (2018: 100%) of the Group's Total assets.

The specific scope component contributed 20% (2018: 20%) of the Group's pre-tax profit, 21% (2018: 18%) of the Group's adjusted pre-tax profit, 2% (2018: 2%) of the Group's Revenue and less than 1% (2018: less than 1%) of the Group's Total assets. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of significant accounts tested for the Group.

The remaining 77 components together represent less than 9% of the Group's pre-tax profit, adjusted pre-tax profit, revenue and total assets. For these components we performed other procedures, including analytical review and testing of consolidation journals and intercompany eliminations, to respond to potential risks of material misstatement to the Group financial statements

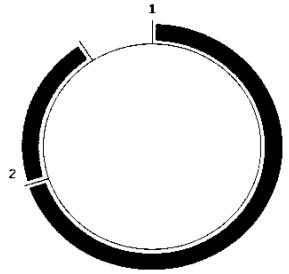
The charts below illustrate the coverage obtained from the work performed by our audit teams.

Profit before Tax*



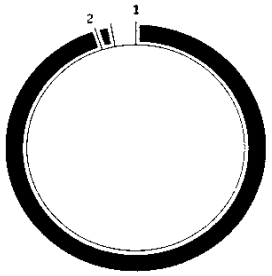
1 ● **71%**
2 ● **20%**
3 **9%**

Adjusted Profit before Tax*



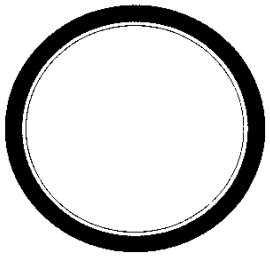
1 ● **70%**
2 ● **21%**
3 **9%**

Revenue



1 ● **95%**
2 ● **3%**
3 **2%**

Total assets



1 ● **100%**

1 ● **Full** 2 ● **Specific** 3 **Out of Scope**

* The percentages were calculated based on absolute values

Changes from the prior year
All full scope components remained consistent. In the prior year, we identified 14 specific scope components. Specific scope components have been re-assessed as the contribution of these smaller parts of the business to the Group financial statements varies each year.

Involvement with component teams
In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken at each of the components by us, as the primary audit engagement team, or by component auditors from other EY global network firms or other firms operating under our instruction.

Of the seven full scope components, audit procedures were performed on four of these directly by the primary audit team. For the three full scope and one specific scope components, where the work was performed by component auditors, we determined the appropriate level of involvement to enable us to determine that sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole.

The Group audit team continued to follow a programme of planned visits that has been designed to ensure that the Senior Statutory Auditor visits the principal locations of the Group.

During the current year's audit cycle, visits were undertaken by the Senior Statutory Auditor and/or other senior members of the primary audit team to the following locations:

Component	Location	Scope	Number of visits
London Stock Exchange Group Holdings Italy S.p.A	Milan, Italy	Full	2
LSEG US Holdco Inc. LSEGH Inc	New York, United States of America	Full Specific	2
LCH S.A	Paris, France	Full	2
Millennium Information Technologies Limited	Colombo, Sri Lanka	Specific	1

These visits involved discussing the audit approach with the component team and any issues arising from their work, as well as meeting with local management. In addition, we participated in planning and closing meetings and reviewed selected key audit working papers. The primary team interacted regularly with the component teams where appropriate during various stages of the audit, reviewed key working papers and were responsible for the scope and direction of the audit process. This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Our application of materiality
We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality
The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined overall materiality for the Group to be £40.7 million (2018: £35.5 million), which is 5% (2018: 5%) of adjusted pre-tax profit from continuing operations, calculated by including the impact of amortisation of purchased intangible assets, but excluding other non-underlying items as disclosed in note 8 of the financial statements.

We consider the basis of our materiality to be one of the important considerations for shareholders of the Company in assessing the financial performance of the Group. It is linked to the key earnings measures discussed when the Group presents the financial results. In addition to non-underlying items, the Group also excludes amortisation of purchased intangibles to present adjusted operating profit; this amount is not excluded from our materiality calculation.

We determined materiality for the parent company to be £46.5 million (2018: £7.1 million), which is 1% of equity. We believe that equity is an appropriate basis to determine materiality given the nature of the parent company as the investment holding company of the Group. Any balances in the parent company financial statements that were relevant to our Group audit were audited using an allocated performance materiality. The allocated materiality is based on the relative scale and risk of the parent company to the Group as a whole, and our assessment of the risk of misstatement. The reason for the increase in the parent company materiality is due to a change in basis. In 2018, we determined materiality for the parent company based on the allocated performance materiality for purposes of the Group audit.

Our overall materiality threshold provided a basis for determining the nature, timing and extent of risk assessment procedures, identifying and assessing the risk of material misstatement and determining the nature, timing and extent of further audit procedures. Our evaluation of materiality requires professional judgement and necessarily takes into account qualitative as well as quantitative considerations implicit in the definition.

Starting basis	– £650.7 million – Profit before tax from continuing operations
▼	
Adjustments	– £163.6 million – Exclude non-underlying items, mostly costs related to the proposed acquistion of Refinitiv and other potential M&A transactions, and costs related to the cost savings programme
▼	
Adjusted basis	– £814.3 million – Adjusted pre-tax profit from continuing operations but including amortisation of purchased intangible assets
▼	
Materiality	– Materiality of £40.7 million (5% of materiality basis)

During the course of our audit, we reassessed initial materiality and made adjustments based on the final financial performance of the Group.

Independent Auditor's Report to the members of London Stock Exchange Group plc (continued)

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality was 50% (2018: 50%) of our planning materiality, namely £20.4 million (2018: £17.8 million). We have set performance materiality at this percentage (which is the lowest in the range) due to misstatements which were identified in the prior year audit. Our approach is designed to have a reasonable probability of ensuring that the total of uncorrected and undetected misstatements does not exceed our overall materiality of £40.7 million (2018: £35.5 million) for the Group financial statements as a whole.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component.

In the current year, the performance materiality allocated to components was as follows:

Component	Allocated performance materiality £m
London Stock Exchange Group plc	7.6
London Stock Exchange plc	13.2
LCH Limited	11.2
LCH S.A	7.6
London Stock Exchange Group Holdings Italy S p.A.	10.2
LSEG US Holdco, Inc.	13.2
FTSE International Limited	10.2
All specific scope components	4.1

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of £2.3 million (2018: £1.8 million), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the annual report set out on pages 2 to 133 including the Strategic Report (including Highlights, Chair's Statement, CEO's statement, What we do – our business model, Overview of Group activities, Market trends and our response, Strategy in action, Executive management team, Segmental review, Supporting sustainable growth, Board engagement with stakeholders, How the Board has complied with Section 172(1)of the Companies Act 2006, Financial review, and Principal risks and uncertainties), Governance information and disclosures (including Board of Directors, Corporate governance, Complying with the provisions of the Code, Report of the Nomination Committee, Report of the Audit Committee, Report of Risk Committee, Directors' Remuneration Report, Directors' Report and Statement of Directors' responsibilities), other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

In this context, we also have nothing to report in regard to our responsibility to specifically address the following items in the other information and to report as uncorrected material misstatements of the other information where we conclude that those items meet the following conditions:

- **Fair, balanced and understandable set out on page 133** – the statement given by the directors that they consider the Annual Report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit Committee reporting set out on pages 90–95** – the section describing the work of the audit committee does not appropriately address matters communicated by us to the Audit Committee or is materially inconsistent with our knowledge obtained in the audit; or
- **Directors' statement of compliance with the UK Corporate Governance Code set out on pages 78, 85–87, 129** – the parts of the directors' statement required under the Listing Rules relating to the Company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

Opinions on other matters prescribed by the Companies Act 2006
In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with 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 the light of the knowledge and understanding of the Group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report or the Directors' report.

We have nothing to report in respect of the following matters in relation to which 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 and the part of the Directors' Remuneration Report to be audited 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.

Responsibilities of directors
As explained more fully in the Statement of Directors' Responsibilities set out on page 133, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company, or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud
The objectives of our audit, in respect to fraud, are; to identify and assess the risks of material misstatement of the financial statements due to fraud; to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud, through designing and implementing appropriate responses; and to respond appropriately to fraud or suspected fraud identified during the audit. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management.

Our approach was as follows:

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group and determined that the most significant are the UK Companies Act 2006, UK Corporate Governance Code 2016, The Financial Conduct Authority's ("FCA") Listing Rules, other relevant FCA rules and regulations, and tax legislation (governed by HM Revenue and Customs).
- We understood how the Group is complying with those frameworks by making enquiries of senior management, including the Group General Counsel, the Chief Risk Officer, the Group Head of Compliance and the Group Head of Internal Audit. We also reviewed significant correspondence between the Group and regulatory bodies, reviewed minutes of the Board, Risk Committee, and gained an understanding of the Group's approach to governance, demonstrated by the Board's approval of the Group's governance framework and the Board's review of the Group's risk management framework and internal control processes.
- We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur by considering the controls that the Group has established to address risks identified by the Group, or that otherwise seek to prevent, deter or detect fraud. We also considered performance and incentive plan targets and their potential to influence management to manage earnings or influence the perceptions of investors.
- Based on this understanding we designed our audit procedures to identify non-compliance with such laws and regulations. Our procedures involved inquiries of senior management, legal counsel, the compliance officer and internal audit, review of significant correspondence with regulatory bodies and minutes of meetings of the Board and certain Board committees, and focused testing, as referred to in the key audit matters section above.

Independent Auditor's Report to the members of London Stock Exchange Group plc (continued)

- The Group operates in the exchange and CCP industries which are regulated environments. As such, the Senior Statutory Auditor reviewed the experience and expertise of the engagement team to ensure that the team had the appropriate competence and capabilities, which included the use of experts where appropriate.
- The FCA has regulatory oversight over London Stock Exchange plc and certain other entities within the Group. The Bank of England ("BOE") supervises CCPs in the UK and therefore regulates LCH Limited. In addition, local regulatory bodies in France and Italy regulate other subsidiaries of the Group, including: LCH SA which is regulated by L'Autorité de Contrôle Prudentiel et de Résolution ("ACPR"), Banque de France ("BDF") and the Autorité des Marchés Financiers ("AMF"); and Borsa Italiana S.p.A., Cassa Di Compensazione e Garanzia S.p.A. ("CC&G"), EuroTLX SIM S.p.A., MTS Società per il Mercato dei Titoli di Stato S.p.A. ("MTS") Monte Titoli S.p.A. and Elite SIM S.p.A. which are all regulated by Commissione Nazionale per le Società e la Borsa and Banca d'Italia.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at **www.frc.org.uk/auditorsresponsibilities**. This description forms part of our auditor's report.

Other matters we are required to address

- We were appointed by the Company on 12 June 2014 to audit the financial statements for the nine months period ended 31 December 2014 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments is six years, covering the nine months period ended 31 December 2014 to the year ended 31 December 2019.
- The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company and we remain independent of the Group and the parent company in conducting the audit.
- The audit opinion is consistent with the additional report to the Audit Committee.

Use of our report

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.

Ernst & Young LLP

Maurice McCormick (Senior Statutory Auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London
28 February 2020

Notes

1 The maintenance and integrity of the London Stock Exchange Group plc 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.

Consolidated income statement

Year ended 31 December 2019	Notes	2019 Underlying £m	2019 Non-underlying £m	2019 Total £m	2018 Underlying £m	2018 Non-underlying £m	2018 Total £m
Continuing operations							
Revenue	5	**2,056**	–	**2,056**	1,911	–	1,911
Net treasury income from CCP clearing business	5	**255**	–	**255**	218	–	218
Other income	5	**3**	–	**3**	6	–	6
Total income		**2,314**	–	**2,314**	2,135	–	2,135
Cost of sales	5	**(210)**	–	**(210)**	(227)	–	(227)
Gross profit		**2,104**	–	**2,104**	1,908	–	1,908
Expenses							
Operating expenses before depreciation, amortisation and impairment	6, 8	**(839)**	**(132)**	**(971)**	(834)	(21)	(855)
Income from equity investments	5, 19	**7**	–	**7**	–	–	–
Share of loss after tax of associates	5, 15	**(7)**	–	**(7)**	(8)	–	(8)
Earnings before interest, tax, depreciation, amortisation and impairment		**1,265**	**(132)**	**1,133**	1,066	(21)	1,045
Depreciation, amortisation and impairment	8, 13, 14	**(200)**	**(195)**	**(395)**	(135)	(159)	(294)
Operating profit/(loss)		**1,065**	**(327)**	**738**	931	(180)	751
Finance income		**14**	–	**14**	13	–	13
Finance expense		***(85)***	***(16)***	***(101)***	(79)	–	(79)
Net finance expense	8, 9	**(71)**	**(16)**	**(87)**	(66)	–	(66)
Profit/(loss) before tax		**994**	**(343)**	**651**	865	(180)	685
Taxation	8, 10	**(236)**	**50**	**(186)**	(187)	55	(132)
Profit/(loss) for the year		**758**	**(293)**	**465**	678	(125)	553
Profit/(loss) attributable to:							
Equity holders		**699**	**(282)**	**417**	603	(123)	480
Non-controlling interests		**59**	**(11)**	**48**	75	(2)	73
Profit/(loss) for the year		**758**	**(293)**	**465**	678	(125)	553
Earnings per share attributable to equity holders							
Basic earnings per share	11			**119.5p**			138.3p
Diluted earnings per share	11			**118.1p**			136.0p
Adjusted basic earnings per share	11			**200.3p**			173.8p
Adjusted diluted earnings per share	11			***198.0p***			*170.8p*
Dividend per share in respect of the financial year							
Dividend per share paid during the year	12			**20.1p**			17.2p
Dividend per share declared for the year	12			**49.9p**			43.2p

The notes on pages 150 to 203 form an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income

Year ended 31 December 2019	Notes	2019 £m	2018 £m
Profit for the financial year		**465**	553
Other comprehensive income:			
Items that will not be subsequently reclassified to profit or loss			
Defined benefit pension scheme remeasurement gain/(loss)	18	**7**	(12)
Income tax relating to these items	10	**–**	5
		7	(7)
Items that may be subsequently reclassified to profit or loss:			
Net gains/(losses) on net investment hedges	19	**71**	(55)
Debt instruments at fair value through other comprehensive income:			
– Net gains/(losses) from changes in fair value		**16**	(21)
– Net (gains)/losses reclassified to the consolidated income statement on disposal		**(2)**	4
Exchange (losses)/gains on translation of foreign operations		**(218)**	168
Income tax relating to these items	10	**(5)**	4
		(138)	100
Other comprehensive income net of tax		**(131)**	93
Total comprehensive income for the year		**334**	646
Total comprehensive income attributable to:			
Equity holders		**298**	572
Non-controlling interests		**36**	74
Total comprehensive income for the year		**334**	646

The notes on pages 150 to 203 form an integral part of these consolidated financial statements.

Balance sheets

At 31 December 2019	Notes	Group 2019 £m	Group 2018 £m	Company 2019 £m	Company 2018 £m
Assets					
Non-current assets					
Property, plant and equipment	13	**288**	149	**–**	–
Intangible assets	14	**4,421**	4,687	**–**	–
Investment in associates	15	**28**	25	**12**	7
Investment in subsidiary companies	16	**–**	–	**6,750**	6,506
Deferred tax assets	17	**49**	42	**–**	–
Investments in financial assets	19	**266**	31	**–**	–
Retirement benefit asset	18	**66**	46	**–**	–
Trade and other receivables	19, 21	**19**	33	**41**	25
		5,137	5,013	**6,803**	6,538
Current assets					
Trade and other receivables	19, 21	**566**	785	**668**	600
Derivative financial instruments	19	**2**	–	**2**	–
Clearing member financial assets		**729,094**	764,411	**–**	–
Clearing member cash and cash equivalents		**67,118**	70,927	**–**	–
Clearing member assets	19	**796,212**	835,338	**–**	–
Current tax		**160**	147	**–**	–
Investments in financial assets	19	**81**	53	**–**	–
Cash and cash equivalents	22	**1,493**	1,510	**2**	6
		798,514	837,833	**672**	606
Total assets		**803,651**	842,846	**7,475**	7,144
Liabilities					
Current liabilities					
Trade and other payables	19, 23	**620**	538	**712**	402
Contract liabilities	25	**157**	153	**–**	–
Derivative financial instruments	19	**1**	30	**1**	30
Clearing member liabilities	19	**796,102**	835,508	**–**	–
Current tax		**127**	61	**–**	–
Borrowings	19, 26	**512**	561	**504**	544
Provisions	28	**19**	2	**–**	–
		797,538	836,853	**1,217**	976
Non-current liabilities					
Borrowings	19, 26	**1,573**	1,642	**1,573**	1,642
Derivative financial instruments	19	**39**	17	**39**	17
Contract liabilities	25	**88**	118	**–**	–
Deferred tax liabilities	17	**432**	475	**–**	–
Retirement benefit obligations	18	**17**	22	**–**	–
Other non-current payables	19, 23	**150**	11	**–**	–
Provisions	28	**13**	10	**–**	–
		2,312	2,295	**1,612**	1,659
Total liabilities		**799,850**	839,148	**2,829**	2,635
Net assets		**3,801**	3,698	**4,646**	4,509

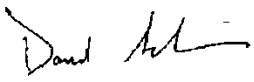
Balance sheets (continued)

At 31 December 2019		Group		Company	
	Notes	2019 £m	2018 £m	2019 £m	2018 £m
Equity					
Capital and reserves attributable to the Company's equity holders					
Ordinary share capital	29	**24**	24	**24**	24
Share premium	29	**967**	965	**967**	965
Retained earnings		**668**	424	**1,836**	1,701
Other reserves		**1,796**	1,930	**1,819**	1,819
Total shareholders' funds		**3,455**	3,343	**4,646**	4,509
Non-controlling interests		**346**	355	**–**	–
Total equity		**3,801**	3,698	**4,646**	4,509

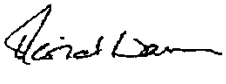
The Company recorded profit for the year of £301 million (2018: £141 million).

The notes on pages 150 to 203 form an integral part of these consolidated financial statements.

The financial statements on pages 143 to 203 were approved by the Board on 27 February 2020 and signed on its behalf by:



David Schwimmer
Chief Executive Officer



David Warren
Chief Financial Officer

28 February 2020
London Stock Exchange Group plc
Registered number 5369106

Cash flow statements

Year ended 31 December 2019	Notes	Group 2019 £m	Group 2018 £m	Company 2019 £m	Company 2018 £m
Cash flow from operating activities					
Cash generated from/(used in) operations	30	**1,089**	969	**(196)**	39
Interest received		**6**	3	**1**	1
Interest paid		**(103)**	(76)	**(91)**	(67)
Royalties paid		**(2)**	(2)	**–**	–
Corporation tax paid		**(153)**	(173)	**–**	–
Withholding tax received		**–**	1	**–**	–
Net cash inflow/(outflow) from operating activities		**837**	722	**(286)**	(27)
Cash flow from investing activities					
Purchase of property, plant and equipment	13	**(41)**	(50)	**–**	–
Purchase of intangible assets	14	**(154)**	(144)	**–**	–
Proceeds from sale of businesses[1]		**30**	58	**–**	–
Cash disposed as part of the sale of businesses		**–**	(2)	**–**	–
Acquisition of business, net of cash acquired[2]	32	**(14)**	3	**–**	–
Investment in subsidiaries	16	**–**	–	**(244)**	(408)
Investment in associates	15	**(11)**	(28)	**(11)**	(12)
Investments in financial assets classed as FVOCI	19	**(247)**	–	**–**	–
Investment in government bonds		**(3)**	–	**–**	–
Dividends received		**–**	–	**464**	–
Net cash (outflow)/inflow from investing activities		**(440)**	(163)	**209**	(420)
Cash flow from financing activities					
Dividends paid to shareholders	12	**(221)**	(189)	**(221)**	(189)
Dividends paid to non-controlling interests		**(40)**	(42)	**–**	–
Purchase of non-controlling interests[3]		**(9)**	(452)	**–**	–
Loans to subsidiary companies		**–**	–	**(10)**	–
Repayments received on loans to subsidiary companies		**–**	–	**110**	335
Loans from subsidiary companies		**–**	–	**447**	74
Repayment of loans to subsidiary companies		**–**	–	**(247)**	–
Purchase of own shares by the employee benefit trust		**(5)**	(4)	**–**	–
Proceeds from exercise of employee share options		**5**	7	**5**	6
Issue of convertible debt to external party		**(4)**	–	**–**	–
Loan to associate		**(1)**	–	**–**	–
Arrangement fee paid		**–**	(4)	**–**	(4)
Proceeds from the issue of bonds		**–**	445	**–**	445
Bond repayment		**(250)**	–	**(250)**	–
Proceeds from the issue of commercial paper		**–**	255	**–**	255
Repayments made towards bank credit facilities		**(35)**	(489)	**(26)**	(474)
Additional drawdowns from bank credit facilities		**261**	–	**261**	–
Principal element of lease payments (2018: Payments towards lease obligations)		**(41)**	(2)	**–**	–
Net cash (outflow)/inflow from financing activities		**(340)**	(475)	**69**	448
Increase/(decrease) in cash and cash equivalents		**57**	84	**(8)**	1
Cash and cash equivalents at beginning of year		**1,510**	1,382	**6**	4
Exchange (loss)/gain on cash and cash equivalents		**(74)**	44	**4**	1
Cash and cash equivalents at end of year		**1,493**	1,510	**2**	6

The notes on pages 150 to 203 form an integral part of these consolidated financial statements.

The Group's net cash inflow from operating activities of £837 million includes £98 million of expenses related to non-underlying items.

The Company's net cash outflow from operating activities of £286 million includes £88 million of expenses related to non-underlying items.

1 Proceeds from sale of businesses include deferred consideration of £29 million received by the Group from its disposal of the Russell Investment Management in 2016 and a further £1 million received in the current year for the disposal of Exactpro Systems Limited and its subsidiaries in the prior year. Proceeds from sale of businesses in the prior year relates to £58 million deferred consideration received by the Group from its disposal of Russell Investment Management.

2 Acquisition of business, net of cash acquired, in the current year relates to the Group's acquisition of 100% of Beyond Ratings for £14 million. In the prior year, the Group received £3 million from the vendors of the Yield Book business on finalisation of the purchase price.

3 Purchase of non-controlling interests relates to the Group's purchase of the remaining 30% interest in EuroTLX SIM S.p.A. from non-controlling equity holders for £9 million (€10.2 million). During the prior year, the Group completed the purchase of shareholdings from non-controlling equity holders in LCH Group Holdings Limited and FTSE Global Debt Capital Markets Limited for cash consideration of £413 million and £39 million respectively.

Group cash flow does not include cash and cash equivalents held by the Group's Post Trade operations on behalf of their clearing members for use in their operations as managers of the clearing and guarantee systems. These balances represent margins and default funds held for counterparties for short periods in connection with these operations.

Statements of changes in equity

Year ended 31 December 2019		Attributable to equity holders						
Group	**Notes**	**Ordinary share capital £m**	**Share premium £m**	**Retained earnings £m**	**Other reserves £m**	**Total attributable to equity holders £m**	**Non-controlling interests £m**	**Total equity £m**
31 December 2017		24	964	324	1,820	3,132	525	3,657
Profit for the year		–	–	480	–	480	73	553
Other comprehensive income for the year		–	–	(18)	110	92	1	93
Issue of shares	29	–	1	–	–	1	–	1
Final dividend relating to the year ended 31 December 2017	12	–	–	(129)	–	(129)	–	(129)
Interim dividend relating to the year ended 31 December 2018	12	–	–	(60)	–	(60)	–	(60)
Dividend payments to non-controlling interests		–	–	–	–	–	(42)	(42)
Employee share scheme expenses		–	–	38	–	38	–	38
Tax in relation to employee share scheme expenses		–	–	7	–	7	–	7
Purchase of non-controlling interest within acquired subsidiary		–	–	(218)	–	(218)	(202)	(420)
31 December 2018		24	965	424	1,930	3,343	355	3,698
Impact of adoption of IFRS 16	2	–	–	(23)	–	(23)	–	(23)
1 January 2019 (restated)		**24**	**965**	**401**	**1,930**	**3,320**	**355**	**3,675**
Profit for the year		–	–	**417**	–	**417**	**48**	**465**
Other comprehensive income for the year		–	–	**15**	**(134)**	**(119)**	**(12)**	**(131)**
Issue of shares	29	–	**2**	–	–	**2**	–	**2**
Final dividend relating to the year ended 31 December 2018	12	–	–	**(151)**	–	**(151)**	–	**(151)**
Interim dividend relating to the year ended 31 December 2019	12	–	–	**(70)**	–	**(70)**	–	**(70)**
Dividend payments to non-controlling interests		–	–	–	–	–	**(44)**	**(44)**
Employee share scheme expenses		–	–	**37**	–	**37**	–	**37**
Tax in relation to employee share scheme expenses		–	–	**17**	–	**17**	–	**17**
Purchase of non-controlling interest within acquired subsidiary		–	–	**2**	–	**2**	**(1)**	**1**
31 December 2019		**24**	**967**	**668**	**1,796**	**3,455**	**346**	**3,801**

The notes on pages 150 to 203 form an integral part of these consolidated financial statements.

Shares held in the Employee Benefit Trust to settle exercises of employee share awards were 517,563 (2018: 573,672).

Employee share scheme expenses include costs related to the issue and purchase of own shares for employee share schemes of £(5) million (2018: £(4) million), subscriptions, net of sundry costs, received on the vesting of employee share schemes of £5 million (2018: £6 million) and equity-settled share scheme expenses for the year of £37 million (2018: £36 million).

Purchase of non-controlling interests in the year relates to the Group's acquisition of the remaining 30% of interest in EuroTLX SIM S.p.A. In the prior year, the Group acquired an additional 16.68% interest in LCH Group Holdings Limited and the remaining 27.26% interest in FTSE Global Debt Capital Markets Limited.

Other reserves comprise the following:
Merger reserve of £1,305 million (2018: £1,305 million), a reserve that arose when the Company issued shares as part of the consideration to acquire subsidiary companies.

Capital redemption reserve of £514 million (2018: £514 million), a reserve set up as a result of a court approved capital reduction.

Reverse acquisition reserve of £(512) million (2018: £(512) million), a reserve arising on consolidation as a result of the capital reduction scheme.

Foreign exchange translation reserve of £535 million (2018: £740 million), a reserve reflecting the impact of foreign currency changes on the translation of foreign operations.

Hedging reserve of £(46) million (2018: £(117) million), a reserve representing the cumulative fair value adjustments recognised in respect of net investment and cash flow hedges undertaken in accordance with hedge accounting principles (note 19).

