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.

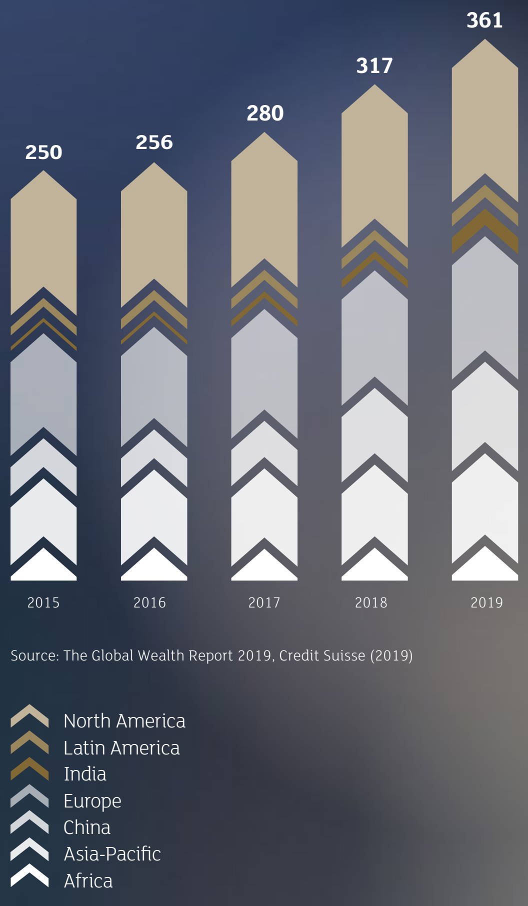
2. Growth in ESG and climate awareness

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



Source: The Global Wealth Report 2019, Credit Suisse (2019)

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.

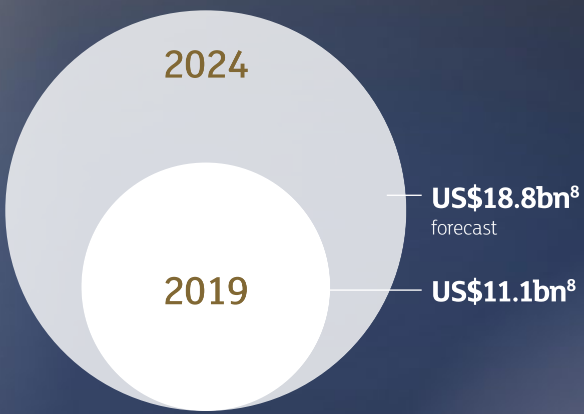
Evolving customer operating dynamics
Buy and sell-side customers continue to focus on operating model reforms and cost efficiencies in response to continued fee pressures, expanding client demands and regulatory-driven changes. Customers are increasingly looking across their operations to realise efficiencies 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

8. The Algorithmic Trading Market, Research And Markets, May 2019
9. Artificial Intelligence in Finance, The Alan Turing Institute, April 2019
10. How much artificial intelligence has changed the Forex trade, AIthority July 2019

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

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.

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.

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.

Implications for LSEG

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.

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.

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.