J.P. MORGAN SECURITIES PLC

(Registered Number: 02711006)

Annual report for the year ended 31 December 2019

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Chief Executive Officer report

The year 2019 was characterised by ongoing changes to our operating conditions. Shifting geopolitical issues, rule changes and technological advances have all created challenges and opportunities for our business and clients.

The underlying strength of J.P. Morgan Securities plc (the "Company" or "JPMS plc"), however, has enabled us to adapt, enhance operations to improve efficiency and evolve to answer more of our clients' needs.

Brexit was a major concern as we entered the year. Now with greater certainty surrounding the process, we are well placed to support clients as they negotiate the transition. However, 2020 has already brought fresh challenges and uncertainties. The COVID-19 pandemic has generated great market stress and continues to inflict a very human toll on our communities.

As CEO of the Company, I want to express our sincere commitment to supporting our clients' financial goals, and will ensure continuity of service in our changing environment.

Financial performance

The Company continues to perform strongly even as competition intensifies and geopolitical issues flare up.

JPMS plc's operating income decreased from the prior year. Operating income was lower compared to 2018 owing to greater global macroeconomic and geopolitical factors.

Despite these uncertainties, the company has continued to strengthen client relationships, demonstrating commitment and consistency at times of market stress. The diversity of our franchise, ability to attract and retain top talent and financial stability stand us in good stead to win more business and weather future challenges.

The power of technology

Key to our future is our ability to invest, chiefly in technology to transform our bank and unlock new efficiencies. Technology is the structural underpinning of our business and also a powerful tool, enabling us to answer more of our clients' needs and giving us new intelligent capabilities to respond more rapidly to market conditions.

This ability to adapt and evolve has been a hallmark of our business and forms the foundations of an effective, efficient risk and control environment and our culture of continuous improvement.

Transforming during times of change

The year 2020 and the coming decade are already bringing their own challenges.

As the Brexit transition process develops, the Firm will continue to employ its resources, expertise and key relationships to ensure the best possible outcome for clients, employees and the business. As we look beyond Brexit, JPMS plc will continue as a key UK entity of the Firm. Brexit, its impact and our approach to the transition are laid out in more detail in the following pages.

We are also monitoring closely the COVID-19 coronavirus outbreak, assessing its effect on market volatility, economic growth and the severe human and social cost on our communities. Consulting the relevant health and government authorities, we continue to implement protocols and processes in response to the spread of the virus.

Protecting our employees and standing by our clients during these challenging times remain our priority.

At the same time, we are committed to doing the right things day to day from an operational basis, staying focused on risk, costs and the client experience, while embracing technology to optimise the business for the near future and thinking creatively about the next generation of banking and how we can best serve clients in five to ten years' time. New and emerging technologies such as artificial intelligence and machine learning have the power to transform our businesses, creating value and fresh insights for us and our clients.

We face the future with solid underpinnings - brain power, capital and a commitment to doing the right thing for a clients whatever the macro environment.

They are qualities that fill me with confidence for the enduring success of our franchise.

Viswas Raghavan
Chief Executive Officer

23 April 2020

London

J.P. MORGAN SECURITIES PLC
Strategic report

The directors present the Strategic report of J.P. Morgan Securities plc (the "Company" or "JPMS plc") for the year ended 31 December 2019.

Overview

JPMS plc, a public limited company incorporated and domiciled in England and Wales, is an indirect subsidiary of JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national banking association in the United States of America ("U.S.") and a principal subsidiary of JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm"). JPMorgan Chase is a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and is one of the largest banking institutions in the U.S. with operations worldwide. JPMS plc had $658 billion in assets and $45 billion in total shareholder's equity as of 31 December 2019.

Review of business

The directors are satisfied with the performance of the Company, and despite operating in a highly competitive environment whilst facing geopolitical issues, the Company continued to focus efforts on investing in growth areas that will benefit the clients and franchise over time.

The company continues to maintain a strong balance sheet. Total assets and liabilities decreased overall due to decreases in cash placed with central banks along with decreases in securities sold under agreements to repurchase and trading liabilities due to redistribution of financing to support growing businesses and capital requirements. This was offset by an increase in trading assets and liabilities in markets set for growth. The Company continues to be well capitalised and met all external capital requirements.

Key performance indicators ("KPIs")

The directors monitor progress on the performance of the Company using various metrics. The primary KPIs are set out below:

Financial performance (in USD '000's except for capital ratios)	2019	2018
Income statement		
Total operating income	7,344,742	10,025,547
Profit on ordinary activities before taxation	2,856,854	4,362,431
Profit for the financial year (after tax)	2,041,370	3,369,587
Balance sheet		
Total assets	658,175,955	668,042,178
Return on assets	0.3%	0.5%
Capital ratios (unaudited)		
Common Equity Tier 1	43,641,102	43,583,506
Common Equity Tier 1 ratio ("CET 1")	17.4%	18.4%
Pillar 1 capital ratio	22.2%	23.4%
Regulatory minimum total required capital ratio*	8.0%	8.0%

* Represents minimum requirements of the European Union's Basel III Capital Requirements Directive and Regulation. The Company's total capital ratio as of 31 December 2019 and 2018 exceeded the minimum requirements, as well as the additional capital requirements in excess of the minimum as specified by the PRA.