Year ended 31 December 2019		**Attributable to equity holders**					
					Other reserves		
Company	**Notes**	**Ordinary share capital £m**	**Share premium £m**	**Retained earnings £m**	**Capital redemption reserve £m**	**Merger reserve £m**	**Total attributable to equity holders £m**
31 December 2017		24	964	1,724	514	1,305	4,531
Profit for the year		–	–	141	–	–	141
Issue of shares	29	–	1	–	–	–	1
Final dividend relating to the year ended 31 December 2017	12	–	–	(129)	–	–	(129)
Interim dividend relating to the year ended 31 December 2018	12	–	–	(60)	–	–	(60)
Employee share scheme expenses		–	–	25	–	–	25
31 December 2018		24	965	1,701	514	1,305	4,509
Profit for the year		–	–	**301**	–	–	**301**
Issue of shares	29	–	**2**	–	–	–	**2**
Final dividend relating to the year ended 31 December 2018	12	–	–	**(151)**	–	–	**(151)**
Interim dividend relating to the year ended 31 December 2019	12	–	–	**(70)**	–	–	**(70)**
Employee share scheme expenses		–	–	**55**	–	–	**55**
31 December 2019		**24**	**967**	**1,836**	**514**	**1,305**	**4,646**

The notes on pages 150 to 203 form an integral part of these financial statements.

Employee share scheme expenses of the Company include movement in the fair value of loan balances with the Employee Benefit Trust of £15 million (2018: £(15) million), costs relating to the issue of own shares for employee share schemes of £(2) million (2018: £(2) million), subscriptions received on the vesting of employee share schemes of £5 million (2018: £6 million) and equity-settled share scheme expenses for the year of £37 million (2018: £36 million).

The merger reserve of £1,305 million (2018: £1,305 million) is a potentially distributable reserve that arose when the Company issued shares as part of the consideration to acquire subsidiary companies.

The capital redemption reserve of £514 million (2018: £514 million) is a non-distributable reserve set up as a result of a court approved capital reduction.

Notes to the financial statements

1. Basis of preparation and accounting policies

The Group's consolidated and the Company's financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) and IFRS Interpretations Committee (IFRIC) interpretations endorsed by the European Union (EU), and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

The financial statements are prepared under the historical cost convention as modified by the revaluation of assets and liabilities held at fair value and on the basis of the Group's accounting policies.

The Group uses a columnar format for the presentation of its consolidated income statement. This enables the Group to aid the reader's understanding of its results by presenting profit for the year before any non-underlying items. Non-underlying items include amortisation of purchased intangible assets and other income or expenses not considered to drive the operating results of the Group. This is the profit measure used to calculate adjusted earnings per share. Profit before non-underlying items is reconciled to profit before taxation on the face of the income statement.

The Company is a public company, incorporated and domiciled in England and Wales. The address of its registered office is 10 Paternoster Square, London, EC4M 7LS.

As permitted by Section 408 of the Companies Act 2006, the Company's income statement has not been included in these financial statements.

Consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiary companies with all inter-company balances and transactions eliminated, together with the Group's attributable share of the results of associates. The results of subsidiary companies sold or acquired in the period are included in the income statement up to, or from, the date that control passes. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The acquisition of subsidiary companies is accounted for using the acquisition method. The cost of the acquisition is measured at the aggregate of the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Upon completion of the Group's fair value exercise, comparatives are revised up to 12 months after the acquisition date, for the final fair value adjustments. Further details are provided in Note 32. Adjustments to fair values include those made to bring accounting policies into line with those of the Group.

The Group applies a policy of treating transactions with non-controlling interests through the economic entity model. Transactions with non-controlling interests are recognised in equity. Where the non-controlling interest has an option to dispose of their holding to the Group, then the amounts potentially due are recognised at their fair value at the balance sheet date.

Investments in subsidiary companies' shares, loans and other contributions are recognised at cost. These are reviewed for impairment when events indicate the carrying amount may not be recoverable and are accounted for in the Company's financial statements at cost less accumulated impairment losses.

Recent accounting developments

The following standards and amendments have been endorsed by the EU and adopted in these financial statements:

– IFRS 16, 'Leases'

– IFRIC 23, 'Uncertainty over Income Tax Treatments'

– Amendments to IAS 28, 'Long-term interest in Associates and Joint Ventures'

– Amendments to IAS 19, 'Plan amendment, curtailment or settlement'

– Amendments to IFRS 9, 'Prepayment features with negative compensation'

– Annual improvements to IFRS standards 2015-2017

The impact of adopting IFRS 16 on the Group's financial results is described in detail in note 2. The adoption of the other amendments did not have a material impact on the results of the Group.

The following standards and interpretations have been issued by the International Accounting Standards Board (IASB) and IFRIC, but have not been adopted because they are not yet mandatory and the Group has not chosen to early adopt. The Group plans to adopt these standards and interpretations when they become effective. The impact on the Group's financial statements of the future standards, amendments and interpretations is still under review, and where appropriate, a description of the impact of certain standards and amendments is provided below:

International accounting standards and interpretations	Effective date
Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020
Amendments to IFRS 3, 'Business Combinations'	1 January 2020
Amendments to IAS 1 and IAS 8: Definition of Material	1 January 2020
Amendments to IFRS 9, IAS 39 & IFRS 7: Interest Rate Benchmark Reform	1 January 2020
IFRS 17, 'Insurance Contracts'	1 January 2021

The above amendments and standards are not expected to have a material impact on the results of the Group.

Accounting policies

Income Statement

Revenue

The main source of the Group's revenue is through fees for services provided. Revenue is measured based on the consideration specified in a contract with a customer. Amounts deducted from revenue relate to discounts, value added tax and other sales related taxes, revenue share arrangements whereby as part of an operating agreement amounts are due back to the customer and pass-through costs where the Group has arrangements to recover specific costs from its customers with no mark up.

The Group recognises revenue as services are performed and as it satisfies its obligations to provide a product or service to a customer. Further details of the Group's revenue accounting policy are set out below:

Information Services	The Information Services segment generates revenues from the provision of information and data products including indexes, benchmarks, real-time pricing data and trade reporting and reconciliation services. **Data subscription and index licence fees** are recognised over the licence or usage period as the Group meets its obligation to deliver data consistently throughout the licence period. Services are billed on a monthly, quarterly or annual basis. **Other information services** include licences to the regulatory news service and reference data businesses. Revenue from licences that grant the right to access intellectual property are recognised over time, consistent with the pattern of the service provision and how the performance obligation is satisfied throughout the licence period. Revenues from other information services, including revenues from the sale of right to use licences, are recognised at the point the licence is granted or service is delivered.
Post Trade – LCH, CC&G and Monte Titoli	Revenues in the Post Trade segments are generated from clearing, settlement, custody and other post trade services. **Clearing, settlement and custody services** generate fees from trades or contracts cleared and settled, compression and custody services which are recognised as revenue at the point when the service is rendered on a per transaction basis, or in cases where there is a fixed annual fee – monthly in arrears. **Other post trade services** include revenue from client connectivity services which is recognised as revenue on a straight-line basis over the service period as this reflects the continuous transfer of services
Capital Markets	Revenues in the Capital Markets segment are generated from Primary and Secondary market services. **Primary market initial admission and the ongoing listing services** represent one performance obligation and the Group recognises revenue from initial admissions and further issues over the period the Group provides the listing services. All admission fees are billed to the customer at the time of admission to trading and become payable when invoiced. **Primary market annual fees, secondary markets membership and subscription fees** are generally paid in advance on the first day of the membership or subscription period. The Group recognises revenue on a straight-line basis over the period to which the fee relates, as this reflects the extent of the Group's progress towards completion of the performance obligation under the contract. Revenue from **secondary market trading and associated capital market services** is recognised as revenue on a per transaction basis at the point that the service is provided

Technology	Technology revenue is generated from contracts to develop capital market technology solutions, software licences, network connections and hosting services. **Capital markets software licence** contracts contain multiple deliverables for the provision of licences and software installation, and ongoing maintenance services. The transaction price for each contract is allocated to these performance obligations based upon the relative standalone selling price. Revenue is recognised based on the actual service provided during the reporting period, as a proportion of the total services to be provided. This is determined by measuring the inputs consumed in delivering the service (for example, material and actual labour) relative to the total expected input consumption over the contract. This best reflects the transfer of assets to the customer which generally occurs as the Group incurs costs on the contract. **Network connection and hosting services** revenues are recognised on a straight-line basis over the period to which the fee relates as this reflects the continuous transfer of technology services and measures the extent of progress towards the completion of the performance obligation.
Other	Fees are generated from the provision of events and media services, and are typically recognised as revenue at the point the service is rendered and becomes payable when invoiced.

Customer contracts across the Group that contain a single performance obligation at a fixed price do not require variable consideration to be constrained or allocated to multiple performance obligations. However certain businesses in the Group provide services to customers under a tiered and tariff pricing structure that generates a degree of variability in the revenue streams from the contract. Where the future revenue from a contract varies due to factors that are outside of the Group's control, the Group limits the total transaction price at contract inception and recognises the minimum expected revenue guaranteed by the terms of the contract over the contract period. Any variable element is subsequently recognised in the period in which the variable factor occurs.

The Group does not have any contracts where the period between the transfer of services to a customer and when the customer is expected to pay for that service to be in excess of one year. Consequently, no adjustments are made to transaction prices for any financing component.

Other income
Other income typically relates to property service charges.

Cost of sales
Cost of sales comprises data and licence fees, data feed costs, expenses incurred in respect of revenue share arrangements and costs incurred in the MillenniumIT business that are directly attributable to the construction and delivery of customers' goods or services, and any other costs linked and directly incurred to generate revenues and provide services to customers.

Revenue share expenses presented within cost of sales relate to arrangements with customers where the revenue share payment is not limited to the amount of revenues receivable from the specific customer.

Contract costs
Incremental costs of obtaining a customer contract, such as sales commissions paid to employees, are recognised as an intangible asset if the benefit of such costs is expected to be longer than one year. The associated asset is amortised over the period from which a customer benefits from existing software technology supporting the underlying product or service, which the Group has determined to be between 3 to 5 years and is presented as an intangible asset in the Group's consolidated balance sheet. The Group amortises the contract costs over the period from which a customer benefits from existing software technology supporting the underlying product or service.

The Group recognises the incremental cost of obtaining a contract as an expense when incurred, if the amortisation period is less than one year.

Net treasury income
Income recognised in the CCP clearing businesses includes net treasury income earned on margin and default funds, held as part of the risk management process. Net treasury income is the result of interest earned on cash assets lodged with the clearing house, less interest paid to the members on their margin and default fund contributions. Net treasury income is shown separately from the Group's revenues on the face of the income statement to distinguish this income stream from revenues arising from other activities and provide a greater understanding of the operating activities of the Group. Where negative interest rates apply, the Group recognises interest paid on cash assets as a treasury expense and interest received on clearing members' margin as treasury income.

Non-underlying items
Items of income and expense that are material by size and/or nature and are not considered to be incurred in the normal course of business are classified as non-underlying items on the face of the income statement within their relevant category. The separate reporting of these items together with amortisation of purchased intangible assets helps give an indication of the Group's sustainable performance. Non-underlying items are disclosed in note 8.

Pension costs
The Group operates defined benefit and defined contribution pension schemes. For the defined benefit schemes the service cost, representing benefits accruing to employees, is included as an operating expense. The interest cost and expected return on plan assets is calculated by applying the discount rate to the net defined benefit liability or asset at the start of each annual reporting period. Actuarial gains and losses arising from experience adjustments, changes in actuarial assumptions or differences between actual and expected returns on assets are recognised at each period end net of tax in the statement of comprehensive income. The net asset or liability recognised on the balance sheet comprises the difference between the present value of pension obligations and the fair value of scheme assets. For defined contribution schemes, the expense is charged to the income statement as incurred.

Share-based compensation
The Group operates a number of equity settled share-based compensation plans for employees. The charge to the income statement is determined by the fair value of the options granted or shares awarded at the date of grant and recognised over the relevant vesting period.

Foreign currencies
The consolidated financial statements are presented in Sterling, which is the Company's presentation and functional currency. Foreign currency transactions are converted into the functional currency of the reporting entity using the rate ruling at the date of the transaction. Foreign exchange gains or losses resulting from the settlement of such transactions and from the translation at year-end rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except for differences arising on pension fund assets or liabilities which are recognised in other comprehensive income.

The results and financial position of all Group entities that have a functional currency different from the presentation currency are converted into the presentation currency as follows:

a) assets and liabilities including goodwill, purchased intangible assets and fair value adjustments are converted at the closing balance sheet rate;

b) income and expenses are translated and recorded in the income statement at the average rate for the period; and

c) all resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, and of borrowing and other currency instruments designated as hedges of such investments, are taken to shareholders' equity. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognised in the income statement as part of the gain or loss on sale.

Finance income and expense
Finance income and expense comprises interest earned on cash deposited with financial counterparties and interest paid on borrowings which reflect the agreed market-based or contractual rate for each transaction undertaken during the financial period and calculated using the effective interest rate method. In conditions where negative interest rates apply, the Group recognises interest paid on cash deposits as an expense and interest received on liabilities as income.

Recurring fees and charges levied on committed bank facilities, cash management transactions and the payment services provided by the Group's banks are charged to the income statement as accrued. Credit facility arrangement fees are capitalised and then amortised back to the income statement over the term of the facility subject to projected utilisation. Fees and charges are included within other finance costs.

Fair value gains and losses on financial instruments include the movement in the market valuations of derivative instruments held as fair value hedges.

Notes to the financial statements (continued)

Balance Sheet

Property, plant and equipment

Property, plant and equipment are included in the financial statements at cost less accumulated depreciation and any provision for impairment.

Land is not depreciated. Freehold buildings, fixed plant and plant and equipment are depreciated to residual value on a straight-line basis over their estimated useful economic lives as follows:

a) Freehold buildings – 30 to 50 years;

b) Fixed plant – 3 to 20 years; and

c) Plant and equipment – 3 to 15 years.

Leasehold improvements are included at cost and depreciated to residual value over the shorter of the period of the lease or the useful economic life of the asset.

Leases – right-of-use assets

The Group recognises a right-of-use asset where the Group has control of an asset for a period of more than 12 months. Assets are recorded initially at cost and depreciated on a straight-line basis over shorter of the lease term or the estimated useful life. Cost is defined as the lease liabilities recognised plus any initial costs and dilapidations provisions less any lease incentives received.

The lease term is the non-cancellable term plus any optional extensions or less any reductions due to break clauses that in the judgement of management are likely to be exercised.

Lease liabilities

Lease liabilities are recognised at the net present value of the future payments to be made over the lease term at the commencement of a lease. Where a lease includes a break clause or extension option, management use their best estimate on the likely outcome on a lease by lease basis. Variable lease payments based on an index are estimated at the commencement date and revalued on an annual basis.

The net present value is determined using the incremental borrowing rate of the leasing entity.

Lease payments due within the next 12 months are recognised within current liabilities; payments due after 12 months are recognised within non-current payables.

Short-term leases and leases of low value assets

Rental costs for leased assets that are for less than 12 months or are for assets with an individual value of less than £5,000 are recognised directly in the income statement on a straight-line basis over the life of the lease.

Group as lessor

Where the Group sub-lets a right-of-use asset for substantially all the useful life of that asset, this is recognised as a finance lease. The asset is derecognised and a net investment in lease is recognised, equivalent to the net present value of the future receipts.

Where the value of the receipts is lower than the amount payable on the head-lease, a loss on disposal of the right-of-use asset is recognised.

A right-of-use asset that is sub-let for less than its expected useful life is recognised as an operating lease and rental income is recognised as received.

Investments in associates

An associate is a company over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the company, but is not control nor joint control over those policies.

The Group's investments in associates are accounted for using the equity method. The Company accounts for its investments in associates at cost, less any impairments recognised through the income statement.

Under the equity method, investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and, if applicable, the Group's share of movements in other comprehensive income. Dividends received or receivable from associates are recognised as a reduction in the carrying amount of the investment.

The Group's investments in associates are assessed for impairment at each balance sheet date. Where indicators of impairment are identified a full impairment assessment is performed. Any difference between the recoverable amount of the associate and its carrying value is recognised as an impairment loss within 'Share of profit or loss of associates' in the Group consolidated income statement.

Intangible assets

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, then the difference is recognised in profit or loss as a gain on purchase.

On the acquisition of a business, fair values are attributed to the assets and liabilities acquired. These may include brand names, customer and supplier relationships, software licences and intellectual property, all of which are recorded as intangible assets and held at cost less accumulated amortisation. These assets are amortised on a straight line basis over their useful economic lives which are as follows:

a) Customer and supplier relationships – 2 to 25 years (material assets are amortised over a life exceeding 15 years);

b) Brand names – 10 to 25 years (material assets are amortised over a life of 25 years); and

c) Software licences and intellectual property – 2 to 25 years (the majority of material assets are amortised over a life not exceeding 5 years).

The useful economic lives are based on management's best estimates such as attrition rates on customer relationships, product upgrade cycles for software and technology assets, market participant perspective for brands and pace of change of regulation for business.

Third-party software costs for the development and implementation of systems which enhance the services provided by the Group are capitalised and amortised over their estimated useful economic lives of 3 to 5 years.

Internal product development expenditure is capitalised if the costs can be reliably measured, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group has sufficient resources to complete the development and to use or sell the asset. The assets are recorded at cost including labour, directly attributable costs and any third-party expenses, and amortised over their useful economic lives of 3 to 7 years.

Intangible assets are assessed for any indicators of impairment at each balance sheet date. Where indicators of impairment for a particular intangible asset are identified, a full impairment assessment is performed, with any diminution in value recognised in the income statement. For assets with an indefinite useful life a full impairment assessment is performed annually. When performing any impairment assessment, in addition to considering matters particular to the relevant Group business area, management evaluates the overall value of the asset from the perspective of a market participant. Accordingly, any reduction in value is recorded to ensure the intangible asset is held at fair value.

The Group recognises an intangible right-of-use asset where the Group has control of an asset for a period of more than 12 months. Assets are recorded initially at cost and depreciated on a straight-line basis over the life of the lease term. Cost is defined as the lease liabilities recognised plus any initial costs.

Current and non-current classification

Current assets comprise assets held primarily for trading purposes, cash and cash equivalents, and assets expected to be realised within one year from the reporting date, or intended for trade or consumption and realised in the course of the Group's operating cycle. All other assets are classified as non-current assets.

Current liabilities comprise liabilities held primarily for trading purposes, liabilities expected to be settled in the course of the Group's operating cycle and those liabilities due within one year from the reporting date. All other liabilities are classified as non-current liabilities.

Current and deferred taxation
The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income.

Full provision is made, using the liability method, for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred taxation is determined using tax rates that are substantively enacted at the balance sheet date and are expected to apply when the asset is realised or liability settled. Deferred tax assets are recognised to the extent it is probable that they will be recoverable against future taxable profits.

Financial instruments
Financial assets and liabilities are initially recognised on their settlement date. The Group classifies its financial instruments as fair value through profit or loss (FVPL), fair value through other comprehensive income (FVOCI) or amortised cost. The classification depends on the Group's business model for managing its financial instruments and whether the cash flows generated are 'solely payments of principal and interest' (SPPI).

Initial recognition:
- Financial assets at amortised cost are financial assets that are held in order to collect the contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. The Group's cash and cash equivalents and trade and other receivables fall within this category. Clearing member trading balances relating to sale and buy back transactions and other receivables from clearing members of the CCP businesses also fall within this category.
- Financial assets at fair value through other comprehensive income (FVOCI) are assets where the objective is achieved by both collecting the contractual cash flows or selling the asset. The contractual cash flows received are solely payments of principal and interest. This category includes investments in equity instruments and quoted debt instruments (predominantly government bonds) held by the CCP businesses of the Group, which are used under the business model to both collect the contractual cash flows and also to sell. Any profit or loss recognised in other comprehensive income on debt instruments is recycled to the income statement if the asset is sold. Any profit or loss on an equity instrument remains in retained earnings and is not recycled through the income statement.
- Financial assets at fair value through profit or loss (FVPL) include all other financial assets not classified as amortised cost or FVOCI. This category includes CCP businesses' clearing member trading balances comprising derivatives, equity and debt instruments that are marked to market on a daily basis.
- Financial liabilities at fair value through profit or loss (FVPL) are liabilities that must be held at fair value. This includes all the CCP businesses' clearing member trading balances, comprising derivatives, equity and debt instruments, which are marked to market on a daily basis.
- Financial liabilities at amortised cost are all financial liabilities that are not included within financial liabilities at FVPL. This comprises the Group's trade and other payables balances, borrowings and other payables to clearing members.

Subsequent measurement:
The Group adopts a forward-looking approach to estimate impairment losses on financial assets. An expected credit loss (ECL) is calculated based on the difference between the contractual cash flows due and the expected cash flows. The difference is discounted at the asset's original effective interest rate and recognised as an allowance against the original value of the asset.

- Financial assets at amortised cost – the ECL for trade receivables, contract assets and cash and cash equivalents is calculated using IFRS 9's simplified approach using lifetime ECL. The allowance is based on the Group's historic experience of collection rates, adjusted for forward looking factors specific to each counterparty and the economic environment at large to create an expected loss matrix.

  The ECL on other financial assets held at amortised cost is measured using the general approach. The Group calculates an allowance based on the 12-month ECL at each reporting date until there is a significant increase in the financial instrument's credit risk, at which point the Group will calculate a loss allowance based on the lifetime ECL, as described above for FVOCI assets.
- Financial assets at fair value through other comprehensive income (FVOCI) – the Group's financial assets held at FVOCI consist of high-quality government bonds that have a low credit risk. The Group's policy is to calculate a 12-month ECL on these assets. If there is a significant increase in credit risk, then a lifetime ECL will be calculated. A significant increase in credit risk is considered to have occurred when contractual payments are more than 30 days past due. Equity instruments are revalued on a regular basis and impaired if necessary.
- Financial assets at fair value through profit or loss (FVPL) – no ECL is calculated for assets held at FVPL as any expected loss is already recognised in the fair value.

Financial assets and financial liabilities are offset and the net amount reported in the balance sheet 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.

Investments in equity instruments
Investments in equity instruments that do not give the Group control or significant influence of an entity, but are held for long-term benefit are classified as FVOCI. Dividend income received is recognised directly in the income statement within operating profit.

Cash and cash equivalents comprises cash at bank, short-term deposits and investments in money market funds, and other instruments and structures that are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value.

Clearing member cash and cash equivalents represents amounts received from the clearing members to cover initial and variation margins and default fund contributions that are not invested in bonds. These amounts are deposited with banks, including central banks, or invested securely in short-term reverse repurchase contracts (reverse repos).

Fair value measurement
All assets and liabilities for which fair value is measured are categorised within the fair value hierarchy which is described in detail in note 19.

For assets and liabilities that are recognised at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation at each balance sheet date.

Derivative financial instruments and hedging activities
Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value at each balance sheet date. The method of recognising the resulting gain or loss depends on whether or not the derivative is designated as a hedging instrument, and the nature of the item being hedged.

The Group applies fair value hedge accounting for hedging interest rate risk on borrowings. Any gain or loss is on the hedging instrument is recognised in the income statement within finance expense.

The Group designates as cash flow hedges both foreign currency derivatives and hedges of interest rate movements associated with highly probable forecast transactions. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income.

The Group hedges a proportion of its net investment in its foreign subsidiaries by designating Euro and US dollar borrowings and derivative instruments as net investment hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income.

In order to qualify for hedge accounting, a transaction must meet strict criteria regarding documentation, effectiveness, probability of occurrence, and reliability of measurement. The Group documents the relationship between hedging instruments and hedged items at the inception of the transaction, as well as its risk management objectives and strategy for undertaking various hedging transactions. Effectiveness testing is conducted at each reporting date and at the commencement and conclusion of any hedge in order to verify that the hedge continues to satisfy all the criteria for hedge accounting to be maintained. The ineffective portion is recognised in the income statement within finance expense.

Amounts accumulated in other comprehensive income are recycled to the income statement in the period when the hedged item affects profit or loss (for example, when the forecast transaction that is hedged takes place). When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing at that time remains in other comprehensive income and is recycled to the income statement when the forecast transaction itself is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the income statement.

Trade and other receivables
Trade receivables are initially recognised at fair value and subsequently at amortised cost, less any loss allowance. The Group's approach to calculating credit loss allowances is described above within the financial instruments policy.

Recoveries of amounts previously written off are credited in the income statement.

Other receivables are initially recognised at fair value and subsequently at amortised cost, less any loss allowance as described above.

Fees receivable
Fees receivable are recognised when the Group has an unconditional right to consideration in exchange for goods or services transferred, but no fee invoice has been formally issued. Amounts are transferred to trade receivables when a formal invoice has been issued.

Contract assets
Contract assets are recognised when the Group has the conditional right to consideration from a customer in exchange for goods or services transferred.

Contract assets are transferred to trade or fees receivables when the entitlement to payment becomes unconditional and only the passage of time is required before payment is due.

Contract liabilities
Revenue relating to future periods is classified as a contract liability on the balance sheet to reflect the Group's obligation to transfer goods or services to a customer for which it has received consideration, or an amount of consideration is due, from the customer.

Contract liabilities are amortised and recognised as revenue in the income statement over the period the services are rendered.

Borrowings
Borrowings are initially recorded at the fair value of amounts received, net of direct issue costs and transaction costs (including upfront facility fees). Subsequently, these liabilities are carried at amortised cost, and interest is charged to the income statement over the period of the borrowings using the effective interest rate method. Similarly, direct issue costs and transaction costs (including upfront facility fees) are charged to the income statement over the period of the borrowings using the effective interest rate method.

Provisions
A provision is recognised where there is a present obligation, whether legal or constructive, as a result of a past event for which it is probable that a transfer of economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the present value of the best estimate of the expenditure required to settle the present obligation at the end of the reporting period, i.e. the present value of the amount that the Group would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party.

Property provisions represent the present value of the Group's estimate of the cost of fulfilling lease obligations for dilapidations on its right-of-use assets.

All provisions are discounted where the time value of money is considered material. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance expense.

Commitments to purchase non-controlling interests
Where the Group has granted put options to non-controlling interest shareholders, these are treated as liabilities as the Group has no control over whether these options are exercised or not. The amounts due are recognised at fair value and are revalued on each balance sheet date. When the liability is recognised initially, the redemption amount is reclassified from non-controlling interests. The changes in the fair value of the liability are recognised in the income statement. Changes in the measurement of the liability that do not change the relative interests in the subsidiary company that are held by the parent and the non-controlling interest shareholder are not equity transactions.

Equity and related items
Share capital
The share capital of the Company includes balances relating to the Company's ordinary equity shares, own shares held by the Employee Benefit Trust and treasury shares held by the Company.

When the Company issues new shares to the Employee Benefit Trust at par, the share capital of the Company is increased by the par value of these own shares, and a corresponding deduction or debit is recorded to the employee share scheme reserves within retained earnings.

From time to time, the Company may also issue new shares to the Employee Benefit Trust to satisfy vesting of specific employee share schemes. These shares may be issued at a subscription price above par value, reflecting the option cost payable by the participant in the employee share scheme. In such instances, the share capital of the Company is increased by the par value of these own shares and the difference between the subscription price and the par value of the own share is recorded in share premium. A corresponding deduction or debit is recognised in the employee share scheme reserves within retained earnings.

Shares reacquired by the Company from the open market as part of share buyback programmes are referred to as treasury shares and are held by the Company. The consideration payable is deducted from retained earnings.

The par value of the treasury shares is then recorded as a transfer from the Company's ordinary equity shares to treasury shares within share capital.

No gain or loss is recognised by the Company in the income statement on the purchase, sale, issue or cancellation of the Company's own shares held by the Employee Benefit Trust and treasury shares.

Dividend distributions
Dividend distributions to the Company's equity holders are recognised as a liability in the Group financial statements in the period in which the dividends are approved by the Company's shareholders. The Group maintains a sustainable progressive dividend policy. The interim dividend will generally be payable each year in September and final dividend in May. The Group's dividend policy determines that the interim dividend is calculated as one-third of the prior full year dividend.

2. Adoption of new accounting standards and interpretations

On 1 January 2019, the Group adopted IFRS 16 'Leases'. The impact of adopting the new standard has been reflected through transition adjustments to the Group's opening retained earnings at the start of the current year, as presented in the consolidated statement of changes in equity. The table below provides a summary of the impact at the date of transition:

	Notes	As reported 31 December 2018 £m	Impact of adoption £m	After adoption 1 January 2019 £m
Property, plant and equipment	13	149	172	321
Investment in leases	24	–	3	3
Assets		**149**	**175**	**324**
Lease liabilities – current	24	4	39	43
Lease liabilities – non-current	24	1	162	163
Trade and other payables – accruals	23	355	(3)	352
Deferred tax liabilities	17	475	(4)	471
Provisions	28	12	4	16
Liabilities		**847**	**198**	**1,045**
Retained earnings		**424**	**(23)**	**401**
Equity		**424**	**(23)**	**401**

The Group adopted IFRS 16 on 1 January 2019 using the modified retrospective transitional arrangements and consequently the comparative amounts have not been restated.

The standard requires the Group to recognise a 'right-of-use' asset where the Group has a long-term arrangement to benefit from an asset which it controls in return for regular consideration (a lease). This definition includes the majority of the Group's offices around the world, and these form the largest group of assets recognised on 1 January 2019. Other assets include motor vehicles.

The Group has recognised right-of-use assets and corresponding liabilities for all leased assets, except for those with only short-term commitment (less than 12 months) or for individual assets of a value less than £5,000. In such cases, the Group recognises the associated lease payments as an expense on a straight-line basis over the lease term.

Right-of-use assets for property or equipment are included within property, plant and equipment on the face of the balance sheet. Assets relating to the right-of-use of an intangible are included within intangible assets on the face of the balance sheet.

The cost of right-of-use assets was calculated as if the Group had always applied the new standard but using an incremental borrowing rate calculated as at 31 December 2018. The value recognised for lease liabilities is the present value of the remaining lease payments, discounted to 1 January 2019 using the same rate.

The following practical expedients have been applied by the Group:

– The use of hindsight to determine the lease term, if the contract included extensions or break clauses

– Application of the short-term lease exemption to leases that expired before 31 December 2019

– Excluding initial direct costs from the measurement of the cost of the asset

– Applying a single discount rate to groups of leases with similar characteristics, e.g. similar period and location

A reconciliation of the new liabilities recognised to the amounts disclosed at 31 December 2018 as lease commitments is given below:

	£m
Lease commitments at 31 December 2018	226
Discounted lease commitments at 1 January 2019	198
Less:	
Lease liabilities recognised as short-term leases	(2)
Add:	
Leases not previously recognised	5
Adjustments in respect of change in treatment of extension options	5
Lease liabilities as at 1 January 2019	**206**
Weighted average incremental borrowing rate as at 1 January 2019	**2.4%**

Notes to the financial statements (continued)

3. Financial risk management

The Group seeks to protect its financial performance and the value of its business from exposure to capital, credit, concentration, country, liquidity, settlement, custodial and market (including foreign exchange, cash flow and fair value interest rate) risks.

The Group's financial risk management approach is not speculative and adopts a '3 lines of defence' model. It is performed both at a Group level, where the treasury function identifies, evaluates and hedges financial risks from a Group perspective and locally, where operating units manage their regulatory and operational risks. This includes clearing operations at the Group's CCPs (CC&G and LCH Group) that adhere to local regulation and operate under approved risk and investment policies.

The Group Chief Risk Officer's team provides assurance that the governance and operational controls are effective to manage risks within the Board-approved risk appetite, supporting a robust Group risk management framework. The Financial Risk Committee, a sub-committee of the Group Executive Committee and chaired by the Chief Financial Officer, meets at least quarterly to oversee the consolidated financial risks of the Group. In addition, the Treasury Committee, a sub-committee of the Financial Risk Committee (which is also chaired by the Chief Financial Officer), meets regularly to monitor the management of, and controls around foreign exchange, interest rate, credit and concentration risks and the investment of excess liquidity in addition to its oversight of the Group's funding arrangements and credit ratings. Both committees provide the Group's senior management with assurance that the treasury and risk operations are performed in accordance with Group Board approved policies and procedures. Regular updates, on a range of key criteria as well as new developments, are provided through the Enterprise-Wide Risk Management Framework to the Group Risk Committee. See 'Risk Management Oversight Supplement' for further detail on the Group's risk framework on our website at: **www.lseg.com/about-london-stock-exchange-group/risk-management-oversight**.

The UK's exit from the EU leaves significant uncertainty concerning the political and regulatory environment, the UK's future relationship with the EU, and the overall impact on the UK and EU economies both in the short and medium term. The UK companies within the Group, as members of the EU or European Economic Area (EEA), rely on a number of rights that are available to them to conduct business with other EU or EEA members. This includes, without limitation, the right for UK CCPs to offer clearing services to EU regulated firms under EMIR, and the right for UK trading venues to offer services to members in the EU or EEA. The Group companies have analysed the potential impacts and considered contingency plans that they may choose to execute should these rights not be replaced by rights that persist outside EU membership. The European Commission published in the Official Journal on 23 December 2019 an extension of temporary equivalence for UK CCPs for another twelve months, confirming LCH Ltd's ability to continue to offer all clearing services for all products and services to all members and clients after 31 January 2020 even under a no-deal Brexit scenario.

Capital risk

Risk description

The Group is profitable and strongly cash generative and its capital base comprises equity and debt capital.

However, the Group recognises the risk that its entities may not maintain sufficient capital to meet their obligations or they may make investments that fail to generate a positive or value enhancing return.

The Group comprises regulated and unregulated entities. It considers that:

- increases in the capital requirements of its regulated companies, or
- negative yields on its investments of cash, or
- a scarcity of debt or equity (driven by its own performance, its capital structure, or financial market conditions)

either separately or in combination are the principal specific risks to managing its capital.

Risk management approach

The Group focuses upon its overall cost of capital as it seeks, within the scope of its risk appetite, to provide superior returns to its shareholders, fulfil its obligations to the relevant regulatory authorities and other stakeholders and ensure that it is not overly dependent upon short and medium term debt that might not be available at renewal. Maintaining access to capital and flexibility to invest for growth is a key management consideration.

The Group can manage its capital structure and react to changes in economic conditions by varying returns to shareholders, issuing new shares or increasing or reducing borrowings. The Board reviews dividend policy and funding capacity on a regular basis and the Group maintains comfortable levels of debt facility headroom. A high-level summary of the Group's capital structure is presented below:

Book value of capital	2019 £m	2018 £m
Total shareholders' funds	**3,455**	3,343
Group consolidated debt	**2,085**	2,203

Whilst the Company is unregulated, the regulated entities within the Group monitor compliance with the capital requirements set by their respective competent authorities and the terms of reference of the Financial Risk Committee includes oversight of the Group's Capital Management Policy. The Capital Management Policy seeks to ensure that capital is allocated optimally in order to maintain a prudent balance sheet and meet regulatory requirements, drive growth and offer suitable returns to shareholders. Regulated entities within the Group have to date predominantly issued equity and held cash to satisfy their local regulatory capital requirements

We believe that capital held by Group companies is sufficient to comfortably support current regulatory frameworks. Whilst the level of amounts set aside for these purposes remains subject to ongoing review with regulators, particularly in Europe, total capital amounts are broadly in line year on year reflecting a relatively settled regulatory backdrop for the Group in 2019. The aggregate of the Group's regulatory and operational capital is shown below:

Regulatory and operational capital	2019 £m	2018 £m
Total regulatory and operational capital	**1,231**	1,203
Amount included in cash and cash equivalents	**1,125**	1,120

To maintain the financial strength to access new capital at reasonable cost and sustain an investment grade credit rating, the Group monitors its net leverage ratio which is operating net debt (i.e. net debt after excluding cash and cash equivalents set aside for regulatory and operational purposes) to proforma adjusted EBITDA (Group consolidated earnings before net finance charges, taxation, impairment, depreciation and amortisation, foreign exchange gains or losses and non-underlying items, prorated for acquisitions or disposals undertaken in the period) against a target range of 1–2 times. The Group is also mindful of potential impacts on the key metrics employed by the credit rating agencies in considering increases to its borrowings. The Group seeks to maintain a strong investment grade credit rating over time and will therefore employ a credible plan to return to its target range in the event leverage rises temporarily due to a debt funded major investment.

As at 31 December 2019, net leverage was 1.4 times (2018: 1.8 times) and remains well within the Group's target range. The Group is comfortably in compliance with its bank facility ratio covenants (net leverage and interest cover) and these measures do not inhibit the Group's operations or its financing plans.

Credit and concentration risk

Risk description

The Group's credit risk relates to its customers and counterparties being unable to meet their obligations to the Group either in part or in full, including:

- customer receivables,
- repayment of invested cash and cash equivalents, and
- settlement of derivative financial instruments.

In their roles as CCP clearers to financial market participants, the Group's CCPs guarantee final settlement of transactions acting as buyer towards each seller and as seller towards each buyer. They manage substantial credit risks as part of their operations including unmatched risk positions that might arise from the default of a party to a cleared transaction. For more information see 'Principal Risks and Uncertainties', pages 60 to 73.

Not withstanding regulations that require CCPs to invest predominantly in secured instruments or structures (such as government bonds and reverse repos), CC&G and the LCH Group CCPs are able to maintain up to 5% of their total deposits at commercial banks on an unsecured basis. Through this potential for its CCPs to invest on an unsecured basis (as well as by certain other regulated and unregulated operations observing agreed investment policy limits), the Group may continue to face some risk of direct loss from a deterioration or failure of one or more of its unsecured investment counterparties.

Concentration risk may arise through Group entities having large individual or connected exposures to groups of counterparties whose likelihood of default is driven by common underlying factors. This is a particular focus of the investment approach at the Group's CCPs.

Risk management approach

Group

Credit risk is governed through policies developed at a Group level. Limits and thresholds for credit and concentration risk are kept under review.

Group companies make a judgement on the credit quality of their customers based upon the customer's financial position, the recurring nature of billing and collection arrangements and, historically, a low incidence of default. The Group is exposed to a large number of customers and so concentration risk on its receivables is deemed low by management. The Group's credit risk is equal to the total of its financial assets as shown in note 19. No estimated credit losses have been recognised on other financial instruments and there have been no significant increases in credit risk for these assets.

Non-CCP entities

Credit risk associated with cash and cash equivalents is managed by limiting exposure to counterparties with credit rating levels below policy minimum thresholds, potentially overlaid by a default probability assessment. Except where specific approval is arranged to increase this limit for certain counterparties, investment limits of between £25 million and £100 million apply for periods ranging between a week and 12 months, depending on counterparty credit rating and default probability risk. Derivative transactions and other treasury receivable structures are undertaken or agreed with well-capitalised counterparties and are authorised by policy to limit the credit risk underlying these transactions.

CCPs

To address market participant and latent market risk, the Group's CCPs have established financial safeguards against single or multiple defaults. Clearing membership selection is based upon supervisory capital, technical and organisational criteria. Each member must pay margins, computed and collected at least daily, to cover the exposures and theoretical costs which the CCP might incur in order to close out open positions in the event of the member's default. Margins are calculated using established and internationally acknowledged risk models and are debited from participants' accounts through central bank accounts and via commercial bank payment systems. Minimum levels of cash collateral are required. Non-cash collateral is revalued daily.

Clearing members also contribute to default funds managed by the CCPs to guarantee the integrity of the markets in the event of multiple defaults in extreme market circumstances. Amounts are determined on the basis of the results of periodic stress testing examined by the risk committees of the respective CCPs. Furthermore, each of the Group's CCPs reinforces its capital position to meet the most stringent relevant regulatory requirements applicable to it, including holding a minimum amount of dedicated own resources to further underpin the protective credit risk framework in the event of a significant market stress event or participant failure.

An analysis of the aggregate clearing member contributions of margin and default funds across the CCPs is shown below:

Total collateral held		**2019 £bn**	**2018 £bn**
	Cash received	**93**	81
Collateral security	Non-cash pledged	**115**	92
	Guarantees pledged	**4**	2
Total collateral as at 31 December 2019		**212**	175
Maximum collateral held during the year		**242**	181

Investment counterparty risk for CCP margin and default funds is managed by investing the cash element in instruments or structures deemed 'secure' by the relevant regulatory bodies including through direct investments in highly rated, 'regulatory qualifying' sovereign bonds and supra-national debt, investments in tri-party and bilateral reverse repos (receiving high-quality government securities as collateral) and, in certain jurisdictions, deposits with the central bank. The small proportion of cash that is invested unsecured is placed for short durations with highly rated counterparties where strict limits are applied with respect to credit quality, concentration and tenor

	2019 £bn	**2018 £bn**
Total investment portfolio	**85**	94
Maximum portfolio size during the year	**122**	103
Additional portfolio information:		
Amount invested securely	**100%**	98%
Weighted average maturity (days)	**90**	49

Associated liquidity risks are considered in the investment mix and discussed further below.

To address concentration risk, the Group maintains a diversified portfolio of high-quality, liquid investments and uses a broad range of custodians, payment and settlement banks and agents. The largest concentration of treasury exposures as at 31 December 2019 was 17% of the total investment portfolio to the French Government (2018 17% to the French Government).

Credit and concentration risk

Risk description	Risk management approach
	Trade and fees receivable An impairment analysis is performed monthly using a provision matrix to measure expected credit losses on trade and fees receivable. The calculation reflects current conditions and forecasts of future economic conditions. None of the Group's trade receivables are material by individual counterparty.

At 31 December 2019	Fees receivable £m	<180 days £m	>180 days £m	Total £m
Expected credit loss rate	<1%	<1%	46%	
Total receivables	141	310	16	467
Expected credit loss	–	(2)	(7)	(9)
	141	308	9	458

At 31 December 2018	Fees receivable £m	<180 days £m	>180 days £m	Total £m
Expected credit loss rate	<1%	<1%	19%	
Total receivables	139	380	52	571
Expected credit loss	–	(1)	(10)	(11)
	139	379	42	560

Country risk

Risk description	Risk management approach
Distress can result from the risk that certain governments may be unable or find it difficult to service their debts. This could have adverse effects, particularly on the Group's CCPs, potentially impacting cleared products, margin collateral, investments, the clearing membership and the financial industry as a whole.	Specific risk frameworks manage country risk for both fixed income clearing and margin collateral and all clearing members' portfolios are monitored regularly against a suite of sovereign stress scenarios. Investment limits and counterparty and clearing membership monitoring are sensitive to changes in ratings and other financial market indicators, to ensure the Group's CCPs are able to measure, monitor and mitigate exposures to sovereign risk and respond quickly to anticipated changes. Risk Committees maintain an ongoing watch over these risks and the associated policy frameworks to protect the Group against potentially severe volatility in the sovereign debt markets. The Group's sovereign exposures of £1 billion or more at the end of either of the financial reporting periods shown below were:

Group Aggregate Sovereign Treasury Exposures

Country	2019 £bn	2018 £bn
France	18	16
USA	12	9
Italy	11	2
EU	10	3
UK	6	4
Spain	1	–
Netherlands	–	7
Switzerland	–	3
Germany	–	1

Liquidity, settlement and custodial risk

Risk description

The Group's operations are exposed to liquidity risk to the extent that they are unable to meet their daily payment obligations.

In addition, the Group's CCPs and certain other Group companies must maintain a level of liquidity (consistent with regulatory requirements) to ensure the smooth operation of their respective markets and to maintain operations in the event of a single or multiple market stress event or member failure. This includes the potential requirement to liquidate the position of a clearing member under a default scenario including covering the associated losses and the settlement obligations of the defaulting member.

The Group is exposed to the risk that a payment or settlement bank could fail or that its systems encounter operational issues, creating liquidity pressures and the risk of possible defaults on payment or receivable obligations.

The Group uses third-party custodians to hold securities and is therefore exposed to the custodian's insolvency, its negligence, a misuse of assets or poor administration

Risk management approach

Group

The combined Group businesses are profitable, generate strong free cash flow and operations are not significantly impacted by seasonal variations. The Group maintains sufficient liquid resources to meet its financial obligations as they fall due and to invest in capital expenditure, make dividend payments, meet its pension commitments, appropriately support or fund acquisitions or repay borrowings. Subject to regulatory constraints impacting certain entities, funds can generally be lent across the Group and cash earnings remitted through regular dividend payments by local companies. This is an important component of the Group Treasury cash management policy and approach.

Management monitors forecasts of the Group's cash flow and overlays sensitivities to these forecasts to reflect assumptions about more difficult market conditions or stress events. The Group will take the appropriate actions to satisfy working capital requirements when committing to large scale acquisitions, including comfortable liquidity headroom projected over a reasonable timeframe.

Non-CCP entities

Treasury policy requires that the Group maintains adequate credit facilities provided by a diversified lending group to cover its expected funding requirements and ensure a minimum level of headroom for at least the next 24 months. The financial strength of lenders to the Group is monitored regularly.

During the year ended 31 December 2019, to improve its debt maturity profile, the Group approached its lenders to further extend the maturity of its 2017 arranged, five year, £600 million committed revolving credit facility by another year to 2024. To diversify and maintain its liquidity sources the Group continued to issue Euro commercial paper under its £1 billion programme, with €300 million in issuance at the end of the financial period (2018: €300 million). At 31 December 2019, £934 million (2018: £1,159 million) of the Group's bank facilities were unutilised, with circa £250 million having been drawn to repay the Group's 2009 issued Bond which matured in the year. Facilities also provide swingline backstop coverage for the €300 million Euro commercial paper in issuance.

During the year, LSEG also arranged a Bridge Facility to facilitate a potential refinancing as it completes the acquisition of Refinitiv, announced on 1 August 2019. The facility is committed and structured with a US$9,325 million tranche and a €3,580 million tranche to provide funding capacity to precisely match the debt the Group will take on when the acquisition completes.

CCPs

The Group's CCPs maintain sufficient cash and cash equivalents and, in certain jurisdictions, have access to central bank refinancing or commercial bank liquidity support credit lines to meet the cash requirements of the clearing and settlement cycle. Revised regulations require CCPs to ensure that appropriate levels of back-up liquidity are in place to underpin the dynamics of a largely secured cash investment requirement, ensuring that the maximum potential outflow under extreme market conditions is covered (see credit and concentration risk section above). The Group's CCPs monitor their liquidity needs daily under normal and stressed market conditions.

Where possible, the Group employs guaranteed delivery versus payment settlement techniques and manages CCP margin and default fund flows through central bank or long-established, bespoke commercial bank settlement mechanisms. Monies due from clearing members remain the clearing members' liability if the payment agent is unable to effect the appropriate transfer. In addition, certain Group companies, including the CCPs, maintain operational facilities with commercial banks to manage intraday and overnight liquidity.

Custodians are subject to minimum eligibility requirements, ongoing credit assessment, robust contractual arrangements and are required to have appropriate back-up contingency arrangements in place.

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 reflect the contractual undiscounted cash flows. The borrowings line includes future interest on debt that is not accrued for in relation to bonds that are not yet due

At 31 December 2019	**Less than 1 year £m**	**Between 1 and 2 years £m**	**Between 2 and 5 years £m**	**Over 5 years £m**	**Total £m**
Borrowings	**529**	**333**	**483**	**914**	**2,259**
Trade and other payables (excluding lease liabilities)	**560**	**–**	**–**	**–**	**560**
Lease liabilities	**39**	**41**	**90**	**36**	**206**
Clearing member business liabilities	**796,102**	**–**	**–**	**–**	**796,102**
Derivative financial instruments	**1**	**–**	**30**	**9**	**40**
Other non-current payables (excluding lease liabilities)	**–**	**4**	**–**	**–**	**4**
	797,231	**378**	**603**	**959**	**799,171**

At 31 December 2018	**Less than 1 year £m**	**Between 1 and 2 years £m**	**Between 2 and 5 years £m**	**Over 5 years £m**	**Total £m**
Borrowings	601	34	373	1,435	2,443
Trade and other payables	509	–	–	–	509
Clearing member business liabilities	835,508	–	–	–	835,508
Derivative financial instruments	30	–	–	17	47
Other non-current payables	–	7	3	1	11
	836,648	41	376	1,453	838,518

Market risk – Foreign Exchange risk

Risk description

The Group operates primarily in the UK, Europe and North America, but also has growing and strategically important businesses in Asia, and other alliances and investments across the globe. Its principal currencies of operation are Sterling, Euro and US dollars.

Group companies generally invoice revenues, incur expenses and purchase assets in their respective local currencies. As a result, foreign exchange risk arises mainly from the translation of the Group's foreign currency earnings, assets and liabilities into its reporting currency, Sterling, and from occasional, high value intragroup transactions. Exceptions exist including at MillenniumIT (a Sri Lankan Rupee reporting entity) which invoices a material proportion of its revenues in US dollars, and at certain operations of the LCH Group (a Euro reporting subsidiary), which generate material revenues in Sterling and US dollars and incur material costs in Sterling.

Intragroup dividends and the currency debt interest obligations of the Company may create short-term transactional FX exposures but play their part in controlling the level of translational FX exposures the Group faces.

The Group may be exposed from time to time to FX risk associated with strategic investments in, or divestments from, operations denominated in currencies other than Sterling.

Risk management approach

The Group seeks to match the currency of its debt liabilities to the currency of its earnings and cash flows which, to an extent, protects its key ratios (net leverage and interest coverage) and balances the currency of its assets with its liabilities. In order to mitigate the impact of unfavourable currency exchange rate movements on earnings and net assets, non-Sterling cash earnings are centralised and applied to matching currency debt and interest payments, and, where relevant, interest payments on Sterling debt re-denominated through the use of cross-currency swaps.

A material proportion of the Group's debt is held in or swapped into Euros and US dollars as noted below.

Currency of debt	2019 £m	2018 £m
Euro denominated drawn debt	**1,557**	1,631
Euro denominated cross-currency interest rate swaps	**(637)**	(361)
US dollar denominated drawn debt	**107**	–
US dollar denominated cross-currency interest rate swaps	**637**	631

During the year, the Group settled maturing Euro-denominated cross-currency interest rate swaps linked to the maturity of its 2009 issued £250 million bond. Therefore, at the end of the year, the remaining cross-currency interest rate swaps are directly linked to Euro fixed debt. The Euro and US dollar denominated debt, including the cross-currency swaps, provides a hedge against the Group's net investment in Euro and US dollar denominated entities.

As at 31 December 2019, the Group's designated hedges of its net investments were fully effective.

Whilst transactional foreign exchange exposure is limited, the Group hedges material transactions in accordance with Group Treasury policy (which requires cash flows of single transactions or a series of linked transactions of more than £5 million or equivalent per annum to be hedged) with appropriate derivative instruments or by settling currency payables or receivables within a short timeframe. Where appropriate, hedge accounting for derivatives is considered in order to mitigate material levels of income statement volatility.

In addition to projecting and analysing its earnings and debt profile by currency, the Group reviews sensitivities to movements in exchange rates which are appropriate to market conditions. The Group has considered movements in the Euro and the US dollar over the year ended 31 December 2019 and year ended 31 December 2018 and, based on actual market observations between its principal currency pairs, has concluded that a 10% movement in rates is a reasonable level to illustrate the risk to the Group. The impact on post tax profit and equity for the years ended 31 December is set out in the table below:

		Post tax profit £m	2019 Equity £m	Post tax profit £m	2018 Equity £m
Euro	Sterling weaken	**–**	**5**	(2)	(16)
	Sterling strengthen	**–**	**(5)**	2	15
US Dollar	Sterling weaken	**(4)**	**(55)**	7	(45)
	Sterling strengthen	**4**	**50**	(7)	41

This reflects foreign exchange gains or losses on translation of Euro and US dollar denominated financial assets and financial liabilities, including Euro and US dollar denominated cash and borrowings.

The impact on the Group's operating profit for the year before amortisation of purchased intangible assets and non-underlying items, of a 10 Euro cent and 10 US dollar cent movement in the Sterling-Euro and Sterling-US dollar rates respectively, can be seen below.

		2019 £m	2018 £m
Euro	Sterling weaken	**32**	27
	Sterling strengthen	**(27)**	(23)
US Dollar	Sterling weaken	**37**	31
	Sterling strengthen	**(31)**	(27)

Market risk – interest rate risk

Risk description	Risk management approach
The Group's interest rate risk arises through the impact of changes in market rates on cash flows associated with cash and cash equivalents, investments in financial assets and borrowings held at floating rates. The Group may also face future interest rate exposure connected to committed M&A transactions where significant debt financing is involved. The Group's CCPs face interest rate exposure through the impact of changes in the reference rates used to calculate member liabilities versus the yields achieved through their predominantly secured investment activities.	Group interest rate management policy focuses on protecting the Group's credit rating and maintaining compliance with bank covenant requirements. To support this objective, a minimum coverage of interest expense by EBITDA of 7 times, and a maximum floating rate component of 50% of total debt are targeted. This approach reflects: (i) a focus on the Group's cost of gross debt rather than its net debt given the material cash and cash equivalents set aside for regulatory purposes; (ii) the short duration allowed for investments of cash and cash equivalents held for regulatory purposes which, by their nature, generate low investment yields; (iii) a view currently maintained that already low market yields are unlikely to move materially lower; and (iv) the broad natural hedge of floating rate borrowings provided by the significant balances of cash and cash equivalents held effectively at floating rates of interest. As at 31 December 2019, consolidated net interest expense cover by EBITDA was measured over the 12-month period at 14.4 times (2018: 16.1 times) and the floating rate component of total debt was 25% (2018: 14%). Where the Group has committed to M&A transactions and is exposed to prospective interest rate risk on borrowings the Group Treasury function will consider the exposure and recommend hedging solutions that conform with policy and seek to limit future interest costs. The acquisition of Refinitiv will meaningfully increase the Group's debt and the interest rate risk exposure was evaluated during the financial period. As at 31 December 2019, no hedging had been arranged but the exposure remains under ongoing review. In the Group's CCPs, interest bearing assets are generally invested in secured instruments or structures and for a longer term than interest bearing liabilities, whose interest rate is reset daily. This makes investment revenue vulnerable to volatility in overnight rates and shifts in spreads between overnight and term rates. Interest rate exposures (and the risk to CCP capital) are managed within defined risk appetite parameters against which sensitivities are monitored daily. In its review of the sensitivities to potential movements in interest rates, the Group has considered interest rate volatility over the last year and prospects for rates over the next 12 months and has concluded that a 1 percentage point upward movement (with a limited prospect of material downward movement) reflects a reasonable level of risk to current rates. At 31 December 2019, at the Group level, if interest rates on cash and cash equivalents and borrowings had been 1 percentage point higher with all other variables held constant, post tax profit for the year would have been £8 million higher (2018: £8 million higher) mainly as a result of higher interest income on floating rate cash and cash equivalents partially offset by higher interest expense on floating rate borrowings. At 31 December 2019, at the CCP level (in aggregate), if interest rates on the common interest bearing member liability benchmarks of Eonia, Fed Funds and Sonia, for Euro, US dollar and Sterling liabilities respectively, had been 1 percentage point higher, with all other variables held constant, the daily impact on post tax profit for the Group would have been £2 million lower (2018: £2 million lower). This deficit is expected to be recovered as investment yields increase as the portfolio matures and is reinvested.

Notes to the financial statements (continued)

4. Significant judgements and estimates

Judgements and estimates are regularly evaluated based on historical experience, current circumstances and expectations of future events.

Estimates

For the year ended 31 December 2019, the following areas require the use of estimates:

- **Impairment of intangible assets, goodwill and investment in subsidiaries** – these assets form a significant part of the balance sheet and are key assets for the cash generating business in the Group. The recoverable amounts of relevant cash generating units are based on value in use calculations using management's best estimate of future performance and estimates of the return required by investors to determine an appropriate discount rate. Details are provided in note 14;
- **Defined benefit pension asset or liability** – determined based on the present value of future pension obligations using assumptions determined by the Group with advice from an independent qualified actuary. Sensitivity analysis is provided in note 18; and
- **Estimated service period for admission and listing services within the Primary Markets business** – the Group determines the estimated period for admission services using historical analysis of listing durations in respect of the companies on our markets. The estimated service period inherently incorporates an element of uncertainty in relation to the length of a customer listing which is subject to factors outside of the Group's control. The estimated service periods are reassessed at each reporting date to ensure the period reflects the Group's best estimates. The Group estimates that a one year decrease in the deferral period would cause an estimated £19 million increase in revenue and a one year increase in the deferral period would cause an estimated £17 million decrease in revenue recognised in the year.

Judgements:

In preparing the financial statements for the year ended 31 December 2019, the following judgement has been made:

- **Clearing member trading assets and trading liabilities** – The Group uses its judgement to carry out the offsetting within clearing member balances. The carrying values of the balances are offset at what the Group considers an appropriate level to arrive at the net balances reported in the balance sheet. The Group has an aligned approach for its CCP subsidiaries to ensure the principles applied are consistent across similar assets and liabilities. The approach is reviewed on a timely basis to ensure the approach used is the most appropriate. Details of amounts offset are provided in note 20.
- **EU State Aid** – The Group has used its judgement to assess any obligations arising in relation to EU State Aid investigations. Considering the appeals made by the UK PLCs (including the Group), UK Government, and management's internal view, the Group does not consider any provision is required in relation to this investigation. Additional details are provided in note 10.

5. Segmental information

The Group is organised into operating units based on its service lines and has six reportable segments: Information Services, Post Trade Services – LCH, Post Trade Services – CC&G and Monte Titoli, Capital Markets, Technology Services and Other. These segments generate revenue in the following areas:

- **Information Services** – Subscription and licence fees for data and index services provided;
- **Post Trade Services** – LCH – Fees based on CCP and clearing services provided, non-cash collateral management and net interest earned on cash held for margin and default funds;
- **Post Trade Services – CC&G and Monte Titoli** – Clearing fees based on trades and contracts cleared, net interest earned on cash, securities held for margin and default funds, and fees from settlement and custody services;
- **Capital Markets** – Admission fees from initial listing and further capital raises, annual fees charged for securities traded on the Group's markets, and fees from our secondary market services;
- **Technology Services** – Capital markets software licences and related IT infrastructure, network connection and server hosting services; and
- **Other** – Includes events and media services.

The Executive Committee monitors the operating results of its business units separately for the purpose of making decisions about resource allocation and performance assessment. The Executive Committee primarily uses a measure of adjusted earnings before interest, tax, depreciation, and amortisation (EBITDA) to assess the performance of the operating segments.

Sales between segments are carried out at arm's length and are eliminated on consolidation.

Segmental disclosures for the year ended 31 December 2019 are as follows:

	Information Services £m	Post Trade Services – LCH £m	Post Trade Services – CC&G and Monte Titoli £m	Capital Markets £m	Technology Services £m	Other £m	Eliminations £m	Group £m
Revenue from external customers	**902**	**550**	**103**	**426**	**66**	**9**	**–**	**2,056**
Inter-segmental revenue	–	–	–	–	17	–	(17)	–
Revenue	**902**	**550**	**103**	**426**	**83**	**9**	**(17)**	**2,056**
Net treasury income from CCP clearing business	**–**	**206**	**49**	**–**	**–**	**–**	**–**	**255**
Other income	**–**	**–**	**–**	**–**	**–**	**3**	**–**	**3**
Total income	**902**	**756**	**152**	**426**	**83**	**12**	**(17)**	**2,314**
Cost of sales	(74)	(114)	(7)	(5)	(7)	(3)	–	(210)
Gross profit	**828**	**642**	**145**	**421**	**76**	**9**	**(17)**	**2,104**
Income from equity investments	–	7	–	–	–	–	–	7
Share of loss after tax of associates	–	–	–	(1)	–	(6)	–	(7)
Earnings before interest, tax, depreciation, amortisation and impairment	**505**	**415**	**101**	**228**	**56**	**(34)**	**(6)**	**1,265**
Underlying depreciation, amortisation and impairment	(56)	(76)	(9)	(32)	(25)	(6)	4	(200)
Operating profit/(loss) before non-underlying items	**449**	**339**	**92**	**196**	**31**	**(40)**	**(2)**	**1,065**
Amortisation and impairment of goodwill and purchased intangible assets								(195)
Other non-underlying items								(132)
Operating profit								**738**
Net finance expense including non-underlying items								(87)
Profit before tax								**651**

Revenue from external customers principally comprises fees for services rendered of £1,981 million (2018: £1,837 million) and Technology Services of £66 million (2018: £65 million).

Net treasury income from CCP clearing businesses of £255 million (2018: £218 million) comprises gross interest income of £1,337 million (2018: £1,025 million) less gross interest expense of £1,082 million (2018: £807 million).

During the year the Group recognised a total of £29 million (2018: £106 million) of net treasury income on financial assets and liabilities held at amortised cost comprising £1,028 million (2018: £732 million) gross treasury income and £999 million (2018: £626 million) gross treasury expense.

£226 million net income (2018: £112 million net gain) on assets held at fair value was recognised, comprising £309 million (2018: £293 million) income and £83 million (2018: £181 million) expense.

Presented within revenue are net settlement expenses from the CCP clearing businesses of net nil (2018: £2 million) which comprise gross settlement income of £30 million (2018: £24 million) less gross settlement expense of £30 million (2018: £26 million).

The Group's revenue from contracts with customers disaggregated by segment, major product and service line, and timing of revenue recognition for the year ended 31 December 2019 is shown below:

	Information Services £m	Post Trade Services – LCH £m	Post Trade Services – CC&G and Monte Titoli £m	Capital Markets £m	Technology Services £m	Other £m	Group £m
Revenue from external customers							
Major product & service lines							
FTSE Russell Indexes – subscription	418	–	–	–	–	–	418
FTSE Russell Indexes – asset based	231	–	–	–	–	–	231
Real time data	97	–	–	–	–	–	97
Other information services	156	–	–	–	–	–	156
Clearing	–	550	43	–	–	–	593
Settlement, custody and other	–	–	60	–	–	–	60
Primary capital markets	–	–	–	151	–	–	151
Secondary capital markets – equities	–	–	–	151	–	–	151
Secondary capital markets – fixed income, derivatives and other	–	–	–	124	–	–	124
Capital markets software licences	–	–	–	–	66	–	66
Other	–	–	–	–	–	9	9
Total revenue from contracts with customers	**902**	**550**	**103**	**426**	**66**	**9**	**2,056**
Timing of revenue recognition							
Services satisfied at a point in time	42	544	95	283	4	7	975
Services satisfied over time	860	6	8	143	62	2	1,081
Total revenue from contracts with customers	**902**	**550**	**103**	**426**	**66**	**9**	**2,056**

Notes to the financial statements (continued)

Segmental disclosures for the year ended 31 December 2018 are as follows:

	Information Services £m	Post Trade Services – LCH £m	Post Trade Services – CC&G and Monte Titoli £m	Capital Markets £m	Technology Services £m	Other £m	Eliminations £m	Group £m
Revenue from external customers	841	487	102	407	65	9	–	1,911
Inter-segmental revenue	–	–	1	–	21	–	(22)	–
Revenue	841	487	103	407	86	9	(22)	1,911
Net treasury income from CCP clearing business	–	175	43	–	–	–	–	218
Other income	–	–	–	–	–	6	–	6
Total income	841	662	146	407	86	15	(22)	2,135
Cost of sales	(70)	(123)	(7)	(16)	(9)	(2)	–	(227)
Gross profit	771	539	139	391	77	13	(22)	1,908
Share of loss after tax of associates	–	–	–	(1)	–	(7)	–	(8)
Earnings before interest, tax, depreciation, amortisation and impairment	469	304	92	201	18	(5)	(13)	1,066
Underlying depreciation, amortisation and impairment	(29)	(62)	(9)	(17)	(20)	(2)	4	(135)
Operating profit/(loss) before non-underlying items	440	242	83	184	(2)	(7)	(9)	931
Amortisation and impairment of goodwill and purchased intangible assets								(159)
Other non-underlying items								(21)
Operating profit								751
Net finance expense								(66)
Profit before tax								685

The Group's revenue from contracts with customers disaggregated by segment, major product and service line, and timing of revenue recognition for the year ended 31 December 2018 is shown below:

	Information Services £m	Post Trade Services – LCH £m	Post Trade Services – CC&G and Monte Titoli £m	Capital Markets £m	Technology Services £m	Other £m	Group £m
Revenue from external customers							
Major product & service lines							
FTSE Russell Indexes – subscription	373	–	–	–	–	–	373
FTSE Russell Indexes – asset based	219	–	–	–	–	–	219
Real time data	94	–	–	–	–	–	94
Other information services	155	–	–	–	–	–	155
Clearing	–	487	41	–	–	–	528
Settlement, custody and other	–	–	61	–	–	–	61
Primary capital markets	–	–	–	113	–	–	113
Secondary capital markets – equities	–	–	–	169	–	–	169
Secondary capital markets – fixed income, derivatives and other	–	–	–	125	–	–	125
Capital markets software licences	–	–	–	–	65	–	65
Other	–	–	–	–	–	9	9
Total revenue from contracts with customers	841	487	102	407	65	9	1,911
Timing of revenue recognition							
Services satisfied at a point in time	45	479	93	237	2	8	864
Services satisfied over time	796	8	9	170	63	1	1,047
Total revenue from contracts with customers	841	487	102	407	65	9	1,911

31 December 2018 comparatives have been re-presented inline with current year classification.

Geographical disclosures

	2019 £m	2018 £m
Revenue from external customers		
UK	**1,149**	1,092
USA	**388**	348
Italy	**327**	316
France	**144**	109
Other	**48**	46
Total	**2,056**	1,911
Non-current operating assets		
UK	**1,492**	1,149
USA	**2,113**	2,226
Italy	**1,203**	1,271
France	**74**	61
Other	**96**	154
Total	**4,978**	4,861

Non-current operating assets consist of property, plant and equipment, intangible assets, investment in associates and strategic long-term investments in equity instruments.

6. Expenses by nature

Expenses comprise the following:

	Notes	2019 £m	2018 £m
Employee costs	7	**529**	510
IT costs		**146**	136
Short-term lease costs		**2**	–
Lease costs for low value items		**2**	–
Other costs		**163**	193
Foreign exchange gains		**(3)**	(5)
Underlying operating expenses before depreciation, amortisation and impairment		**839**	834
Non-underlying operating expenses before depreciation, amortisation and impairment	8	**132**	21
Operating expenses before depreciation, amortisation and impairment		**971**	855

Other costs include £49 million in relation to professional fees (2018: £60 million). Previously property costs included within other costs are now recognised as depreciation under IFRS 16 (note 2).

7. Employee costs

Employee costs comprise the following:

	Note	2019 £m	2018 £m
Salaries and other benefits		**397**	387
Social security costs		**71**	62
Pension costs	18	**26**	25
Share-based compensation		**35**	36
Total		**529**	510

Staff costs include the costs of contract staff who are not on the payroll, but fulfil a similar role to employees.

The average number of employees in the Group from total operations was:

	2019	2018
UK	**1,631**	1,628
USA	**664**	659
Italy	**643**	612
France	**185**	166
Sri Lanka	**1,082**	1,025
Other	**493**	315
Total	**4,698**	4,405

Average staff numbers are calculated from the date of acquisition for subsidiary companies acquired in the year and up to the date of disposal for businesses disposed in the year.

The Company had no employees in the year (2018: nil).

Notes to the financial statements (continued)

8. Non-underlying items

	Note	2019 £m	2018 £m
Amortisation and impairment of intangible assets	14	**195**	159
Transaction costs		**96**	9
Restructuring costs		**32**	–
Integration costs		**4**	12
Operating expenses before depreciation, amortisation and impairment		**132**	21
Total affecting operating profit		**327**	180
Non-underlying finance expense		**16**	–
Total affecting profit before tax		**343**	180
Tax effect on items affecting profit before tax			
Deferred tax on amortisation of purchased intangible assets		**(31)**	(33)
Current tax on amortisation of purchased intangible assets		**(11)**	(11)
Tax effect on other items		**(8)**	(11)
Total tax effect on items affecting profit before tax		**(50)**	(55)
Total non-underlying charge to income statement		**293**	125

During the year the Group incurred a £180 million (2018: £154 million) amortisation charge in relation to purchased intangible assets, which includes £25 million accelerated amortisation in relation to Mergent Inc. In the prior year £5 million expense was recognised in relation to written-off work in progress assets no longer required for development.

The Group impaired goodwill of £8 million and purchased intangible assets of £1 million in relation to Turquoise Global Holdings Ltd and the Group impaired goodwill of £6 million in relation to Mergent Inc (note 14).

Transaction costs comprise charges incurred for services relating to potential merger and acquisition transactions.

Restructuring costs comprise one-off implementation costs arising from the cost savings programme announced in March 2019.

Integration costs in the current and prior year relate to the activities to integrate the Mergent and Yield Book businesses into the Group.

Financing costs relate to fees for establishing a Bridge Financing to refinance the Refinitiv notes and term loans in full following completion of its proposed acquisition. Further details of the facility are provided in note 26.

Further details on the recognition of deferred tax in relation to the amortisation of purchased intangible assets are provided in note 17.

9. Net finance expense

	Notes	2019 £m	2018 £m
Finance income			
Expected return on defined benefit pension scheme assets	18	**1**	1
Bank deposit and other interest income		**9**	8
Other finance income		**4**	4
Underlying finance income		**14**	13
Finance expense			
Interest payable on bank and other borrowings		**(73)**	(72)
Defined benefit pension scheme interest cost	18	**–**	(1)
Lease interest payable	24	**(4)**	–
Other finance expenses		**(8)**	(6)
Underlying finance expense		**(85)**	(79)
Non-underlying		**(16)**	–
Net finance expense		**(87)**	(66)

Bank deposits and other income includes negative interest earned on the Group's borrowings. Interest payable includes amounts where the Group earns negative interest on its cash deposits.

Other finance income includes amounts relating to the unwind of discount on net investments in leases. These amounts are immaterial.

During the year the Group recognised a total of £72 million (2018: £66 million) of net interest expense on financial assets and financial liabilities held at amortised cost, comprising £13 million (2018: £12 million) gross finance income and £85 million (2018: £78 million) gross finance expense. Presented within finance income and finance expense are amounts in relation to defined benefit pension schemes which are measured at fair value.

10. Taxation

The standard UK corporation tax rate for the year was 19% (2018: 19%).

Taxation charged to the income statement	Note	2019 £m	2018 £m
Current tax			
UK corporation tax for the year		**84**	53
Overseas tax for the year		**134**	107
Adjustments in respect of previous years		**(3)**	(12)
		215	148
Deferred tax:	17		
Deferred tax for the year		**2**	15
Adjustments in respect of previous years		**–**	2
Deferred tax on amortisation of purchased intangible assets		**(31)**	(33)
		(29)	(16)
Total taxation charge		**186**	132

The adjustments in respect of previous years' corporation tax are mainly in respect of tax returns submitted to relevant tax authorities.

Taxation on items not recognised in the income statement	2019 £m	2018 £m
Current tax credit:		
Tax allowance on share awards in excess of expense recognised	**7**	5
	7	5
Deferred tax (charge)/credit:		
Tax on defined benefit pension scheme remeasurement	**(2)**	5
Adjustments relating to change in defined benefit pension tax rate	**2**	–
Tax allowance on share options/awards in excess of expense recognised	**10**	2
Tax on movement in value of investments in financial assets	**(5)**	4
	12	16

Factors affecting the tax charge for the year

The income statement tax charge for the year differs from the standard rate of corporation tax in the UK of 19% (2018: 19%) as explained below:

	2019 £m	2018 £m
Profit before tax	**651**	685
Profit multiplied by standard rate of corporation tax in the UK	**124**	130
Expenses not deductible/(income not taxable)	**9**	(7)
Adjustment arising from change in tax rates	**7**	–
Overseas earnings taxed at higher rate	**38**	25
Adjustments in respect of previous years	**(3)**	(10)
Adjustment arising from changes in tax rates on amortisation of purchased intangible assets	**4**	(2)
Deferred tax provided for withholding tax on distributable reserves	**2**	–
Derecognition of deferred tax	**5**	(4)
Taxation	**186**	132

The UK Finance Bill 2016 was enacted in September 2016, reducing the standard rate of corporation tax to 17% effective from 1 April 2020. Accordingly, the UK deferred tax balances at December 2019 have been stated at the rate dependent on when the temporary differences are expected to reverse. The deferred tax balances in other countries are recognised at the substantively enacted rates at the balance sheet date.

Notes to the financial statements (continued)

Uncertain tax positions

EU State Aid

The Group continues to monitor developments in relation to EU State Aid investigations. On 25 April 2019, the EU Commission's final decision regarding its investigation into the UK's Controlled Foreign Company (CFC) regime was published. It concludes that the legislation up until December 2018 does partially represent State Aid.

Both the Group and the UK Government, among a number of other UK PLCs, have since submitted appeals to the EU general court to annul the EU Commission's findings.

The UK Government are required to commence the process of recovering the State Aid while the decision is under appeal, issuing their first round of determinations in December 2019 focusing on the financial year 2015 due to the expiry of certain time limits.

The Group received a determination in respect of one of its two affected subsidiaries for £1 million, which was both paid by the Group and appealed against separately to HMRC in January 2020. The appeal against the determination to HMRC is likely to stay until the conclusion of the appeals to the EU general court to annul the original EU Commission's decision.

Considering the appeals made by the UK PLCs (including the Group), UK Government, and management's internal view, the Group does not consider any provision is required in relation to this investigation. Additionally, in accordance with the provisions of IFRIC 23 'Uncertainty over Income Tax Treatments' and IAS 12 'Income Taxes', the Group will recognise a receivable for the determination paid in January 2020.

As previously disclosed, the Group has made claims under the CFC legislation and considers that the potential amount of tax payable, excluding compound interest, remains between nil and £65 million.

Other

The Group does not have any other uncertain tax positions as at 31 December 2019 (2018: nil).

11. Earnings per share

Earnings per share is presented on four bases: basic earnings per share, diluted earnings per share, adjusted basic earnings per share, and adjusted diluted earnings per share. Basic earnings per share is in respect of all activities. Diluted earnings per share takes into account the dilutive effects that would arise on conversion or vesting of all outstanding share options and share awards under the Group's share option and award schemes. Adjusted basic earnings per share and adjusted diluted earnings per share exclude amortisation of purchased intangible assets and non-underlying items to enable a better comparison of the underlying earnings of the business with prior periods.

	2019	2018
Basic earnings per share	**119.5p**	138.3p
Diluted earnings per share	**118.1p**	136.0p
Adjusted basic earnings per share	**200.3p**	173.8p
Adjusted diluted earnings per share	**198.0p**	170.8p

Profit and adjusted profit for the year attributable to the Company's equity holders:

	2019 £m	2018 £m
Profit/(loss) for the financial year attributable to the Company's equity holders	**417**	480
Adjustments		
Total non-underlying items (note 8)	**293**	125
Amortisation of purchased intangible assets, non-underlying items and taxation attributable to non-controlling interests	**(11)**	(2)
Adjusted profit for the year attributable to the Company's equity holders	**699**	603

	2019	2018
Weighted average number of shares – millions	**349**	347
Effect of dilutive share options and awards – millions	**4**	6
Diluted weighted average number of shares – millions	**353**	353

The weighted average number of shares excludes those held in the Employee Benefit Trust and treasury shares held by the Group.

12. Dividends

	2019 £m	2018 £m
Final dividend for 31 December 2017 paid 30 May 2018: 37.2p per Ordinary share	–	129
Interim dividend for 31 December 2018 paid 18 September 2018: 17.2p per Ordinary share	–	60
Final dividend for 31 December 2018 paid 29 May 2019 43.2p per Ordinary share	**151**	–
Interim dividend for 31 December 2019 paid 17 September 2019: 20.1p per Ordinary share	**70**	–
	221	189

Dividends are only paid out of available distributable reserves of the Company.

The Board has proposed a final dividend in respect of the year ended 31 December 2019 of 49.9p per share, which is estimated to amount to an expected payment of £174 million in May 2020. This is not reflected in the financial statements.

13. Property, plant and equipment

	Land & Buildings				
Cost	**Freehold property £m**	**Property right-of-use assets £m**	**Leasehold improvements £m**	**Plant and equipment £m**	**Total £m**
31 December 2017	51	–	52	216	319
Additions	5	–	8	44	57
Disposals	–	–	(5)	(4)	(9)
Write off	–	–	–	(2)	(2)
Transfers	–	–	–	(3)	(3)
Foreign exchange	(1)	–	–	–	(1)
31 December 2018	55	–	55	251	361
Impact of adoption of IFRS 16 (note 2)	–	170	–	2	172
1 January 2019 (restated)	55	170	55	253	533
Additions	**4**	**–**	**3**	**41**	**48**
Acquisition of subsidiaries	**–**	**1**	**–**	**–**	**1**
Disposals and write-offs	**–**	**(5)**	**(5)**	**(15)**	**(25)**
Transfers	**(2)**	**–**	**7**	**(6)**	**(1)**
Foreign exchange	**–**	**(3)**	**(1)**	**(7)**	**(11)**
31 December 2019	**57**	**163**	**59**	**266**	**545**
Accumulated depreciation and impairment					
31 December 2017	29	–	37	124	190
Disposals	–	–	(5)	(4)	(9)
Charge for the year	–	–	4	27	31
31 December 2018	29	–	36	147	212
Disposals	**–**	**(3)**	**(3)**	**(13)**	**(19)**
Charge for the year	**–**	**26**	**6**	**34**	**66**
Impairment	**–**	**2**	**–**	**–**	**2**
Foreign exchange	**–**	**–**	**–**	**(4)**	**(4)**
31 December 2019	**29**	**25**	**39**	**164**	**257**
Net book values					
31 December 2019	**28**	**138**	**20**	**102**	**288**
31 December 2018	26	–	19	104	149

The Group leases a number of properties in the countries in which it operates and these are represented above as property right-of-use assets.

Disposals of right-of-use assets represent office space that is no longer used by the Group. A loss of £2 million was recognised on the derecognition of these assets.

Plant and equipment includes right-of-use assets with a cost of £2 million and depreciation charges of £1 million.

Transfers relate to reclassification of property, plant and equipment to other asset classes and reallocations of work in progress assets between property, plant and equipment types.

During the prior year the Group incurred a £2 million asset write-off expense presented as a non-underlying item in the Group's consolidated income statement in relation to IT hardware work in progress which is no longer required for development as a result of the integration of Yield Book into the Group. There are no similar expenses in the current year.

The Company has no property, plant and equipment (2018: nil).

Notes to the financial statements (continued)

14. Intangible assets

		Purchased intangible assets				
Cost	*Goodwill* £m	Customer and supplier *relationships* £m	*Brands* £m	Software, licences and intellectual *property* £m	Software and *other* £m	*Total* £m
31 December 2017	2,377	1,848	960	584	678	6,447
Additions	–	–	–	–	187	187
Disposals	–	(6)	–	(14)	(4)	(24)
Transfer of asset	–	–	–	–	3	3
Write-off	–	–	–	–	(5)	(5)
Foreign exchange	70	50	45	12	13	190
31 December 2018	2,447	1,892	1,005	582	872	6,798
Acquisition of subsidiaries	**14**	–	–	–	–	**14**
Additions	–	–	–	–	**206**	**206**
Disposals and write-off	–	**(2)**	**(1)**	**(2)**	**(16)**	**(21)**
Foreign exchange	**(104)**	**(64)**	**(24)**	**(12)**	**(39)**	**(243)**
31 December 2019	**2,357**	**1,826**	**980**	**568**	**1,023**	**6,754**
Accumulated amortisation and impairment						
31 December 2017	521	566	151	291	317	1,846
Amortisation charge for the year	–	91	39	24	102	256
Impairment	–	–	–	–	1	1
Disposals	–	(6)	–	(14)	(4)	(24)
Write-off	–	–	–	–	(1)	(1)
Foreign exchange	7	11	7	3	5	33
31 December 2018	528	662	197	304	420	2,111
Amortisation charge for the year	–	**117**	**41**	**22**	**123**	**303**
Impairment	**14**	**1**	–	–	**9**	**24**
Disposals and write-off	–	**(2)**	**(1)**	**(2)**	**(14)**	**(19)**
Foreign exchange	**(27)**	**(26)**	**(5)**	**(6)**	**(22)**	**(86)**
31 December 2019	**515**	**752**	**232**	**318**	**516**	**2,333**
Net book values						
31 December 2019	**1,842**	**1,074**	**748**	**250**	**507**	**4,421**
31 December 2018	1,919	1,230	808	278	452	4,687

Goodwill

On 31 May 2019, the Group acquired Beyond Ratings, which resulted in additions to goodwill of £14 million (note 32).

The goodwill arising on consolidation represents the growth potential and assembled workforces of the Italian Group, LCH Group, FTSE Group, MillenniumIT, the US Information Services Group and Turquoise. The Company has no intangible assets (2018: none).

Impairment tests for goodwill

Goodwill has been allocated for impairment testing purposes to 10 cash generating units (CGUs).

The recoverable amounts of these CGUs have been determined based on value in use calculations using discounted cash flow forecasts based on business plans prepared by management for a three year period ending 31 December 2022, and then projected for a further two years to 31 December 2024. Cash flows beyond this period are extrapolated using the estimated long-term growth rates and applying the pre-tax discount rates referred to below.

During the year an impairment has been recognised in relation to Turquoise Global Holdings Ltd due to uncertainties in the underlying future cash flows resulting in an impairment of £8 million in goodwill.

An impairment has been recognised in relation to Mergent due to lower forecast cash flows, driven by revenue performance below expectations set at the time of acquisition. This has resulted in an impairment of £6 million in goodwill.

The amount of the net book value of goodwill allocated to each CGU is set out below:

	Net book value of goodwill					Pre-tax discount rate used in value in use calculations	
	31 December 2018 £m	Acquisition of subsidiaries £m	Impairment in year £m	Foreign exchange £m	31 December 2019 £m	2019	2018
Italian Group							
Capital Markets	405	–	–	**(21)**	**384**	**11.6%**	12.3%
Technology Services	24	–	–	**(1)**	**23**	**11.4%**	10.5%
Post Trade Services	443	–	–	**(23)**	**420**	**13.0%**	13.2%
MillenniumIT	1	–	–	–	**1**	**19.3%**	20.0%
Turquoise	9	–	**(8)**	–	**1**	**8.8%**	9.7%
FTSE Group	191	**14**	–	**(1)**	**204**	**10.5%**	9.6%
LCH Group	128	–	–	**(6)**	**122**	**9.9%**	10.4%
US Information Services Group							
Frank Russell Group	429	–	–	**(14)**	**415**	**10.4%**	10.5%
Yield Book	217	–	–	**(8)**	**209**	**11.1%**	10.5%
Mergent	72	–	**(6)**	**(3)**	**63**	**11.3%**	10.0%
	1,919	**14**	**(14)**	**(77)**	**1,842**		

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.

The values assigned to short- and medium-term revenue and cost growth assumptions are based on the business plans prepared by management for a three year period ending 31 December 2022. 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-term growth assumptions.

Long-term growth rates are assumed to be 1.8% for each of the Italian CGUs (2018: 1.9%), 8.6% for MillenniumIT (2018: 9.0%), 4.0% for each of the US Information Services CGUs (2018: 3.9%), 3.4% for the other CGUs (2018: 3.5%) and represent management's internal forecasts based on external estimates of GDP and inflation analysis for the 10-year period 1 January 2015 to 31 December 2024, and do not exceed the long-term average growth rates for the countries in which the CGUs operate.

Pre-tax discount rates are based on a number of factors including the risk-free rates in Italy, France, Sri Lanka, USA and the UK as appropriate, the Group's estimated market risk premium and a premium to reflect the inherent risks of each of the CGUs.

Value in use calculations for each CGU are sensitive to changes in short- and medium-term revenue and cost growth assumptions, long term growth rates and pre-tax discount rates.

Management believes the value in use of each CGU, with the exception of Mergent, is significantly higher than the carrying value, and is unlikely to be materially impaired by reasonable adverse changes to key assumptions. The excess of value in use over carrying value is determined by reference to the net book value as at 31 December 2019. Revenue and cost sensitivities assume a 5% change in revenues or costs for each of the 5 years in the value in use calculations.

The value in use of the Mergent CGU is equal to its carrying value. The impact of reasonable changes in the assumptions on Mergent's value in use is set out below:

Cash generating unit	5% reduction in revenues £m	5% increase in costs £m	0.5% reduction in long-term growth rate £m	0.5% increase in pre-tax discount rate £m
Mergent	(24)	(19)	(8)	(8)

Purchased intangible assets
The fair values of the purchased intangible assets were principally valued using discounted cash flow methodologies and are being amortised over their useful economic lives, which do not normally exceed 25 years. The Group's purchased intangible assets include:

Customer and supplier relationships
These assets have been recognised on acquisition of major subsidiary companies by the Group. The amortisation periods remaining on these assets are between 7 to 23 years. Following a reassessment of useful economic lives the Group has recognised a £25 million acceleration of amortisation charge in the year.

Brands
Brands have been recognised in a number of major acquisitions, including FTSE, LCH, Russell and Yield Book. Included within brands are trade names relating to the acquisition of Frank Russell Group of £538 million (2018: £583 million). The remaining amortisation period on these assets are between 3 to 23 years.

Software, licences and intellectual property
These assets have been recognised on acquisition of subsidiary companies and have a remaining amortisation period of 2 to 18 years.

There are no other individual purchased intangible assets with a carrying value that is considered material to each asset class.

Following a review of purchased intangible assets no longer in use, the Group disposed of assets with costs of £2 million of customer relationships, £1 million of brands and £2 million of software licences, all with a nil net book value.

Impairment tests for purchased intangible assets
Turquoise
An impairment of £1 million has been recognised in relation to Customer and Supplier Relationships which represents the recurring source of income from customers' existing at the time of acquisition. The impaired asset belongs to the Capital Markets reportable segment.

The recoverable amount has been determined based on a value in use calculation using cash flow projections from financial budgets and forecasts approved by senior management covering a three year period. The pre tax discount rate applied to cash flow projections is 8.8% (2018: 9.7%) and cash flows beyond the three-year period are extrapolated using a 3.4% growth rate (2018: 3.5%). The projected cash flows have been impacted by weaker demand in the 'lit' trading book, coupled with increased costs of additional investment in information technology to support the business. This has resulted in the carrying value exceeding the value in use and the Group has recognised an impairment of £1 million in the current year taking the carrying value to nil.

Software and other
As a part of the business operating model the Group develops technology solutions where software products are developed internally, for use within the Group or to sell externally. The cost of self-developed software products in the year includes £100 million (2018: £133 million) representing assets not yet brought into use. No amortisation has been charged on these assets and instead they are tested for impairment annually.

During the year, additions relating to internally generated software amounted to £176 million (2018: £175 million). Research expenditure of £16 million (2018: £4 million) has been recognised in the income statement in the year.

Other amounts represent the internally built and developed trading systems within the various business lines, licences, capitalised contract costs and right-of-use assets. In general, these assets have a useful economic life of up to 7 years.

During the year, the Group capitalised £9 million (2018: £10 million) of incremental contract costs in respect of revenue generating contracts with customers and recognised a £7 million (2018: £6 million) amortisation charge relating to contract cost assets. No impairment was recognised in the year (2018: nil) in relation to contract cost assets.

Previously, the Group recognised licences held under finance leases with a carrying value of £6 million at 2018. On 1 January 2019, the Group adopted IFRS 16 (note 2) and these assets are now included with other right-of-use assets within 'software and other'. During the year the Group recognised additions of £21 million of right-of-use assets, with a corresponding amortisation charge of £7 million.

Following a review of software assets in the year the Group recognised £9 million impairment in relation to assets no longer in use.

During the year the Group recognised disposals and write-offs of assets no longer in use with a cost of £16 million, comprising £14 million nil net book value assets and £2 million of assets not yet brought into use.

15. Investment in associates

The Group has a number of associated companies that are accounted for using the equity method. The activities of these companies are complementary to the Group's businesses. The associate companies are listed in note 36.

The investment in these companies is as follows:

	Group £m	Company £m
31 December 2017	5	3
Acquisitions and investments	28	12
Share of loss after tax	(8)	–
Impairment	–	(8)
31 December 2018	25	7
Acquisitions and investments	**11**	**11**
Share of loss after tax	**(7)**	**–**
Impairment	**–**	**(6)**
Foreign exchange	**(1)**	**–**
31 December 2019	**28**	**12**

The total comprehensive income of the associates is equivalent to the loss after tax shown above. None of the associates are material to the Group.

During the year, the Group made additional investments in Curve Global for £11 million cash consideration, increasing the Group's equity interest to 44.05%.

During the prior year, the Group acquired a 15.67% equity interest in AcadiaSoft, Inc., a provider of margin automation solutions, for US$22 million (£16 million) cash consideration and made additional investments in Curve Global of £12 million cash consideration, which maintained the Group's equity interest at 43.38%.

16. Investment in subsidiary companies

Company	Shares £m	Other £m	Total £m
31 December 2017	5,081	1,017	6,098
Investment in London Stock Exchange (C) Limited	382	–	382
Investment in London Stock Exchange Reg Holdings Limited	10	–	10
Investment in LSEGH US PT, Inc.	16	–	16
31 December 2018	5,489	1,017	6,506
Investment in London Stock Exchange (C) Limited	**244**	**–**	**244**
31 December 2019	**5,733**	**1,017**	**6,750**

Other includes amounts invested in subsidiary companies by way of capital contributions and awards granted under the Group's share schemes.

Principal operating subsidiaries	Principal activity	Country of incorporation and principal operations	% equity and votes held
Held directly by the Company			
London Stock Exchange plc	Recognised investment exchange	England and Wales	100.00
Held indirectly by the Company			
Banque Centrale De Compensation SA (LCH SA)	CCP clearing services	France	73.45
Borsa Italiana S.p.A	Recognised investment exchange	Italy	99.99
Cassa di Compensazione e Garanzia S.p.A.	CCP clearing services	Italy	99.99
Elite S.p.A.	Business support programme	Italy	74.99
Frank Russell Company	Market indices provider	USA	100.00
FTSE International Limited	Market indices provider	England and Wales	100.00
LCH Limited	CCP clearing services	England and Wales	82.61
Mergent, Inc.	Business and financial information provider	USA	100.00
Millennium IT Software (Private) Limited	*IT solutions provider*	*Sri Lanka*	*100.00*
Monte Titoli S.p.A.	Pre-settlement, settlement and centralised custody	Italy	98.87
MTS S.p.A.	Wholesale fixed income bonds	Italy	62.53
The Yield Book, Inc.	Fixed income indices and analytics	USA	100.00
Turquoise Global Holdings Limited	Multilateral trading facility	England and Wales	51.36

Under Regulation 7 of The Partnerships (Accounts) Regulations 2008, the Group elected not to prepare partnership accounts for its indirect partnership interest in London Stock Exchange Connectivity Solutions LP, as its results are contained in the consolidated group accounts.

A full list of subsidiaries is provided in note 36.

Notes to the financial statements (continued)

Material non-controlling interests

The LCH companies, LCH Ltd, based in the UK, and LCH SA, based in France, are the only subsidiaries that have material non-controlling interests within the Group.

In 2018, the Group acquired further shares in the LCH Group and owned 82.61% of the equity throughout 2019.

Summarised financial information attributable to material non-controlling interests

Amounts include goodwill, purchased intangible assets and associated amortisation, impairments and deferred tax attributable to non-controlling interests.

	2019 £m	2018 £m
Profit for the year attributable to non-controlling interests	**49**	63
Total comprehensive income for the year attributable to non-controlling interests	**38**	65
Dividends paid to non-controlling interests in the year	**(35)**	(37)

Summarised total financial information for companies with material non-controlling interests

Amounts include goodwill, purchased intangible assets and associated amortisation, impairments and deferred tax.

Summarised balance sheet	2019 £m	2018 £m
Non-current assets	**570**	548
Current assets	**654,402**	684,787
Current liabilities	**(653,684)**	(684,071)
Non-current liabilities	**(64)**	(41)
Total equity	**1,224**	1,223
Attributable to:		
Equity holders of the company	**965**	967
Non-controlling interests	**259**	256
	1,224	1,223

Summarised total comprehensive income and cash flows	2019 £m	2018 £m
Total income for the year	**756**	662
Total profit for the year	**241**	188
Total comprehensive income for the year	**197**	189
Net decrease in cash and cash equivalents	**(3)**	(87)

Subsidiaries exempt from audit

The following UK subsidiaries will take advantage of the audit exemption set out within section 479A of the Companies Act 2006 for the year ended 31 December 2019.

Company name	**Registration number**
London Stock Exchange Group Holdings Limited	6795362
London Stock Exchange Reg Holdings Limited	7378551
London Stock Exchange (C) Limited	7943990
London Stock Exchange Group (Services) Limited	9313935

17. Deferred tax

The movements in deferred tax assets and liabilities during the year are shown below.

Group	Accelerated tax depreciation £m	Acquisition deferred tax and amortisation £m	Provisions and other temporary differences £m	Total £m
31 December 2017	9	(484)	34	(441)
Tax (charged)/credited to the income statement	(2)	33	(15)	16
Tax credited/(charged) to other comprehensive income:				
– Defined benefit scheme remeasurement gain	–	–	5	5
– Movement in debt instruments at FVOCI	–	–	4	4
– Foreign exchange	–	(19)	–	(19)
Allowance on share options/awards – to equity	–	–	2	2
31 December 2018	7	(470)	30	(433)
Impact of adoption of IFRS 16 (note 2)	–	–	4	4
31 December 2018	7	(470)	34	(429)
Tax (charged)/credited to the income statement	**(2)**	**31**	**–**	**29**
Tax (charged)/credited to other comprehensive income:				
– Movement in debt instruments at FVOCI	**–**	**–**	**(5)**	**(5)**
– Foreign exchange	**–**	**15**	**(3)**	**12**
Allowance on share options/awards – to equity	**–**	**–**	**10**	**10**
31 December 2019	**5**	**(424)**	**36**	**(383)**
Assets at 31 December 2019	**5**	**–**	**44**	**49**
Liabilities at 31 December 2019	**–**	**(424)**	**(8)**	**(432)**
Net assets/(liabilities) at 31 December 2019	**5**	**(424)**	**36**	**(383)**
Assets at 31 December 2018	7	–	35	42
Liabilities at 31 December 2018	–	(470)	(5)	(475)
Net assets/(liabilities) at 31 December 2018	7	(470)	30	(433)

The deferred tax assets are recoverable against future taxable profits and are due after more than one year.

The net deferred tax asset of £36 million (2018: £30 million) in respect of provisions and other temporary differences relates to share based payments of £28 million (2018: £15 million), retirement benefits liability of £(19) million (2018: £(10) million), interest payable of £17 million (2018: £15 million), trading losses of £4 million (2018: £8 million), withholding tax on distributable reserves of subsidiary companies of £(6) million (2018: £(4) million), the impact of the adoption of new accounting standards of £4 million (2018: £3 million), accrued bonus of £2 million (2018: nil), Yield Book closing costs of £2 million (2018: nil), and other provisions and temporary differences of £4 million (2018: £3 million).

The purchased intangible assets of the acquired subsidiaries create a deferred tax liability due to the difference between their accounting and tax treatment. This liability is amortised at the same rate as the purchased intangible assets.

The Group has unrecognised deferred tax assets in respect of losses of £20 million (2018: £17 million) within certain Group subsidiaries. The assets will be recognised in the future only if suitable taxable income were to arise within the Group.

There was no deferred tax in the Company (2018: nil).

Notes to the financial statements (continued)

18. Retirement benefit obligations

The Group operates separate defined benefit and defined contribution schemes. The assets of the defined benefit and defined contribution schemes are held separately from those of the Group.

All schemes are governed by the local regulatory framework and employment laws in the country in which they operate.

The Company has no retirement benefit obligations.

Defined benefit schemes

United Kingdom

On 5 September 2016, the London Stock Exchange Retirement Plan (LSERP) and the LCH Pension Scheme in the UK (LCH UK) underwent a sectionalised merger into a new London Stock Exchange Group Pension Scheme (LSEGPS). The scheme maintains separate LCH and LSE Sections.

The LSEGPS is administered by trustees who are responsible for the scheme's governance. The scheme invests in a wide range of assets in the UK and overseas through investment managers, appointed by the scheme's trustees, who seek to balance risk and investment return. The assets are primarily managed by Ruffer LLP, Royal London Asset Management, Payden and Rygel Investment Management, Schroder Investment Management Limited and a 'buy-in' insurance asset with Pension Insurance Corporation.

The plan assets do not include any of the Group's own financial instruments, nor any property occupied by, or other assets used by, the Group.

The LSE section of LSEGPS was a non-contributory defined benefit scheme that closed to new members in 1999. With effect from 31 March 2012, the LSERP also closed to accrual of future benefits for active members and it has been agreed that the benefits already accrued for affected members will remain linked to their salary with the Group.

The LCH section of LSEGPS was closed to new members from 30 September 2009. It was closed to further employee contributions and accrual of future benefits from 31 March 2013 with the defined contribution section remaining open until April 2017, when the Legal & General mastertrust was provided to all UK employees.

Pension scheme obligations and costs are determined by an independent qualified actuary on a regular basis using the projected unit credit method. The obligations are measured by discounting the best estimate of future cash flows to be paid out by the scheme and are reflected in the Group balance sheet.

Overseas

LCH Group operates retirement indemnity and long-service award schemes in Paris, for which the scheme obligations are calculated by an independent qualified actuary. They also operate an independent defined benefit scheme in Porto. Updated valuations of these funds are carried out by an independent qualified actuary.

The Trattamento di Fine Rapporto (TFR) operated by the Italian Group is a severance and leaving indemnity scheme, classified as an unfunded defined benefit scheme for funds accumulated prior to 1 July 2007. The service cost, representing deferred salaries accruing to employees, was included as an operating expense and was determined by law at 6.91% of salary payments subject to certain adjustments. The scheme obligation comprises accumulated service costs and is revalued by law at a rate equal to 75% of 'national life price index +1.5%' by an independent qualified actuary. Since 1 July 2007, the Group retains no obligation, as contributions are made directly into Italian state funds in the manner of a defined contribution scheme.

The employee benefit and retirement plan operated by MillenniumIT is classified as an unfunded defined benefit plan. The net obligation in respect of this plan is the amount of future benefit that employees have earned in return for their service in the current and prior periods. Once an employee is continuously employed for more than five years, he or she is entitled to a payment equivalent to half a month's gross salary multiplied by the number of years in service at MillenniumIT.

Pension risks

The principal risk to which the defined benefit schemes expose the Group arises from an increase in pension liabilities.

The pension liabilities could increase in the following circumstances:

– if increases in the plan liabilities are not accompanied by corresponding increases in the plan assets;

– if investment returns are lower than assumed in assessing the adequacy of plans;

– if inflation is higher than expected, increasing liabilities through indexing of pension payments; and

– the risk that members live longer than expected, increasing the length of time for which pensions have to be paid, potentially due to a medical breakthrough.

Such an increase in pension liabilities could lead to an increase in pension deficit. Defined benefit schemes are normally revalued by actuaries every three years. Where any material funding gap is identified by this process, the Trustees will agree a schedule of contributions with the sponsor company. Such contributions would result in financial impact to the Group.

In addition, with regard to the LSE Section of LSEGPS, the Group is exposed to the credit of the buy-in insurance provider. A failure of the buy-in insurance provider would reduce the pension assets and could thus also lead to a pension deficit or an increase in pension deficit and the need for contributions from the Group.

Defined contribution schemes

In the UK, the only pension scheme open to employees is a defined contribution scheme, provided by Legal & General. Following a pension consultation, from April 2017, all UK employees are eligible to participate in the same pension scheme. A core contribution of 8% of basic salary is paid by the Group, who will also match employee contributions up to 4% of basic salary.

Defined contribution schemes are operated by FTSE International and US entities.

Amounts recognised in the income statement from continuing operations are as follows:

		2019				2018			
	Notes	LSERP £m	LCH UK £m	Other plans £m	Total £m	LSERP £m	LCH UK £m	Other plans £m	Total £m
Defined contribution schemes		**(4)**	**(4)**	**(11)**	**(19)**	(4)	(4)	(10)	(18)
Defined benefit scheme – current/past service cost and expenses		**(1)**	**–**	**(6)**	**(7)**	(1)	–	(6)	(7)
Total pension charge included in employee costs	7	**(5)**	**(4)**	**(17)**	**(26)**	(5)	(4)	(16)	(25)
Net finance income / (expense)	9	**–**	**1**	**–**	**1**	(1)	1	–	–
Total recognised in the income statement		**(5)**	**(3)**	**(17)**	**(25)**	(6)	(3)	(16)	(25)

Defined benefit assets/(obligations) for pension schemes

	2019				2018			
	LSERP £m	LCH UK £m	Other plans £m	Total £m	LSERP £m	LCH UK £m	Other plans £m	Total £m
Fair value of assets								
Equities:								
– Quoted	**17**	**52**	**–**	**69**	–	62	–	62
– Not quoted	**1**	**3**	**–**	**4**	–	42	–	42
Bonds:								
– Quoted	**71**	**95**	**1**	**167**	14	17	1	32
– Not quoted	**120**	**133**	**–**	**253**	140	121	–	261
Property	**5**	**–**	**–**	**5**	6	–	–	6
Cash	**1**	**4**	**–**	**5**	15	2	–	17
Pensioner buy-in policy	**187**	**–**	**–**	**187**	180	–	–	180
Total fair value of assets	**402**	**287**	**1**	**690**	355	244	1	600
Present value of funded obligations	**(395)**	**(228)**	**(18)**	**(641)**	(361)	(198)	(17)	(576)
Surplus/(deficit)	**7**	**59**	**(17)**	**49**	(6)	46	(16)	24

As at 31 December 2019, the Group has recognised a net defined benefit asset of £7 million (2018: £(6) million) in relation to the LSE section and £59 million (2018: £46 million) in relation to the LCH section, on the basis that the Group has access to the surplus in the event of a wind-up of the scheme and therefore no asset ceiling has been applied to the net surplus recognised. Further, no minimum funding commitments are associated with the plan.

UK pension plan actuarial assumptions are set out below:

	2019		2018	
	LSERP	LCH UK	LSERP	LCH UK
Inflation rate – RPI	**2.9%**	**2.9%**	3.2%	3.2%
Inflation rate – CPI	**1.8%**	**1.8%**	2.0%	2.0%
Rate of increase in salaries	**2.9%**	**n/a**	3.2%	n/a
Rate of increase in pensions in payment	**3.5%**	**2.1%**	3.6%	2.2%
Discount rate:				
– Non-insured	**2.1%**	**2.1%**	3.0%	3.0%
– Insured	**1.9%**	**n/a**	2.7%	n/a
Life expectancy from age 60 (years)				
– Non-retired male member	**27.6**	**27.6**	28.1	28.1
– Non-retired female member	**30.1**	**30.0**	30.6	30.5
– Retired male member	**26.7**	**27.0**	27.2	27.5
– Retired female member	**28.9**	**28.8**	29.4	29.2

The mortality assumptions are based on S2PA tables published by the Institute and Faculty of Actuaries adjusted to take account of projected future improvements in life expectancy from the Self Administered Pension Scheme (SAPS) mortality survey, which was published in 2008. We have used an allowance for CMI 2017 projections and applied a 1.25% for the male and female long-term trend rate in respect of future mortality improvements.

Sensitivities

The sensitivities regarding the principal assumptions used to measure the LSERP and LCH UK scheme obligations are:

	Change in assumption	2019 Impact on scheme obligations		2018 Impact on scheme obligations	
Assumption		**LSERP**	**LCH UK**	**LSERP**	**LCH UK**
Inflation rate (CPI) and salary increase	Increase by 0.5%	**Increase by £3m**	**Increase by £6m**	Increase by £3m	Increase by £6m
Rate of increase in pensions payment	Increase by 0.5%	**Increase by £26m**	**Increase by £17m**	Increase by £21m	Increase by £11m
Discount rate	Increase by 0.5%	**Reduce by £30m**	**Reduce by £24m**	Reduce by £24m	Reduce by £19m
Mortality rate	Increase by 1 year	**Increase by £18m**	**Increase by £8m**	Increase by £14m	Increase by £6m

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

The impact of the salary increase assumption as a standalone sensitivity has an immaterial impact on the scheme obligations.

Changes in the present value of the defined benefit obligations during the year

	2019				2018			
	LSERP £m	**LCH UK £m**	**Other plans £m**	**Total £m**	**LSERP £m**	**LCH UK £m**	**Other plans £m**	**Total £m**
Benefit obligation as at beginning of year	**361**	**198**	**17**	**576**	376	208	17	601
Pension expense:								
– Past/current service cost	**–**	**–**	**6**	**6**	1	–	6	7
– Interest cost	**10**	**6**	**–**	**16**	10	6	–	16
Subtotal included in the income statement	**10**	**6**	**6**	**22**	11	6	6	23
Remeasurement losses/(gains):								
– Actuarial losses/(gains) – financial assumptions	**44**	**32**	**1**	**77**	(10)	(8)	(1)	(19)
– Actuarial losses – demographic assumptions	**(3)**	**(3)**	**–**	**(6)**	(3)	–	–	(3)
– Actuarial (gains)/losses – experience	**(1)**	**–**	**–**	**(1)**	3	1	–	4
Subtotal included in total comprehensive income	**40**	**29**	**1**	**70**	(10)	(7)	(1)	(18)
Benefits paid	**(16)**	**(6)**	**(6)**	**(28)**	(16)	(9)	(5)	(30)
Foreign exchange	**–**	**1**	**–**	**1**	–	–	–	–
Benefit obligation as at end of year	**395**	**228**	**18**	**641**	361	198	17	576

Movement in fair value of scheme assets during the year

	2019				2018			
	LSERP £m	**LCH UK £m**	**Other plans £m**	**Total £m**	**LSERP £m**	**LCH UK £m**	**Other plans £m**	**Total £m**
Fair value of scheme assets as at beginning of year	**355**	**244**	**1**	**600**	356	264	1	621
Pension income								
Interest income	**10**	**7**	**–**	**17**	9	7	–	16
Subtotal included in the income statement	**10**	**7**	**–**	**17**	9	7	–	16
Remeasurement gains/(losses):								
Return/(loss) on plan assets, excluding interest income	**39**	**38**	**–**	**77**	(9)	(21)	–	(30)
Subtotal included in total comprehensive income	**39**	**38**	**–**	**77**	(9)	(21)	–	(30)
Contributions by employer	**15**	**3**	**–**	**18**	15	3	–	18
Expenses	**(1)**	**–**	**–**	**(1)**	–	–	–	–
Benefits paid	**(16)**	**(6)**	**–**	**(22)**	(16)	(9)	–	(25)
Foreign exchange	**–**	**1**	**–**	**1**	–	–	–	–
Fair value of scheme assets as at end of year	**402**	**287**	**1**	**690**	355	244	1	600

The actual gain on plan assets was £94 million (2018: loss £14 million).

Defined benefit actuarial gains and losses recognised

The experience adjustments and the effects of changes in actuarial assumptions of the pension scheme during the year are recognised in the statement of comprehensive income.

	2019			2018		
	LSERP £m	LCH UK £m	Other plans £m	LSERP £m	LCH UK £m	Other plans £m
Recognised up to beginning year	**(28)**	**30**	**2**	(29)	44	1
Net actuarial (losses)/gains recognised in the year	**(1)**	**9**	**(1)**	1	(14)	1
Cumulative amount recognised at end of year	**(29)**	**39**	**1**	(28)	30	2

The last actuarial valuations of the UK defined benefit scheme were carried out as at 31 December 2017 by an independent qualified actuary. According to the schedule of contributions of these valuations, LSE plc has funded its defined benefit scheme deficit £14 million in 2018 and 2019 and is expected to pay £14 million per annum into the LSE Section in years 2020 to 2022. LCH Limited funded its defined benefit scheme deficit £3 million in 2019 and is expected to pay £3 million per annum into the LCH Section in years 2020 to 2022.

The weighted average duration of the LSERP defined benefit obligation at the end of the reporting period is estimated to be 21 years and 12 years for non-insured and insured, respectively. The weighted average duration of the LCH UK defined benefit obligation at the end of the reporting period is estimated to be 23 years.

The Trustees invests the Scheme's assets in a portfolio of physical assets and liability matching assets. The physical assets have the objective of outperforming the liabilities by investing in a suitably diversified range of assets, consisting of risk premia strategies, corporate bonds and other credit alternatives and property which together are expected to reduce investment volatility.

The liability matching assets have the objective of using a liability driven investment strategy to hedge against the interest rate and inflation risks associated with liabilities predominantly in a range of gilts, both nominal and index linked. The LSERP scheme also includes a bulk annuity transaction insuring the benefits for a part of the scheme's pensioner liabilities.

This combination of physical assets and liability matching assets is expected to provide an appropriate risk and return profile, with suitable interest rate and inflation hedging characteristics, consistent with lower volatility and improved funding level.

19. Financial assets and financial liabilities

Financial instruments by category

The financial instruments of the Group and Company are categorised as follows:

Financial assets

31 December 2019	Group				Company		
	Financial assets at amortised cost £m	Financial assets at fair value through OCI £m	Financial assets at fair value through profit or loss £m	Total £m	Financial assets at amortised cost £m	Financial assets at fair value through profit or loss £m	Total £m
Clearing member financial assets:							
– Clearing member trading assets	122,299	–	574,889	**697,188**	–	–	–
– Other receivables from clearing members	8,330	–	–	**8,330**	–	–	–
– Other financial assets	–	23,576	–	**23,576**	–	–	–
– Clearing member cash and cash equivalents	67,118	–	–	**67,118**	–	–	–
Clearing member business assets	197,747	23,576	574,889	**796,212**	–	–	–
Trade and other receivables	521	–	5	**526**	706	–	**706**
Cash and cash equivalents	1,493	–	–	**1,493**	2	–	**2**
Investments in financial assets – debt instruments	–	106	–	**106**	–	–	–
Investments in financial assets – equity instruments	–	241	–	**241**	–	–	–
Derivative financial instruments	–	–	2	**2**	–	2	**2**
Total	**199,761**	**23,923**	**574,896**	**798,580**	**708**	**2**	**710**

There were no transfers between categories during the year.

Prepayments and contract assets within trade and other receivables are not classified as financial instruments.

The Group no longer recognises bonds with less than three months maturity as cash and cash equivalents. They remain within investments in financial assets – debt.

Financial liabilities

31 December 2019	Group			Company		
	Financial liabilities at amortised cost £m	Financial liabilities at fair value through profit or loss £m	Total £m	Financial liabilities at amortised cost £m	Financial liabilities at fair value through profit or loss £m	Total £m
Clearing member financial assets:						
– Clearing member trading liabilities	122,299	574,889	**697,188**	–	–	–
– Other payables to clearing members	98,914	–	**98,914**	–	–	–
Clearing member business liabilities	221,213	574,889	**796,102**	–	–	–
Trade and other payables	747	–	**747**	712	–	**712**
Borrowings	2,085	–	**2,085**	2,077		**2,077**
Derivative financial instruments	–	40	**40**	–	40	**40**
Total	**224,045**	**574,929**	**798,974**	**2,789**	**40**	**2,829**

There were no transfers between categories during the year.

Social security and other tax liabilities within trade and other payables, and contract liabilities are not classified as financial instruments.

The financial instruments of the Group and Company at the previous year's balance sheet date were as follows:

Financial assets

31 December 2018	Group				Company		
	Financial assets at amortised cost £m	Financial assets at fair value through OCI £m	Financial assets at fair value through profit or loss £m	Total £m	Financial assets at amortised cost £m	Financial assets at fair value through profit or loss £m	Total £m
Clearing member financial assets:							
– Clearing member trading assets	138,153	–	604,303	742,456	–	–	–
– Other receivables from clearing members	2,261	–	–	2,261	–	–	–
– Other financial assets	–	19,694	–	19,694	–	–	–
– Clearing member cash and cash equivalents	70,927	–	–	70,927	–	–	–
Clearing member business assets	211,341	19,694	604,303	835,338	–	–	–
Trade and other receivables	761	–	–	761	622	–	622
Cash and cash equivalents	1,510	–	–	1,510	6	–	6
Investments in financial assets – debt instruments	–	84	–	84	–	–	–
Total	213,612	19,778	604,303	837,693	628	–	628

Prepayments and contract assets within trade and other receivables are not classified as financial instruments.

Contract assets that have been reclassified as fees receivable are included within trade and other receivables (note 21).

Financial liabilities

31 December 2018	Group			Company		
	Financial liabilities at amortised cost £m	Financial liabilities at fair value through profit or loss £m	Total £m	Financial liabilities at amortised cost £m	Financial liabilities at fair value through profit or loss £m	Total £m
Clearing member financial liabilities:						
– Clearing member trading liabilities	138,153	604,303	742,456	–	–	–
– Other payables to clearing members	93,052	–	93,052	–	–	–
Clearing member business liabilities	231,205	604,303	835,508	–	–	–
Trade and other payables	510	10	520	402	–	402
Borrowings	2,203	–	2,203	2,186	–	2,186
Derivative financial instruments	–	47	47	–	47	47
Total	233,918	604,360	838,278	2,588	47	2,635

Social security and other tax liabilities within trade and other payables are not classified as financial instruments.

The following table provides the fair value measurement hierarchy of the Group's financial assets and liabilities as at 31 December 2019:

Financial assets measured at fair value

31 December 2019	Group			
	Quoted prices in active markets (Level 1) £m	Significant observable inputs (Level 2) £m	Significant unobservable inputs (Level 3) £m	Total fair value £m
Clearing member trading assets:				
– Derivative instruments	11,492	3,061	–	**14,553**
– Non-derivative instruments	3	560,333	–	**560,336**
– Other financial assets	23,576	–	–	**23,576**
Fair value of clearing member business assets	35,071	563,394	–	**598,465**
Investments in financial assets – debt	106	–	–	**106**
Investment in financial assets – equity	–	–	241	**241**
Trade and other receivables – convertible loan notes	–	–	5	**5**
Derivatives not designated as hedges:				
– Foreign exchange forward contracts	–	2	–	**2**
	35,177	**563,396**	**246**	**598,819**

The Company had derivative assets of £2 million (2018: nil). All derivatives assets in the Company are the same as for the Group.

Financial liabilities measured at fair value

31 December 2019	Group			
	Quoted prices in active markets (Level 1) £m	Significant observable inputs (Level 2) £m	Significant unobservable inputs (Level 3) £m	Total fair value £m
Clearing member trading liabilities:				
Derivative instruments	11,492	3,061	–	**14,553**
Non-derivative instruments	3	560,333	–	**560,336**
Fair value of clearing member business liabilities	11,495	563,394	–	**574,889**
Derivatives used for hedging:				
– Cross-currency interest rate swaps	–	39	–	**39**
Derivatives not designated as hedges:				
– Foreign exchange forward contracts	–	1	–	**1**
	11,495	**563,434**	**–**	**574,929**

The Company had derivative liabilities of £40 million (2018: £47 million). All derivative liabilities in the Company are the same as for the Group.

The following table provides the fair value measurement hierarchy of the Group's financial assets and liabilities as at 31 December 2018:

Financial assets measured at fair value

31 December 2018	Group			
	Quoted prices in active markets (Level 1) £m	Significant observable inputs (Level 2) £m	Significant unobservable inputs (Level 3) £m	Total fair value £m
Clearing member trading assets:				
– Derivative instruments	4,958	8	–	4,966
– Non-derivative instruments	5	599,332		599,337
– Other financial assets	19,694	–	–	19,694
Fair value of clearing member business assets	24,657	599,340	–	623,997
Investment in financial assets – debt	84	–	–	84
	24,741	599,340	–	624,081

Financial liabilities measured at fair value

31 December 2018	Group			
	Quoted prices in active markets (Level 1) £m	Significant observable inputs (Level 2) £m	Significant unobservable inputs (Level 3) £m	Total fair value £m
Clearing member trading liabilities:				
– Derivative instruments	4,958	8	–	4,966
– Non-derivative instruments	5	599,332	–	599,337
Fair value of clearing member business liabilities	4,963	599,340	–	604,303
Deferred consideration	–	–	10	10
Derivatives designated as hedges:				
– Cross-currency interest rate swaps	–	47	–	47
	4,963	599,387	10	604,360

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; and

– Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

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 one or more valuation techniques (e.g. the market approach or the income approach) with market observable inputs. The selection of the appropriate valuation techniques may be affected by the availability of the relevant inputs as well as the reliability of the inputs. The inputs may include currency rates, interest rate and forward rate curves and net asset values.

There have been no transfers between Level 1 and Level 2 during the current and prior period.

When observable market data is not available, the Group uses one or more valuation techniques (e.g. the market approach or the income approach) for which sufficient and reliable data is available. These inputs used in estimating the fair value of Level 3 financial instruments include expected timing and level of future cash flows, timing of settlement, discount rates and net asset values of certain investments.

There are no deferred consideration liabilities outstanding in relation to put options over non-controlling interests of subsidiaries as at 31 December 2019 (2018: £10 million). The deferred consideration was paid during the year.

With the exception of Group borrowings, management has assessed that the fair value of financial assets and financial liabilities categorised as being at amortised cost approximate to their carrying values. The fair value of the Group's borrowings is disclosed in note 26.

The Group's financial assets and financial liabilities held at fair value consist largely of securities restricted in use for the operations of the Group's CCPs as managers of their respective clearing and guarantee systems. The nature and composition of the CCP clearing business assets and liabilities are explained in the accounting policies section in note 1.

As at 31 December 2019, there are no provisions for expected credit losses in relation to any of the CCP businesses' financial assets held at amortised cost or FVOCI (2018: nil). The Group closely monitors its CCP investment portfolio and invests only in government debt and other collateralised instruments where the risk of loss is minimal. There was no increase in credit risk in the year and none of the assets are past due (2018: nil).

Investments in financial assets – equity

On 30 January 2019, the Group acquired a 4.92% equity interest in Euroclear Holding SA/NV (Euroclear) for €278 million (£244 million) and considers its interest a long-term strategic investment. As at 31 December 2019, the carrying value of the investment is £238 million (€278 million). The investment is classified as Level 3, but was classified as Level 2 on acquisition. The fair value can be derived from external observable inputs, which include transactions in equity. No such transactions have occurred since the acquisition of the Group's interest. The Group regularly reviews Euroclear's financial information, which is available publicly or received as a shareholder and considers the current value to be a reasonable approximation of fair value. A dividend of £7 million was received during the year and recognised directly in the income statement within operating profit.

On 25 February 2019, the Group acquired a 7.3% equity interest in Nivaura Limited (Nivaura) for £3 million. A further investment of £4 million in the form of a convertible loan was also made. The loan is convertible to equity under certain conditions and attracts a discount on the available share price. The fair value of the loan as at 31 December 2019 is £5 million and is calculated using expected values based on the probability of each possible outcome. A fair value gain of £1 million has been recognised during the year in the income statement. Interest is charged on the loan at 6% per annum for the first two years and 15% for any years thereafter. Finance income has been recognised in the year, but is immaterial.

The fair value of the Nivaura investment is classified as Level 3. The fair value can be derived from external observable inputs, which include transactions in equity. No such transactions have occurred since the acquisition of the Group's interest. The Group regularly reviews financial information for Nivaura and considers the current value as a reasonable approximation of its fair value.

The Group has opted to value the equity investments at FVOCI, given the long-term strategic nature of these interests. The convertible loan is held at fair value through profit or loss, as it contains a derivative option.

Hedging activities and derivatives

Net investment hedges

Cross-currency interest rate swaps

In 2017, the Group issued €1 billion of bonds in two €500 million tranches that mature in 2024 and 2029. €700 million of these bonds were swapped on a coordinated basis into US$836 million through a series of cross-currency interest rate swaps which mature on the same dates as the bonds. These instruments effectively exchange some of the obligations and coupons of the bonds from Euros into US dollars in order to more closely match the Group's currency of borrowing to the currency of its net assets and earnings. These swaps have been designated as a hedge of the Group's net investments in its US dollar reporting subsidiaries and qualify for effective hedge accounting.

€700 million cross-currency interest rate swap	**2019**	2018
Fair value of derivative on the balance sheet	**£(39)m**	£(17)m
Nominal value of hedging instrument	**$836m**	$836m
Hedge ratio	**1:1**	1:1
Hedge effectiveness	**100%**	100%
Change in fair value of derivative	**£(22)m**	£(21)m
Change in value of net investment	**£22m**	£21m
Cumulative amount held in hedging reserve	**£(39)m**	£(17)m

The 2009 £250 million bond was swapped from Sterling into Euros. This also resulted in a reduction in balance sheet translation exposure on Euro denominated net assets and the protection of Sterling cash flows. These swaps were designated as a hedge of the Group's net investment in the Italian Group and qualified for effective hedge accounting until their maturity in October 2019.

£242 million cross-currency interest rate swap	**2019**	2018
Fair value of derivative on the balance sheet	**–**	£(30)m
Nominal value of hedging instrument	**–**	€300m
Hedge ratio	**–**	1:1
Hedge effectiveness	**–**	100%
Change in fair value of derivative	**£12m**	£(1)m
Change in value of net investment	**£(12)m**	£1m
Cumulative amount held in hedging reserve	**£(18)m**	£(30)m

The £18 million loss remains in the hedging reserve as the Group continues to own the underlying investment.

Non-derivative hedges

€800 million of the €1,500 million bonds not swapped into US dollars qualify as hedges of the Group's net investments in Euro denominated subsidiaries and qualify for effective hedge accounting. The movement on the €700 million that has been swapped is included below and is netted against the fair value movement of the US dollar derivative in the hedging reserve.

Euro denominated bonds	2019	2018
Carrying value of debt on the balance sheet	**£1,274m**	£1,342m
Nominal value of hedging instrument	**€1,500m**	€1,500m
Hedge ratio	**1:1**	1:1
Hedge effectiveness	**100%**	100%
Change in carrying value of hedging instrument	**£71m**	£(17)m
Change in value of net investment	**£(71)m**	£17m
Cumulative amount held in hedging reserve	**£50m**	£(21)m

Throughout the financial year the Group drew on its committed bank facilities in Euro and US dollars and issued Euro denominated Commercial Paper. These drawings and issuances were designated as hedges of the Group's net investments in Euro and US dollar denominated subsidiaries.

Revolving credit facility and commercial paper	2019	2018
Carrying value of debt on balance sheet	**£378m**	£270m
Nominal value of hedging instrument – Euros	**€317m**	€300m
Nominal value of hedging instrument – US dollars	**US$141m**	nil
Hedge ratio	**1:1**	1:1
Hedge effectiveness	**100%**	100%
Change in carrying value of hedging instruments	**£10m**	£(16)m
Change in value of net investments	**£(10)m**	£16m
Cumulative amount held in reserve	**£1m**	£(6)m

Hedging reserve	2019 £m	2018 £m
1 January	**(117)**	(62)
Changes in fair value recognised in other comprehensive income	**71**	(55)
31 December	**(46)**	(117)

No amounts have been reclassified to the income statement during the year (2018: £nil). £40 million of losses remain in reserves as at 31 December 2019 that have not been recycled to the income statement, as the Group continues to hold the underlying investments (2018: £43 million losses).

The Group's hedging instruments are recognised on the balance sheet within derivative financial instruments or borrowings.

Foreign currency forwards

At 31 December 2019, payables of €261 million and US$239 million were hedged forward into the next financial year. The fair value of the derivatives at the year end was an asset of £2 million (2018: nil) and a liability of £1 million (2018: nil).

Hedge accounting is not applied to these derivatives.

20. 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 liabilities simultaneously.

The following table shows the impact of netting arrangements on all financial assets and financial liabilities that are reported net on the balance sheet as at 31 December 2019:

31 December 2019	Gross amounts £m	Amount offset £m	Net amount as reported £m
Other financial assets	**1,087,976**	**(1,073,415)**	**14,561**
Repurchase agreements	**792,921**	**(110,294)**	**682,627**
Total assets	**1,880,897**	**(1,183,709)**	**697,188**
Other financial liabilities	**(1,118,402)**	**1,103,841**	**(14,561)**
Reverse repurchase agreements	**(792,921)**	**110,294**	**(682,627)**
Total liabilities	**(1,911,323)**	**1,214,135**	**(697,188)**

The impact of netting arrangements on all financial assets and financial liabilities that are reported net on the balance sheet as at 31 December 2018 is as follows:

31 December 2018	Gross amounts £m	Amount offset £m	Net amount as reported £m
Other financial assets	867,201	(859,535)	7,666
Repurchase agreements	823,180	(88,390)	734,790
Total assets	1,690,381	(947,925)	742,456
Other financial liabilities	(892,461)	884,795	(7,666)
Reverse repurchase agreements	(823,180)	88,390	(734,790)
Total liabilities	(1,715,641)	973,185	(742,456)

All offset amounts are held in Clearing member trading assets and Clearing member trading liabilities within the Group's financial instruments.

As CCPs, the Group's operating companies sit in the middle of members' transactions and hold default funds and margin amounts as a contingency against the default of a member. As such, further amounts are available to offset in the event of a default reducing the asset and liability of £697,188 million (2018: £742,456 million) to nil.

Notes to the financial statements (continued)

21. Trade and other receivables

	Notes	Group 2019 £m	Group 2018 £m	Company 2019 £m	Company 2018 £m
Non-current					
Deferred consideration		–	28	–	–
Fees receivable[1]		**1**	1	–	–
Amounts due from Group companies	34	–	–	**41**	25
Amounts due from associates	34	**1**	–	–	–
Net investments in leases	24	**3**	–	–	–
Convertible loan notes	19	**5**	–	–	–
Other receivables		**9**	2	–	–
Contract assets		–	2	–	–
		19	33	**41**	25
Current					
Trade receivables		**328**	432	–	–
Fees receivable[1]		**141**	139	–	–
Less: provision for expected credit losses on trade receivables		**(9)**	(11)	–	–
Trade receivables – net		**460**	560	–	–
Amounts due from Group companies	34	–	–	**513**	525
Amounts due from associates	34	**2**	1	–	–
Group relief receivable		–	–	**101**	68
Deferred consideration		**27**	28	–	–
Other receivables		**18**	141	**51**	4
Prepayments		**58**	53	**3**	3
Contract assets		**1**	2	–	–
		566	785	**668**	600
Total		**585**	818	**709**	625

1. The 31 December 2018 comparatives have been re-presented for the change in classification of the majority of contract assets as fees receivable

The carrying amount of the Group's current trade and other receivables are denominated in the following currencies:

	2019 £m	2018 £m
Sterling	**208**	361
Euro	**116**	117
US Dollar	**227**	288
Other currencies	**15**	19
	566	785

Movements in the Group's provision for expected credit losses on trade receivables are as follows:

	2019 £m	2018 £m
1 January	**11**	11
Provision for impairment of receivables	–	2
Receivables written off during the year as uncollectible	–	(1)
Provisions no longer required	**(2)**	–
Amounts recovered in the year	–	(1)
31 December	**9**	11

The creation and release of the provisions for impaired receivables have been included in operating expenses in the income statement. Amounts charged to the allowance account are written off when there is no expectation of recovering additional cash.

The other classes within trade and other receivables and the other categories of financial assets do not contain impaired assets.

Fees receivable and contract assets

In 2018, the Group considered contract assets as amounts primarily related to the right to consideration for work completed but not invoiced at the reporting date. These amounts are not conditional on something other than the passage of time, and therefore these amounts are now included within trade and other receivables as fees receivable.

Where assets exist that are conditional on something other than the passage of time, these continue to be recognised as contract assets and are also included in trade and other receivables.

There is no change in the total of assets recognised.

During the year, the Group recognised no impairment losses in relation to contract assets.

Movements in the Group's contract assets during the year were as follows:

	2019 £m	2018 £m
1 January	**4**	–
Amounts billed in the year	**(4)**	–
Services provided in the year	**1**	4
31 December	**1**	4

The contract assets table has been re-presented to reflect the fact that there has been a change in recognition of assets as fees receivable as follows:

	As at 31 December 2018 £m	Reclassification £m	1 January 2019 £m
Contract assets	144	(140)	4
Fees receivable	–	140	140
	144	–	144

22. Cash and cash equivalents

	Group		Company	
	2019 £m	2018 £m	2019 £m	2018 £m
Cash at bank	**607**	701	**–**	1
Short-term deposits	**886**	809	**2**	5
	1,493	1,510	**2**	6

Cash and cash equivalents are held with authorised counterparties of a high credit standing; in secured investments by LCH Group companies and CC&G, and unsecured interest bearing current and call accounts, short-term deposits and AAA-rated money market funds elsewhere in the Group. Management does not expect any losses from non-performance by counterparties holding cash and cash equivalents, and there are no material differences between book and fair values. Cash and cash equivalents do not include amounts held by the CCPs on behalf of their clearing members.

At 31 December 2019, cash and cash equivalents shown above include £1,125 million (2018: £1,120 million) of amounts held by regulated entities for regulatory and operational purposes. Total amounts set aside for regulatory and operational purposes include current investments in financial assets of £81 million (2018: £53 million) and non-current investments in financial assets of £25 million (2018: £31 million).

All amounts are subject to regular reviews with regulators in the UK, France and Italy.

23. Trade and other payables

		Group		Company	
	Notes	2019 £m	2018 £m	2019 £m	2018 £m
Non-current					
Other non-current payables		**4**	10	**–**	–
Lease liabilities	24	**146**	1	**–**	–
		150	11	**–**	–
Current					
Trade payables		**57**	52	**1**	1
Amounts owed to Group companies	34	**–**	–	**663**	366
Amounts owed to associates	34	**1**	–	**–**	–
Social security and other taxes		**23**	29	**–**	–
Other payables		**164**	98	**19**	22
Lease liabilities	24	**37**	4	**–**	–
Accruals		**338**	355	**29**	13
		620	538	**712**	402
Total		**770**	549	**712**	402

Prior to the adoption of IFRS 16, at 31 December 2018 lease liabilities totalling £5 million were reported within other payables. There is no change to total trade and other payables.

Other payables includes margin payable on reverse repurchase contracts within the CCP businesses.

24. Leases

Movements in the lease liabilities during the year were as follows:

	2019 £m
31 December 2018	5
Impact of adoption of IFRS 16 (note 2)	201
1 January 2019 (restated)	206
Acquisition of subsidiary (note 32)	1
Leases terminated early	(1)
New lease contracts	20
Lease interest expense (note 9)	4
Lease payments	(45)
Foreign exchange	(2)
31 December 2019	**183**

Movements in lease liabilities are a new disclosure requirement as a result of the adoption of IFRS 16 on 1 January 2019. The Group has used the modified retrospective approach to transition to IFRS 16 and therefore no comparative disclosures are presented.

The Group is both a lessee and lessor of assets.

Group as lessee

Right-of-use assets are disclosed within property, plant and equipment (note 13) and intangible assets (note 14).

A number of leases, which although originally for longer than 12 months at inception, ended within 12 months of the date of adoption: these leases have been treated as short-term leases under IFRS 16 and the expense incurred in the year is shown within expenses by nature (note 6).

The Group has applied discount rates specific to the country and entity for all leases of property and other assets. The maturity of the Group's lease commitments is disclosed within the risk management note (note 3). Lease liabilities are included within trade and other payables (note 23).

The weighted average incremental borrowing rate used by the Group for the calculation of the lease liabilities recognised on adoption was 2.4%.

Variable lease payments are linked to a publicly available index and adjustments to the value of assets are made accordingly. There are no outstanding options to extend lease periods or early break clauses that have not been accounted for that would create material additional liabilities.

The total amount paid during the year for all leased assets was £49 million.

Group as lessor

The Group sub-lets a number of its property right-of-use assets where there is surplus space, or the office is no longer used by the business. The right-of-use asset is derecognised, and a net investment in lease equal to the present value of future rental income is recognised instead. Any difference in value is recognised as a profit or loss on disposal in the income statement. A loss on disposal of £2 million relating to property right-of-use assets was recognised in the year.

The value of net investment in leases is disclosed within trade and other receivables (note 21). Finance income earned on the sub-leases is included within finance income (note 9), but is immaterial.

The Group carries out stringent checks on potential lessees before granting a lease to ensure the Group's asset (the building) is protected. In addition, certain "make good" clauses are included in any lease, with penalties for non-completion. A security deposit is also retained to cover any additional costs incurred.

The value of future payments receivable is as follows:

	Less than 1 year £m	More than 1 year, less than 5 years £m	More than 5 years £m	Total £m
Rent amounts due	1	2	–	3

25. Contract liabilities

Group	2019 £m	2018 £m
Non-current	**88**	118
Current	**157**	153
Total	**245**	271

There were no contract liabilities in the Company (2018: nil).

Contract liabilities primarily relate to the consideration received from customers for which services have not yet been rendered.

Changes in the Group's contract liabilities balances during the year were as follows:

	2019 £m	2018 £m
1 January	**271**	244
Revenue recognised as a result of revised recognition period	**(32)**	–
Revenue recognised in the income statement	**(154)**	(134)
Increases due to consideration received (excluding amounts recognised as revenue during the year)	**162**	160
Foreign exchange	**(2)**	1
31 December	**245**	271

During the year, the Group revised the recognition period within the Capital Markets segment. This resulted in £32 million being released from contract liabilities and recognised as revenue.

The Group's contract liabilities are expected to be recognised in the following periods after 31 December 2019:

	Information Services £m	Post Trade *Services* – LCH £m	Post Trade Services – *CC&G and* Monte Titoli £m	*Capital* Markets £m	*Technology* Services £m	Group £m
Less than 1 year	**112**	**2**	**–**	**41**	**2**	**157**
More than 1 year but less than 5 years	**–**	**–**	**–**	**75**	**–**	**75**
More than 5 years	**–**	**–**	**–**	**13**	**–**	**13**
Contract liabilities as at end of year	**112**	**2**	**–**	**129**	**2**	**245**

26. Borrowings

	Group		Company	
	2019 £m	2018 £m	2019 £m	2018 £m
Current				
Bank borrowings	**256**	41	**248**	24
Commercial paper	**256**	270	**256**	270
Bonds	**–**	250	**–**	250
	512	561	**504**	544
Non-current				
Bonds	**1,573**	1,642	**1,573**	1,642
	1,573	1,642	**1,573**	1,642
Total	**2,085**	2,203	**2,077**	2,186

Notes to the financial statements (continued)

The Group has the following committed bank facilities and unsecured notes:

Type	Expiry Date	Notes/Facility £m	Carrying value at 31 *December* 2019 £m	Interest rate percentage at *31 December* 2019 %
Drawn value of Facilities				
Dual-currency bridge credit facility	Jan 2022[1]	10,167	**(8)**	LIBOR + 0.3
Multi-currency revolving credit facility	Nov 2022	600	**115**	LIBOR + 0.45
Multi-currency revolving credit facility	Dec 2024	600	**149**	LIBOR + 0.3
Total committed bank facilities			**256**	
Commercial paper	Jan 2020	256	**256**	(0.330)[2]
£300 million bond, issued November 2012	Nov 2021	300	**299**	4.750
€500 million bond, issued September 2017	Sep 2024	427	**426**	0.875
€500 million bond, issued December 2018	Dec 2027	427	**424**	1.750
€500 million bond, issued September 2017	Sep 2029	427	**424**	1.750
Total bonds			**1,573**	
Total committed facilities and unsecured notes			**2,085**	

1. Terminates 12 months after the earlier of Refinitiv business acquisition or the end of January 2022
2. The Commercial paper interest rate reflected is the average interest rate achieved on the outstanding issuances

Current borrowings

The Group retained total committed revolving credit bank facilities of £1,200 million during the financial year. The final one year extension option on the five year £600 million facility arranged in December 2017 was taken up to push the final maturity out to December 2024. In August 2019 the Group arranged a Bridge Facility comprising tranches of US$9.325 billion and €3.58 billion. The revolving credit facilities were partially drawn at 31 December 2019 and the Bridge Facility remained undrawn, with total facilities carrying value of £256 million (2018: £41 million) which includes £10 million of deferred arrangement fees (2018: £2 million). Further details of the Bridge Facility arrangement fees amortised to the income statements are provided in note 8.

The Group maintained its £1 billion Euro Commercial Paper Programme. Outstanding issuances at 31 December 2019 of €300 million (£256 million) (2018: of €300 million (£270 million)) *may be reissued upon maturity in line with the Group's liquidity requirements.*

In October 2019, the Company redeemed the 2009 £250 million unsecured bond using funding drawn from its bank credit facilities. The issue price of the bond was £99.548 per £100 nominal. The coupon on the bond was dependent on the Company's credit ratings with Moody's and Standard & Poor's, which were unchanged at A3 and A- respectively. The bond coupon remained at 9.125% per annum for the period outstanding.

Cassa di Compensazione e Garanzia S.p.A. (CC&G) has direct intra-day access to refinancing with the Bank of Italy to cover its operational liquidity requirements in the event of a market stress or participant failure. In addition, it has arranged commercial bank back-up credit lines with a number of commercial banks, which total €420 million at 31 December 2019 (2018: €420 million), for overnight and longer durations to broaden its liquidity resources consistent with requirements under the European Markets Infrastructure Regulation (EMIR).

LCH SA has a French banking licence and is able to access refinancing at the European Central Bank to support its liquidity position. LCH Limited is deemed to have sufficient fungible liquid assets to maintain an appropriate liquidity position, and has direct access to certain central bank facilities to support its liquidity risk management in accordance with the requirements under the EMIR. In accordance with the Committee on Payments and Market Infrastructures (CPMI), International Organization of Securities Commissions (IOSCO) and Principles for Financial Market Infrastructures (PFMIs), many Central Banks now provide for CCPs to apply for access to certain Central Bank facilities.

In addition, a number of Group entities have access to uncommitted operational, money market and overdraft facilities which support post trade activities and day-to-day liquidity requirements across its operations.

Non-current borrowings

In November 2012, the Company issued a £300 million bond under its Euro Medium Term Notes Programme (launched at the same time) which is unsecured and is due for repayment in November 2021. Interest is paid semi-annually in arrears in May and November each year. The issue price of the bond was £100 per £100 nominal. The coupon on the bond is fixed at 4.75% per annum

In September 2017, the Company issued €1 billion of bonds in two €500 million (£427 million) tranches under its updated Euro Medium Term Notes Programme. The bonds are unsecured and the tranches are due for repayment in September 2024 and September 2029 respectively. Interest is paid annually in arrears in September each year. The issue prices of the bonds were €99.602 per €100 nominal for the 2024 tranche and €99.507 per €100 nominal for the 2029 tranche. The coupon on the respective tranches is fixed at 0.875% per annum and 1.75% per annum respectively.

In December 2018, the Company issued a €500 million (£427 million) bond under its updated Euro Medium Term Notes Programme. The bond is unsecured and due for repayment in December 2027. Interest is paid annually in arrears in December each year. The issue price was €99.547 per €100 nominal. The coupon on the bond is fixed at 1.75% per annum.

Fair values

The fair values of the Group's borrowings are as follows:

Group	2019 Carrying value £m	2019 Fair value £m	2018 Carrying value £m	2018 Fair value £m
Borrowings				
– within 1 year	**512**	**512**	561	561
– after more than 1 year	**1,573**	**1,676**	1,642	1,914
	2,085	**2,188**	2,203	2,475

The fair values of the Company's borrowings are as follows:

Company	2019 Carrying value £m	2019 Fair value £m	2018 Carrying value £m	2018 Fair value £m
Borrowings				
– within 1 year	**504**	**504**	544	544
– after more than 1 year	**1,573**	**1,676**	1,642	1,914
	2,077	**2,180**	2,186	2,458

Bonds are classified as Level 1 in the Group's hierarchy for determining and disclosing the fair value of financial instruments. Bond fair values are as quoted in the relevant fixed income markets.

Bank borrowings and commercial paper are classified as Level 2 in the Group's hierarchy for determining and disclosing the fair value of financial instruments. The fair values of these instruments are based on discounted cash flows using a rate based on borrowing cost. Bank borrowings bear interest at an appropriate inter-bank reference rate plus and agreed margin, and commercial paper attracts interest at a negotiated rate at the time of issuance.

The carrying amounts of the Group's borrowings are denominated in the following currencies:

Currency	2019 Drawn £m	2019 Swapped £m	2019 Effective £m	2018 Drawn £m	2018 Swapped £m	2018 Effective £m
Sterling	**420**	**–**	**420**	572	(270)	302
Euro	**1,557**	**(637)**	**920**	1,631	(361)	1,270
US Dollar	**108**	**637**	**745**	–	631	631
Total	**2,085**	**–**	**2,085**	2,203	–	2,203

The carrying amounts of the Company's borrowings are denominated in the following currencies:

Currency	2019 Drawn £m	2019 Swapped £m	2019 Effective £m	2018 Drawn £m	2018 Swapped £m	2018 Effective £m
Sterling	**420**	**–**	**420**	572	(270)	302
Euro	**1,549**	**(637)**	**912**	1,614	(361)	1,253
US Dollar	**108**	**637**	**745**	–	631	631
Total	**2,077**	**–**	**2,077**	2,186	–	2,186

Notes to the financial statements (continued)

27. Analysis of net debt

Group net debt includes interest bearing loans and borrowings and derivative financial instruments less cash and cash equivalents.

	Group		Company	
	2019 £m	2018 £m	2019 £m	2018 £m
Due within 1 year				
Cash and cash equivalents	**1,493**	1,510	**2**	6
Bank borrowings	**(256)**	(41)	**(248)**	(24)
Commercial paper	**(256)**	(270)	**(256)**	(270)
Bonds	**–**	(250)	**–**	(250)
Derivative financial assets	**2**	–	**2**	–
Derivative financial liabilities	**(1)**	(30)	**(1)**	(30)
	982	919	**(501)**	(568)
Due after 1 year				
Bonds	**(1,573)**	(1,642)	**(1,573)**	(1,642)
Derivative financial liabilities	**(39)**	(17)	**(39)**	(17)
Total net debt	**(630)**	(740)	**(2,113)**	(2,227)

Reconciliation of net cash flow to movement in net debt

	Group		Company	
	2019 £m	2018 £m	2019 £m	2018 £m
Increase/(decrease) in cash in the year	**57**	84	**(8)**	1
Bond issue proceeds	**–**	(445)	**–**	(445)
Commercial paper issuance	**–**	(255)	**–**	(255)
Additional drawdowns from bank credit facilities	**(261)**	–	**(261)**	–
Net repayments made towards bank credit facilities	**35**	489	**26**	474
Repayment of bonds	**250**	–	**250**	–
Change in net debt resulting from cash flows	**81**	(127)	**7**	(225)
Foreign exchange	**14**	4	**92**	(40)
Movement on derivative financial assets and liabilities	**9**	(22)	**9**	(22)
Bond valuation adjustment	**(2)**	3	**(2)**	3
Movement in bank credit facility arrangement fees	**8**	(1)	**8**	(1)
Net debt at the start of the year	**(740)**	(597)	**(2,227)**	(1,942)
Net debt at the end of the year	**(630)**	(740)	**(2,113)**	(2,227)

28. Provisions

Group	Property £m	Other £m	Total £m
31 December 2018	**10**	**2**	**12**
Impact of adoption of IFRS 16 (note 2)	**4**	**–**	**4**
1 January 2019 (restated)	**14**	**2**	**16**
Utilised during the year	**–**	**(2)**	**(2)**
Provisions no longer required	**–**	**(2)**	**(2)**
Provided in the year	**–**	**20**	**20**
31 December 2019	**14**	**18**	**32**
Current	**1**	**18**	**19**
Non-current	**13**	**–**	**13**
31 December 2019	**14**	**18**	**32**

The property provision represents the estimated net present value of future costs for dilapidation costs. On adoption of IFRS 16 on 1 January 2019, additional provisions were recognised (note 2).

The majority of the non-current provisions are expected to be due in 2024.

Other provisions primarily relate to the expected costs arising from restructuring during the year.

The Company has no provisions (2018: nil).

29. Share capital and share premium

Ordinary shares issued and fully paid

	Number of shares millions	Ordinary shares[1] £m	Share premium £m	Total £m
1 January 2018	350	24	964	988
Issue of shares to the Employee Benefit Trust	1	–	1	1
31 December 2018	351	24	965	989
Issue of shares to the Employee Benefit Trust	–	–	**2**	**2**
31 December 2019	**351**	**24**	**967**	**991**

1. Ordinary Shares of 6 79/86 pence

The Board approved the allotment and issue of 68,020 ordinary shares of par value 6 79/86 pence at a weighted average exercise price of 2,238 pence to the Employee Benefit Trust (2018: 72,763 ordinary shares of par value 6 79/86 pence at 2,042 pence), to settle employee 'Save As You Earn' share plans. This generated a premium of £2 million (2018: £1 million).

The Ordinary Share Capital of 351 million shares is shown net of 1 million treasury shares, recorded at par.

30. Net cash flow generated from operations

	Notes	Group 2019 £m	Group 2018 £m	Company 2019 £m	Company 2018 £m
Profit before tax		**651**	685	**268**	112
Adjustments for depreciation, amortisation and impairments:					
Depreciation and amortisation	13, 14	**369**	287	–	–
Impairment of software and intangible assets	14	**24**	5	–	–
Impairment of property, plant and equipment	13	**2**	2	–	–
Adjustments for other non-cash items:					
Loss on disposal of intangible assets		**2**	–	–	–
Share of loss of associates	15	**7**	8	–	–
Impairment of investment in associate	15	–	–	**6**	8
Net finance expense	9	**87**	66	**83**	61
Share scheme expense	7	**35**	36	–	–
Royalties		**1**	3	–	–
Movement in pensions and provisions		**(2)**	(19)	–	–
Net foreign exchange differences		**(27)**	30	**(103)**	52
Dividend income	34	–	–	**(464)**	(320)
Research and development tax credit		**(1)**	–	–	–
Decrease/(increase) in receivables and contract assets		**203**	(107)	**(18)**	38
Increase in payables and contract liabilities		**37**	3	**39**	66
Movement in other assets and liabilities relating to operations:					
Decrease/(increase) in clearing member financial assets		**6,525**	(101,678)	–	–
(Decrease)/increase in clearing member financial liabilities		**(6,796)**	101,646	–	–
Movement in derivative assets and liabilities[1]		**(28)**	2	**(7)**	22
Cash generated from/(used in) operations		**1,089**	969	**(196)**	39

1 Movement in derivative assets and liabilities includes £10 million relating to the Group's exercise of its option to purchase the remaining interest in EuroTLX SIM S p A, a subsidiary of the Group and £1 million from the revaluation of the derivative option attached to the convertible loan to Nivaura Limited

Movement in financial liabilities arising from financing activities:

	31 December 2018 £m	Impact of adoption of IFRS 16 (note 2) £m	1 January 2019 (restated) £m	Cash flows from financing activities £m	Acquisition activities £m	Foreign exchange £m	Other movements £m	31 December 2019 £m
Bank borrowings	41	–	41	**226**	**(19)**	**(4)**	**12**	**256**
Bonds	1,892	–	1,892	**(250)**	–	**(71)**	**2**	**1,573**
Commercial paper	270	–	270	–	–	**(14)**	–	**256**
Finance lease liabilities	5	201	206	**(41)**	**1**	**(2)**	**19**	**183**
	2,208	201	2,409	**(65)**	**(18)**	**(91)**	**33**	**2,268**

Other movements comprise non-cash movements relating to amortisation of arrangement fees of £14 million, new leases recognised of £20 million and leases terminated early of £(1) million during the year.

Acquisition activities include arrangement fees of £19 million paid on funding arrangements, which have been disclosed as part of interest paid within the Group's cash flows from operating activities.

	31 December 2017 £m	Cash flows from financing activities £m	Foreign exchange £m	Other movements £m	31 December 2018 £m
Bank borrowings	522	(489)	7	1	41
Bonds	1,431	445	18	(2)	1,892
Commercial paper	–	255	15	–	270
Finance lease liabilities	7	(2)	–	–	5
	1,960	209	40	(1)	2,208

The comparative table has been re-presented to be in line with current year disclosure.

31. Commitments and contingencies

The Group and Company have no contracted capital commitments or any other commitments not provided for in the financial statements as at 31 December 2019 (2018: nil).

In the normal course of business, the Group and the Company receive 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 or the Company, a provision is made representing the expected cost of settling such claims.

32. Business combinations

Acquisitions in the year to 31 December 2019

On 31 May 2019, the Group acquired 100% of Beyond Ratings, a provider of financial analysis that includes Environmental, Social and Governance criteria, based in France. The consideration of £14 million (€15 million) cash was paid in two instalments during the year.

The provisional fair value of the net assets acquired was nil, including fixed assets of £1 million, current assets of £1 million and liabilities of £2 million. The fair value of assets acquired will be finalised within 12 months of acquisition. There were no purchased intangible assets. The Group provisionally recognised £14 million in goodwill which represents the potential growth of future income streams expected as the Beyond Ratings business is highly complementary to the Group's analytics tools and the index and data products.

The post-acquisition revenues and operating profit from the continuing operations of Beyond Ratings were not material to the Group. If the acquisition had taken place at the beginning of the year there would have been no material effect on the Group.

Acquisition related costs incurred have been recognised in the income statement during the year, but were immaterial.

Acquisitions in the year to 31 December 2018

There were no acquisitions in the year ended 31 December 2018.

33. Share schemes

The London Stock Exchange Group Long Term Incentive Plan (LTIP), approved at the 2014 AGM, has two elements, a conditional award of Performance Shares and an award of Matching Shares linked to investment by the executive of annual bonus in the Company's shares – the latter element is not applicable to executive directors. Vesting of these awards is dependent upon the Company's total shareholder return performance and adjusted basic earnings per share. Further details are provided in the Directors' Remuneration Report on pages 98 to 128. Awards are granted at nil cost to employees.

The SAYE Option Scheme and International Sharesave Plan (SAYE Scheme) provide for grants of options to employees who enter into a SAYE savings contract and options were granted at 20% below fair market value during the year.

The Group has an employee benefit discretionary trust to administer the share plans and to acquire the shares to meet commitments to Group employees. At the year end, 517,563 (2018: 573,672) shares were held by the trust, funded in part by an interest free loan from the Group and in part by the issue of 68,020 (2018: 72,763) shares and transfer of 1,505,267 (2018: 1,359,900) shares held in treasury.

The Company has no employees but, in accordance with IFRS 10 'Consolidated Financial Statements', has the obligation for the assets, liabilities, income and costs of the employee benefit trust and these have been consolidated in the Group's financial statements. The cost of the Group's shares held by the trust are deducted from retained earnings.

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

	Share options		SAYE Scheme		LTIP	
	Number	Weighted average exercise price £	Number	Weighted average exercise price £	Number	Weighted average exercise price £
31 December 2017	1,676	8.94	867,873	26.40	5,438,872	–
Granted	–	–	208,598	34.37	1,335,947	–
Exercised	–	–	(206,738)	20.59	(1,659,249)	–
Lapsed/forfeited	–	–	(76,746)	27.88	(320,648)	–
31 December 2018	1,676	8.94	792,987	29.87	4,794,922	–
Granted	–	–	**207,202**	**38.46**	**1,135,926**	–
Exercised	–	–	**(195,424)**	**23.01**	**(1,496,293)**	–
Lapsed/forfeited	–	–	**(69,556)**	**32.33**	**(495,157)**	–
31 December 2019	**1,676**	**8.94**	**735,209**	**33.88**	**3,939,398**	–
Exercisable at:						
31 December 2019	**1,676**	**8.94**	**11,057**	**32.59**	–	–
31 December 2018	1,676	8.94	9,940	28.05	–	–

The weighted average share price of London Stock Exchange Group plc shares during the year was £58.75 (2018: £42.62).

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

	31 December 2019		31 December 2018	
	Number outstanding	Weighted average remaining contractual life Years	Number outstanding	Weighted average remaining contractual life Years
Share options				
Between £8 and £9	**1,676**	–	1,676	–
SAYE				
Between £20 and £30	–	–	188,218	0.1
More than £30	**735,209**	**1.4**	604,769	1.6
LTIP				
Nil	**3,939,398**	**1.2**	4,794,922	1.2
Total	**4,676,283**	**1.2**	5,589,585	1.3

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

	Performance Shares			Matching Shares	Restricted Share Award			Share Save Plan
	22-Mar-19	29-Aug-19	28-Nov-19	22-Mar-19	22-Mar-19	29-Aug-19	28-Nov-19	01-May-19
Grant date share price	**£45.94**	**£69.70**	**£68.98**	**£45.94**	**£45.94**	**£69.70**	**£68.98**	**£51.86**
Expected life	**3 years**	**3 years**	**3 years**	**3 years**	**0.95 year to 2.95 years**	**2 years to 3 years**	**0.33 year to 4.33 years**	**3.3 years**
Exercise price	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**£38.46 to £39.37**
Dividend yield	**1.5%**	**1.1%**	**0.9%**	**1.5%**	**1.5%**	**1.1%**	**0.9%**	**1.3%**
Risk-free interest rate	**0.7%**	**0.3%**	**0.5%**	**0.7%**	**0.65% to 0.72%**	**0.33% to 0.43%**	**0.49% to 0.74%**	**0.8%**
Volatility	**20%**	**20%**	**21%**	**20%**	**18.2% to 20.3%**	**20% to 21.4%**	**21% to 39.1%**	**23%**
Fair value	–	–	–	–	**£44 to £45.31**	**£67.40 to £68.16**	**£66.28 to £68.77**	**£14.41 to £15.00**
Fair value TSR	**£13.69**	**£27.09**	**£20.00**	**£13.69**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Fair value EPS	**£43.97**	**£67.40**	**£66.90 to £67.10**	**£43.97**	**n.a.**	**n.a.**	**n.a.**	**n.a.**

Notes to the financial statements (continued)

The approach adopted by the Group in determining the fair value for the Performance and Matching Shares granted during the year was based on a Total Shareholder Return pricing model which incorporates TSR and EPS performance conditions and references the vesting schedules of the awards.

For all other share awards, including the Share Save Plan, the Black-Scholes model was used.

The significant inputs into both models are the share price at grant date, expected volatility, dividend yields and annual risk-free interest rate. The volatility assumption is based on the historical 3-year volatility as at the date of grant. The risk-free interest rate represents the yield available on a UK zero-coupon government bond on the date of grant for a term commensurate with the vesting period of the award. The expected life refers to the time from the date of grant to the date the awards vest. Holders of share awards and share options are not entitled to receive dividends declared during the vesting period.

34. Transactions with related parties

Key management compensation

Compensation for Directors of the Company and key personnel who have authority for planning, directing and controlling the Group:

	2019 £m	2018 £m
Salaries and other short-term benefits	**11**	11
Pensions	**1**	1
Share-based payments	**12**	14
	24	26

Key management compensation relates to the Executive Directors, Group Chair and Executive Committee, who have authority for planning, directing and controlling the Group.

Other directors' interests

One director has a 40.5% (2018: 40.5%) equity interest in Quantile Technologies Limited who are an approved compression service provider for the Group's LCH Limited subsidiary. The Group operated a commercial arrangement with Quantile Technologies Limited and all transactions were carried out on an arm's length basis. During the year the Group recognised income of £0.5 million and expenses of £0.4 million as part of the agreement (2018: nil).

Inter-company transactions with subsidiary undertakings

The Company has loans with some subsidiary undertakings. Details as at 31 December 2019 are shown in the table below:

Loan counterparty	Amount (owed to)/ due from as at 2019	Amount (owed to)/ due from as at 2018	Term	Interest rate as at 31 December 2019	Interest (charge)/credit 2019	Interest (charge)/credit 2018
London Stock Exchange plc	**£(203)m**	£(198)m	25 years from May 2006 with five equal annual repayments commencing in May 2027	LIBOR plus 2% per annum	**£(6)m**	£(5)m
London Stock Exchange Employee Benefit Trust	**£41m**	£25m	Repayable on demand.	Non-interest bearing	–	–
London Stock Exchange Group Holdings (Italy) Limited	**€(206)m**	€(11)m	Fifth anniversary of the initial utilisation date which was April 2018.	EURIBOR plus 1.5% per annum	**€(2)m**	€(1)m
London Stock Exchange Group Holdings Limited	**£272m**	£226m	Fifth anniversary of the initial utilisation date which was October 2019.	LIBOR plus 1.5% per annum	**£9m**	£12m
London Stock Exchange Reg Holdings Limited	**£24m**	£20m	Fifth anniversary of the initial utilisation date which was July 2018.	LIBOR plus 1.2% per annum	–	–
London Stock Exchange (C) Limited	**€(40)m**	–	Fifth anniversary of the initial utilisation date which was May 2017.	EURIBOR plus 1.5% per annum	–	–
London Stock Exchange Group Holdings (Luxembourg) Ltd	**US$(227)m**	US$(24)m	Fifth anniversary of the initial utilisation date which was November 2019.	LIBOR plus 1.5% per annum	**US$(2)m**	US$(3)m
LSEG Employment Services Limited	**£34m**	£137m	Fifth anniversary of the initial utilisation date which was January 2015.	LIBOR plus 1.2% per annum	**£1m**	£2m
London Stock Exchange Group (Services) Limited	**£197m**	£71m	Fifth anniversary of the initial utilisation date which was January 2016.	LIBOR plus 0.9% per annum	**£3m**	£2m

During the year, the Company charged in respect of employee share schemes £10 million (2018: £9 million) to LSEG Employment Services Limited, £6 million (2018: £5 million) to LCH Group, £4 million (2018: £5 million) to the London Stock Exchange Group Holdings Italia S.p.A. group of companies, £4 million (2018: £3 million) to the FTSE Group, £5 million (2018: £7 million) to London Stock Exchange Group Holdings Inc, £4 million (2018: £5 million) to London Stock Exchange plc and £2 million (2018: £1 million) to other subsidiaries of the Group.

During the year the Company received dividends of £218 million from LSE plc, £155 million from LSE Group Holdings Ltd, £31 million from LSE Group Holdings (Italy) Ltd and £60 million from LSEGH (Luxembourg) Ltd. The Company recognised £7 million income (2018: £7 million) and £72 million expenses (2018: £61 million) with Group undertakings in relation to corporate recharges. At 31 December 2019, the Company had £25 million (2018: £67 million) other receivables due from Group companies and other payables of £78 million (2018: £144 million) owed to Group undertakings.

Transactions with associates
In the year ended 31 December 2019, the Group recognised £1 million revenue (2018: £1 million) from its associates and as at 31 December 2019, the Group had £1 million receivable from its associates (2018: £1 million).

All transactions with subsidiaries and associates were carried out on an arm's length basis.

35. Events after the reporting period
In January 2020 the Group created a Post Trade Division. The division will include LCH Group and the post trade businesses in Italy, Monte Titoli and CC&G, which are currently reported separately as part of our financial results. The Post Trade division will also include UnaVista, the trade reporting business that currently sits in the Information Services Division.

The Group will disclose segmental information for the Post Trade Division in future financial reporting.

36. Other statutory information
Auditors' remuneration payable to Ernst and Young LLP and its associates comprise the following:

	2019 £m	2018 £m
Audit of parent and consolidated financial statements	**1**	1
Audit of subsidiary companies	**3**	2
Non-audit services	**1**	1
Total	**5**	4

Ernst and Young LLP provided non-audit services of £0.4 million; 8% of total fees (2018: £0.6 million; 15% of total fees). This comprised of audit related assurance services of £0.3 million (2018: £0.5 million) and other non-audit services of £0.1 million (2018: £0.1 million).

Further details of the services provided by Ernst and Young LLP are given in the Report of the Audit Committee on pages 90 to 95.

Directors' emoluments comprise the following:

	2019 £m	2018 £m
Salary and fees	**3**	3
Performance bonus	**3**	2
Gains made on share awards	**6**	3
Benefits	**1**	1
	13	9

During the year, one Director (2018: one) had retirement benefits accruing under a defined benefit scheme.

Further details of Directors' emoluments are included in the Directors' Remuneration Report on pages 98 to 128.

Notes to the financial statements (continued)

Related undertakings

A list of the Group's subsidiaries as at 31 December 2019 is given below including the percentage of each class held and the Group's ownership percentages.

The share ownership percentage records the percentage of each subsidiary's share capital owned within the LSEG Group. Shares owned directly by LSEG plc are listed as being a 'direct' shareholding, shares owned by other LSEG Group companies are listed as an 'indirect (group interest)' shareholding. Where more than 1 LSEG Group company owns shares in a subsidiary these interests have been added together. The ultimate economic interest percentage on the other hand does not show actual share ownership. It records LSEG plc's effective interest in the subsidiary, allowing for situations where subsidiaries are owned by partly owned intermediate subsidiaries.

All subsidiaries are consolidated in the Group's financial statements.

Name of subsidiary undertaking	Country of incorporation	Registered office address	Identity of each class of share held in the subsidiary undertaking	Direct or indirect holding	Share ownership %	LSEG plc ultimate economic interest %
Banque Centrale de Compensation SA (LCH SA)	France	18 Rue du Quatre-Septembre, 75002, Paris, France	Ordinary	Indirect (group interest)	88.91	73.45
Beyond Ratings	France	58 Rue des Meuniers, 93100, Montreuil, France	Ordinary	Indirect (group interest)	100	100
BIt Market Services S.p.A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	99.99	99.99
Bondclear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
Borsa Italiana S.p A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia Italy	Ordinary	Indirect (group interest)	99.99	99.99
Cassa Di Compensazione e Garanzia S.p.A. (CC&G)	Italy	Via Tomacelli, 146, 00186 Rome, Italy	Ordinary	Indirect (group interest)	100	99.99
CommodityClear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
Elite Americas LLC	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Member Interest	Indirect (group interest)	100	74.99
Elite Club Deal Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	74.99
Elite S.p.A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	75.00	74.99
Elite SIM S.p.A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	100	74.99
Equityclear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
EuroMTS Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	62.53
EuroTLX SIM S.p A	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	100	99.99
ForexClear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
Frank Russell Company	United States	c/o United Agent Group Inc. West 505 Riverside Avenue #500, Spokane, Spokane County, WA, 99201, United States	Common	Indirect (group interest)	100	100
FTSE (Australia) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE (Beijing) Consulting Limited	China	Room 02D-H, 6/F Dongwai Diplomatic Building, 23 Dongzhimenwai Dajie, Beijing, China	Ordinary	Indirect (group interest)	100	100
FTSE (Japan) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE Americas, Inc.	United States	c/o United Agent Group Inc. 15 North Mill Street, Nyack, Rockland County, NY, 10960, United States	Ordinary	Indirect (group interest)	100	100
FTSE China Index Ltd	Hong Kong	Suite 1106-8, 11/F, Tai Yau Building, No.181 Johnston Road, Wanchai, Hong Kong	Ordinary	Indirect (group interest)	100	100
FTSE Fixed Income LLC	Unites States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Member Interest	Indirect (group interest)	100	100
FTSE Global Debt Capital Markets Inc.	Canada	40 King Street West, Suite 5800, Toronto, Ontario, M5H 3S1	Ordinary	Indirect (group interest)	100	100
FTSE Global Debt Capital Markets Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE International (France) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE International (Hong Kong) Limited	Hong Kong	Suite 1106-8, 11/F, Tai Yau Building, No.181 Johnston Road, Wanchai, Hong Kong	Ordinary	Indirect (group interest)	100	100
FTSE International (Italy) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE International (MEA) Ltd	United Arab Emirates	Unit 15501, Level 15, Gate Building, DIFC, PO Box 121208, Dubai, United Arab Emirates	Ordinary	Indirect (group interest)	100	100
FTSE International Brasil Representacoes LTDA	Brazil	Edificio Argentina, Praia de Botafogo 228, 16 andar, Sala1617, Rio de Janeiro, Brazil	Ordinary	Indirect (group interest)	100	100

Name of subsidiary undertaking	Country of incorporation	Registered office address	Identity of each class of share held in the subsidiary undertaking	Direct or indirect holding	Share ownership %	LSEG plc ultimate economic interest %
FTSE International Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
FTSE International Taiwan Limited	Taiwan	26F.-1, No. 100, Song Ren Road, Xinyi Dist., Taipei City	Ordinary	Indirect (group interest)	100	100
FTSE Italy S.p.A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	100	100
FTSE Mexico Sociedad de Responsabilidad Limitada de Capital Variable	Mexico	Privada Paseo de los Tamarindos 120, Torre 3, Dep. 1103, Col. Bosques de las Lomas, Mexico City, C.P. 05120, Mexico	Ordinary	Indirect (group interest)	100	100
Gatelab Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
Gatelab S.r.l.	Italy	Via dei Pentri, 161, 86170, Isernia, Italy	Ordinary	Indirect (group interest)	100	100
globeSettle s.a.r.l	Luxembourg	19 Rue De Bitbourg, L-1273, Luxembourg	Ordinary	Indirect (group interest)	100	100
International Commodities Clearing House Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
Intrinsic Research Systems Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary A	Indirect (group interest)	100	100
			Ordinary B	Indirect (group interest)	100	100
LCH Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
LCH Group Holdings Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary (Voting)		82.61	82.61
			Ordinary (Non-Voting)		100	–
LCH.Clearnet LLC	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Units	Indirect (group interest)	100	82.61
LCH.Clearnet Group Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
LCH Pensions Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
London Stock Exchange (C) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	£ Ordinary	Direct	100	100
			€ Ordinary	Direct	100	–
London Stock Exchange Connectivity Solutions LP	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Partnership	Indirect (group interest)	100	100
London Stock Exchange Group (Services) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
London Stock Exchange Group Holdings (Italy) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
London Stock Exchange Group Holdings (R) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
London Stock Exchange Group Holdings Italia S.p.A	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	100	100
London Stock Exchange Group Holdings Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
London Stock Exchange LEI Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
London Stock Exchange Plc	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
London Stock Exchange Reg Holdings Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
LSEG (F) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG F1 Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
LSEG F2 Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG HK Financing Limited	Hong Kong	Suite 1106-8, 11/F, Tai Yau Building, No.181 Johnston Road, Wanchai, Hong Kong	Ordinary	Indirect (group interest)	100	100
LSEG (M) Financing Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG Business Services Colombo (Private) Limited	Sri Lanka	Trace Expert City, Maradana, Colombo 10, Sri Lanka	Ordinary	Indirect (group interest)	100	100
LSEG Business Services Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100

Notes to the financial statements (continued)

Name of subsidiary undertaking	Country of incorporation	Registered office address	Identity of each class of share held in the subsidiary undertaking	Direct or indirect holding	Share ownership %	LSEG plc ultimate economic interest %
LSEG (ELT) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG Business Services RM S.R.L	Romania	6F Juliu Maniu Blvd, Building 6.1, 3rd – 4th floor, District 6, Bucharest, Romania	Ordinary	Indirect (group interest)	100	100
LSEG Employment Services Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG Information Services (US), Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
LSEG Ireland Limited	Ireland	10 Earlsfort Terrace, Dublin, D02 T380, Ireland	Ordinary	Indirect (group interest)	100	100
LSEG Ireland 2 Limited	Ireland	1 Stokes Place, St Stephen's Green, Dublin 2, D02 DE03, Ireland	Ordinary	Indirect (group interest)	100	100
LSEG Ireland 3 Limited	Ireland	1 Stokes Place, St Stephen's Green, Dublin 2, D02 DE03, Ireland	Ordinary	Indirect (group interest)	100	100
LSEG LuxCo 1 S.a.r.l	Luxembourg	19 Rue De Bitbourg, L-1273, Luxembourg	Ordinary	Indirect (group interest)	100	100
LSEG LuxCo 2 S.a.r.l	Luxembourg	19 Rue De Bitbourg, L-1273, Luxembourg	Ordinary	Indirect (group interest)	100	100
LSEG Malaysia Sdn. Bhd.	Malaysia	Level 19-1, Menara Milenium, Jalan Damanlela, Pusat Bandar Damansara, W.P. Kuala Lumpur, 50490, Malaysia	Ordinary	Indirect (group interest)	100	100
LSEG Pension Trustees Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG Technology Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
LSEG US Holdco, Inc	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Common	Direct	100	100
LSEGA Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Common	Direct	100	100
LSEGA Jersey Limited	Jersey	47 Esplanade, St Helier, JE1 0BD, Jersey	Ordinary	Direct	100	100
LSEGA Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
LSEGA2 Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
LSEGH (I) LLC	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
LSEGH (Luxembourg) Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Direct	100	100
LSEGH Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
LSEGH US PT, Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Common	Direct	100	100
Marché de Titres France (MTS France)	France	18 Rue du Quatre-Septembre, 75002, Paris, France	Ordinary	Indirect (group interest)	100	62.53
M-CCP Holdings, Inc	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
M-CCP Parent, Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
Mergent Japan K.K.	Japan	1-5-1, Otemachi First Square East Tower 11F, Otemachi, Chiyoda-ku, Tokyo, 1-5-1	Ordinary	Indirect (group interest)	100	100
Mergent, Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	100
Millennium Information Technologies (India) (Private) Limited	India	83 - C, Mittal Towers, Nariman Point, Mumbai - 400 021, India	Ordinary	Indirect (group interest)	100	100
Millennium IT (USA) Inc.	*United States*	*c/o United Agent Group Inc. 3411 Silverside Road* Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	*Common*	*Indirect* (group interest)	*100*	*100*
Millennium IT Services (Private) Limited	Sri Lanka	65/2, Sir Chittampalam A Gardiner Mawatha, Colombo 02, Sri Lanka	Ordinary	Indirect (group interest)	100	100
Millennium IT Software (Canada) Inc.	Canada	Suite 2400, 333 Bay Street, Toronto, Ontario, Canada	Common	Indirect (group interest)	100	100

Name of subsidiary undertaking	Country of incorporation	Registered office address	Identity of each class of share held in the subsidiary undertaking	Direct or indirect holding	Share ownership %	LSEG plc ultimate economic interest %
Millennium IT Software (Private) Limited	Sri Lanka	No.01 Millennium Drive, Malabe, Sri Lanka	Ordinary	Indirect (group interest)	100	100
Monte Titoli S.p.A.	Italy	Piazza degli Affari 6, 20123, Milano, Lombardia, Italy	Ordinary	Indirect (group interest)	98.88	98.87
MTS S.p.A.	Italy	Via Tomacelli, 146, 00186 Rome, Italy	Ordinary	Indirect (group interest)	62.53	62.53
MTS Markets International Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Ordinary	Indirect (group interest)	100	62.53
MTSNext Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
Repoclear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
SSC Global Business Services Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
Stock Exchange (Holdings) Limited (The)	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
SwapAgent Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82 61
Swapclear Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
The London Clearing House Limited	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82.61
London Produce Clearing House Limited (The)	England and Wales	Aldgate House, 33 Aldgate High Street, London, England, EC3N 1EA	Ordinary	Indirect (group interest)	100	82 61
The London Stock Exchange Retirement Plan Trustee Company Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
The Yield Book, Inc.	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Common	Indirect (group interest)	100	100
Turquoise Global Holdings Europe B.V.	Netherlands	Suite 108, Nieuwezijds Voorburgwal 162, Amsterdam, 1012 SJ, Netherlands	Ordinary	Indirect (group interest)	100	51.36
Turquoise Global Holdings Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary A	Indirect (group interest)	100	51.36
			Ordinary B	–	–	–
Turquoise Global Holdings US, Inc.	*United States*	*c/o United Agent Group Inc. 3411 Silverside Road* Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	*Ordinary*	*Indirect* (group interest)	*100*	*51.36*
Unavista Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary	Indirect (group interest)	100	100
UnaVista TRADEcho B.V.	Netherlands	Suite 108, Nieuwezijds Voorburgwal 162, Amsterdam, 1012 SJ, Netherlands	Ordinary	Indirect (group interest)	100	100
Yield Book Software BRE LLC	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Member Interest	Indirect (group interest)	100	100
Yield Book Tangible Property BRE LLC	United States	c/o United Agent Group Inc. 3411 Silverside Road Tatnall Building #104, Wilmington, New Castle County, DE, 19810, United States	Member Interest	Indirect (group interest)	100	100

The Group's associate undertakings were:

Associate name	Country of incorporation		Identity of each class of share held in the subsidiary undertaking	Direct or indirect holding	Share ownership % held by the Parent Company	Group ultimate economic interest %
AcadiaSoft, Inc.	United States	c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, New Castle, 19801 United States	Convertible Preferred	Indirect (group interest)	15.67	15.67
Curve Global Limited	England and Wales	10 Paternoster Square, London, England, EC4M 7LS	Ordinary A	Direct	43.99	44.05
			Ordinary B	Direct	46.01	–
			Ordinary C	–	–	–
MTS Associated Markets S.A.	Belgium	Rue des Comédiens, 16-22, 1000 Brussels, Belgium	Ordinary	Indirect (group interest)	23.3	14.57
The Hub Exchange Limited	England and Wales	843 Finchley Road, London, England, NW11 8NA	Ordinary	Indirect (group interest)	30.03	22.52

All associates have the same year end as The Group, with the exception of the Hub Exchange Limited which has a 31 January year end.

Glossary

AIM
The Group's market for smaller and growing companies established in London and in Italy as AIM Italia

Beyond Ratings
LSEG completed the acquisition of Beyond Ratings in 2019. Beyond Ratings is a provider of ESG data and analytics for fixed income investors

Borsa Italiana (BIt)
Borsa Italiana S.p.A., the Group's Italian exchange business

Bridge Facility
A committed, term loan facility comprising a tranche of US$9.325 billion and a tranche of €3.580 billion

CAGR
Compound annual growth rate

CCP
Central Counterparty – stands between two parties to a trade to eliminate counterparty risk by ensuring that settlement takes place

CC&G
Cassa di Compensazione e Garanzia S.p.A., the Group's Italian subsidiary which manages the Italian CCP for equity, derivative, commodity and fixed income trades

CDSClear
LCH's over-the-counter credit default swap (CDS) clearing service

Central Securities Depository (CSD)
An entity that enables securities to be processed, settled and held in custody

Central Securities Depositories Regulation (CSDR)
EU regulations framework to harmonise CSD operations

Company or LSEG or London Stock Exchange Group
London Stock Exchange Group plc and its subsidiaries

CONSOB
Commissione Nazionale per le Società e la Borsa, Italy's official body for regulating and supervising companies and trading infrastructure providers

CPI
Consumer Price Index which measures changes in the price of consumer goods and services purchased by households

CurveGlobal
An interest rate derivatives venture between LSEG and a number of major dealer banks together with Cboe

Dark Pool
Electronic trading networks developed by regulated venues such as Regulated Markets, MTFs and by OTC broker dealers to enable the matching of orders between buyers and sellers without pre-trade transparency (non-displayed) until the trade is complete

Depositary Receipts/Global Depositary Receipts (GDR)
Tradable certificates representing ownership of a number of underlying shares, mainly for companies in developing or emerging markets

Derivatives
Tradable financial instruments whose value is determined by the value of underlying instruments; this could be equity, an index, a commodity or any other tradable instrument

- **Exchange traded derivatives (ETD)** Listed derivatives traded on an electronic trading venue such as an exchange and cleared through a clearing house
- **Over the counter (OTC) Derivatives** are negotiated privately between two parties and may be cleared through a clearing house

EBITDA
Earnings before interest, tax, depreciation and amortisation

European Market Infrastructure Regulation (EMIR)
European legislation on regulation of clearing of derivatives, and the operation and governance of CCPs and trade repositories

European Benchmark Regulation (EU BMR)
European regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds. It applied from 1 January 2018

ELITE
An international programme and platform to help ambitious companies prepare and structure for further growth and investment, while providing these businesses access to an extensive community of advisers, investors and business leaders

ELITE Club Deal
An online private placement platform designed to streamline the capital raising process for companies

ESOP
Employee Share Option Plan

ETP
Exchange traded products including ETFs and ETCs

- **Exchange Traded Fund (ETF)** – low-cost and flexible investments that track indices and sectors

€STR
The Risk Free Rate for Euro markets, published from October 2019

EuroTLX
The Group's 70% subsidiary which owns and operates a European MTF for the trading of fixed income securities in retail-size and investment products distributed to retail clients

FCA
Financial Conduct Authority, the current regulator of conduct of providers of financial services in the UK and of UK trading venues such as Recognised Investment Exchanges (RIEs) and MTFs

ForexClear
LCH's over-the-counter foreign exchange clearing service

FTSE Group or FTSE Russell
FTSE International Limited and its subsidiaries, the Group subsidiary that is a leading global provider of index and analytics solutions

FTSE 100 Index
The index developed by FTSE of leading UK quoted companies

FTSE MIB Index
The index developed by FTSE of leading Italian quoted companies

Global Equity Segment (GES)
Segment of London Stock Exchange Main Market that allows trading in international companies on LSE during London trading hours

Green Economy Mark
Mark recognising equity issuers on London Stock Exchange with 50% or more green revenues

Group
The Company and its Group undertakings

Group undertakings
Group undertakings shall be construed in accordance with section 1161 of the Companies Act 2006 and, in relation to the Company

International Central Securities Depository (ICSD)
An entity that enables international securities to be processed, settled and held in custody

IDEM
The Group's Italian Derivatives Market, trading contracts based on equities and related indices

IOB
International Order Book – the Group's electronic trading service for international securities

International Organisation of Securities Commission (IOSCO)
IOSCO sets out recommendations 'Principles for Financial Benchmarks', with the objective to address conflicts of interest in the benchmark-setting process, enhance the reliability of benchmark determinations, and promote transparency and openness

IPO
Initial Public Offering – the process whereby companies join our markets and raise capital for the first time

LCH or LCH Group
LCH Group Limited and its subsidiaries, the Group's 82.6% owned global clearing and risk management business

LCH Spider
Portfolio margining tool for cleared OTC products and listed interest rate futures

Legal Entity Identifiers (LEI)
The Legal Entity Identifier (LEI) initiative is designed to create a global reference data system that uniquely identifies every legal entity or structure, in any jurisdiction, that is party to a financial transaction

LSE
London Stock Exchange plc

LSEG
London Stock Exchange Group plc

LSEG Business Services Limited (BSL)
Our shared services company providing a range of technology and corporate functions Group-wide

Main Market
The market for companies which have been admitted to trading on the London Stock Exchange's principal market; and in Italy, the market for companies listed on Borsa Italiana's principal MTA market

Mergent Inc.
LSEG completed the acquisition of Mergent Inc., a provider of business and financial data on public and private companies, in January 2017 and has been integrated within FTSE Russell

MiFID or Markets in Financial Instruments Directive
EU Directive introduced in November 2007 to harmonise cross-border trading of equities, providing greater choice of trading venues

MiFID II
The revised MiFID and the accompanying Markets in Financial Instruments Regulation – better known as MiFID II and MiFIR – came into effect across all EU member states from January 2018. MiFID II is intended to build on the achievements of MiFID I, with the aim of making financial markets more open, efficient, resilient and transparent

Millennium Exchange
MillenniumIT's multi-asset trading platform, deployed for the UK, Italian and Turquoise equities markets

MillenniumIT
Millennium Information Technologies (Pvt) Limited, the Group's subsidiary that is the developer of flexible, low-cost, high performance trading platforms and financial markets software serving both the Group's own businesses and third parties

Millennium Surveillance
MillenniumIT's financial markets surveillance system

Glossary (continued)

Monte Titoli
Monte Titoli S.p.A., the Group's Italian Central Securities Depository and settlement provider

MOT
Mercato Obbligazionario Telematico is the Group's Italian retail bond trading platform

MTS
MTS S.pA., the Group's 62.53% subsidiary which owns and operates an electronic trading platform for European and US fixed income securities

Multilateral Trading Facility (MTF)
Alternative electronic trading systems as categorised under MiFID

Non-Executive Director (NED)
A Non-Executive Director (NED) is a member of the Board, who is not part of the company's executive management team

ORB
The Group's UK Order Book for Retail Bonds

OTC
Over-the-counter trades in financial instruments executed outside a Regulated Market or MTF – see also Derivatives

Primary Market
The listing of securities for the first time via an IPO or introduction of existing securities

Regulated Market
A multilateral system which brings together multiple third party buying and selling in financial instruments in accordance with rules, authorised under provisions of MiFID

Repo
Repurchase Agreement – the process of borrowing money by combining the sale and subsequent repurchase of an asset, traded through MTS and cleared through CC&G or LCH

RNS
Regulatory News Service, the Group's Primary Information Provider, for dissemination of regulatory and non-regulatory news to the market

RPI
The Retail Price Index which measures inflation in the UK economy

Secondary Market
The public market on which securities once issued are traded

SEDOL
The Group's securities identification service

SETS
The electronic order book operated by the London Stock Exchange for the trading of the most liquid securities

Smart Beta (also known as Factor indices)
An alternative index-based methodology that seeks to enhance portfolio returns or reduce portfolio risk, or both. Smart beta indices have rules-based strategies designed to provide focused exposure to specific factors, market segments or investment strategies. These may include volatility indices, defensive and high dividend yield indices, or a combination of fundamentals

Sustainable Bond Market (SBM)
A dedicated segment of London Stock Exchange for social and sustainable bonds

SwapAgent
LCH's service designed to simplify the processing, margining and settlement of non-cleared derivatives

SwapClear
LCH's over-the-counter interest rate swap clearing service

TARGET2-Securities (T2S)
Initiative led by the European Central Bank to provide a platform for settlement of bonds and equities traded in the Eurozone

Temporary Recognition Regime (TRR)
Regime of Bank of England which allows EU domiciled CCPs to continue to offer clearing services and activities in the UK if the UK leaves the EU with no implementation period, as a third country CCP, for up to three years extendable by HM Treasury in increments of 12 months

The Yield Book
The Yield Book provides fixed income analytics that enables market makers and institutional investors to perform portfolio analysis and risk management. LSEG acquired The Yield Book in August 2017 and incorporated it within FTSE Russell

Turquoise
Turquoise Global Holdings Limited, the Group's 51.36% owned pan-European MTF equity trading subsidiary, a venture between the Group and 12 global investment bank clients

UnaVista
The Group's web-based matching, reconciliation and data integration engine that provides matching of post trade data in a simple, automated process and the Trade Repository approved by ESMA under EMIR

WGBI
FTSE Russell's World Government Bond Index which measures performance of fixed rate local currency investment grade sovereign bonds

Investor Relations

Shareholder services

Equiniti registrars Shareview service

Shareholders who hold London Stock Exchange Group shares in certificated form or within an Equiniti Investment Account or ISA can access Shareview. Shareview is a free service provided by our registrars, Equiniti. It may be accessed through the internet at: **www.shareview.co.uk**.

By creating a Shareview portfolio, shareholders will gain online access to information about their London Stock Exchange Group shares and other investments including:

- Direct access to information held for you on the share register including share movements
- A daily indicative valuation of all investments held in your portfolio
- A range of information and practical help for shareholders

To register at Shareview shareholders will need their shareholder reference (which can be found on your share certificate) and they will be asked to select their own personal identification number. A user ID will then be posted to them.

If shareholders have any problems in registering their portfolio for the Shareview service, contact Equiniti on 0371 384 2544. For calls from outside the UK, contact Equiniti on +44 (0)121 415 7047.

Group's share price service

To obtain share price information for London Stock Exchange Group plc, see our website at: **www.lseg.com**.

By clicking on the Investor Relations tab, you will find the Company's share price, historical closing prices and volumes and an interactive share price graph.

Substantial Shareholders

As at 28 February 2020 the Company had been notified of the following interests amounting to more than 3% in the issued share capital of the Company in accordance with DTR 5 of the FCA's Disclosure Guidance and Transparency Rules:

Qatar Investment Authority	10.3%
BlackRock, Inc	6.9%
The Capital Group Companies, Inc	6.8%
Lindsell Train Limited	5.0%

Financial calendar (provisional)

Preliminary Results (for year ending 31 December 2019)	28 February 2020
AGM	21 April 2020
Q1 Interim Management Statement (revenues only)	21 April 2020
Ex-dividend date for final dividend	30 April 2020
Final dividend record date	01 May 2020
Final dividend payment	27 May 2020
Half year end	30 June 2020
Interim Results	31 July 2020
Financial year end	31 December 2020
Preliminary Results	March 2021

The financial calendar is updated on a regular basis throughout the year.

Please refer to our website: **www.lseg.com/investor-relations** and click on the shareholder services section for up-to-date details.

The Group's AGM for the year ended 31 December 2019 will be held on 21 April 2020 at Hilton London Bankside Hotel, Bear Lane, London SE1 0UH, starting at 10:30am.

Investor Relations contacts

Investor Relations
London Stock Exchange Group plc
10 Paternoster Square
London
EC4M 7LS

For enquiries relating to shareholdings in London Stock Exchange Group plc:

Shareholder helpline: +44 (0)20 7797 3322. Email: ***irinfo-r@lseg.com***

Visit the Investor Relations section of our website for up-to-date information including the latest share price, announcements, financial reports and details of analysts and consensus forecasts: **www.lseg.com/investor-relations**.

Registered office
London Stock Exchange Group plc
10 Paternoster Square
London
EC4M 7LS

Registered company number
London Stock Exchange Group plc: 5369106

Registrar information
Equiniti
Aspect House
Spencer Road
Lancing
West Sussex
BN99 6DA

T +44 (0)371 384 2030 or +44 (0)121 415 7047
Lines open 8:30 to 17:30, Monday to Friday.
www.shareview.co.uk

Independent auditors
Ernst & Young LLP
25 Churchill Place
Canary Wharf
London
E14 5EY

T +44 (0)20 7951 2000

Principal legal adviser
Freshfields Bruckhaus Deringer LLP
65 Fleet Street
London
EC4Y 1HS

T +44 (0)20 7936 4000

Corporate brokers
Barclays
5 The North Colonnade
Canary Wharf
London
E14 4BB

T +44 (0)20 7623 2323
www.barclays.com

RBC Capital Markets
RBC Europe Limited
Riverbank House
2 Swan Lane
London
EC4R 3BF

T +44 (0)20 7653 4000
www.rbccm.com

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London
Stock Exchange Group

London Stock Exchange Group plc
10 Paternoster Square
London
EC4M 7LS
Telephone +44 (0)20 7797 1000
Registered in England and Wales No. 5369106
www.lseg.com