Income statement

The income statement for the year ended 31 December 2019 is set out on page 62. Net operating income was $7,345 million for 2019 (2018: $10,026 million). The results for the Company show a pre-tax profit of $2,857 million for 2019 (2018: $4,362 million). Net operating income was down year on year, driven by reduced client activity in a number of lines of business.

Balance sheet

The balance sheet is set out on page 63. The Company has total assets and total liabilities of $658,176 million (2018: $668,042 million) and $613,267 million (2018: $623,138 million) respectively, as at 31 December 2019.

Capital ratios

The Company continues to maintain strong capital ratios. Refer to the Risk management section on pages 8 - 37 for further details.

Future outlook

The Company's outlook for the full 2020 year should be viewed against the backdrop of the global economy, financial markets activity, the geopolitical environment, the competitive environment, client activity levels and regulatory and legislative developments in the countries where the Company does business. Each of these inter-related factors will affect the performance of the Company and its lines of business ("LOB's").

Departure of the UK from the EU

The UK's departure from the EU, which is commonly referred to as "Brexit," occurred on January 31, 2020.

Following this departure, the UK has entered a transition period that is scheduled to expire on December 31, 2020. The purpose of the transition period is to enable the UK and the EU to negotiate the terms of their future relationship. The transition period can be extended, but both sides need to agree to extend it by July 1, 2020. It is not clear whether the terms of the future relationship can be agreed before the end of 2020, and so significant uncertainty remains about the relationship between the UK and the EU after the end of the transition period.

Firm's Response to Brexit

The Firm has a long-standing presence in the UK, which currently serves as the regional headquarters of the Firm's operations in over 30 countries across Europe, the Middle East, and Africa ("EMEA"). In the region, the Firm serves clients and customers across its business segments. The Firm has approximately 17,000 employees in the UK, of which approximately two-thirds are in London, with operational and technology support centers in locations such as Bournemouth, Glasgow and Edinburgh.

The Company is a principal subsidiary in the region and the Firm utilises its EU passport to serve clients and customers across its business segments. It is assumed that the Company is likely to lose its EU passporting rights at the end of the current transition period and will not be able to continue to conduct the regulated activities in the EEA. The Firm has therefore been making the necessary modifications to its legal entity structure and operations in the EU, the locations in which it operates and the staffing in those locations to ensure the continuity of service to its clients. In particular, the Firm is building its EU legal entities so they are able to face the EEA clients and counterparties for the EU passported regulated activity. The Company is facilitating the Firm's implementation efforts, including re-documentation of in-scope EEA clients, redirection of the membership activity with certain EU Central Counterparty Clearing Houses ("CCP"s) to the relevant EU legal entity, and planning for the transfer of necessary staff out of the UK to the EU locations.

Brexit Implementation Program

In light of the ongoing uncertainty, the Firm continues to execute the relevant elements of its Firmwide Brexit Implementation program with the objective of being able to continue delivering the Firm's capabilities to its EU clients. The program covers strategic implementation across all impacted businesses and functions and includes an ongoing assessment of implementation risks including political, legal and regulatory risks and plans for addressing and mitigating those risks under any scenario, including where the UK and the EU fail to reach an agreement on their future relationship by the end of 2020 and the transition period is not extended.

The Company is facilitating the Firm's implementation program, including transition of in-scope activities to the relevant EU legal entities. The purchase price consideration for the transition of the activities will be determined based on arm's length fair market value principles. Management has performed an assessment of the facts and circumstances of the planned transition and the assets and liabilities that would be subject of the transfer from the Company to the relevant EU legal entity and the fair market value compensation that the Company would receive for the transfers. In 2019, compensation for the initial transition of a small number of employees was received and the remainder of the compensation will be concluded, once the components of the transfer have been finalised.

The principal operational risks associated with Brexit continue to be the potential for disruption caused by insufficient preparations by individual market participants or in the overall market ecosystem, and risks related to potential disruptions of connectivity among market participants. There continues to be regulatory and legal uncertainty with respect to various matters including contract continuity, access by market participants to liquidity in certain products, such as products subject to potentially conflicting UK and EU regulatory requirements in relation to eligible trading venues, including certain cross-border derivative contracts and equities that are listed on both UK and EU exchanges, as well as ongoing access to central banks. It is uncertain as to whether any of these issues will be resolved in the negotiations, or whether any of the previous temporary solutions will be available at the end of the transition period to mitigate these risks.

The Firm is focused on the following key areas to ensure continuation of service to its EU clients: regulatory and legal entity readiness; client readiness; and business and operational readiness. Following are the significant updates.

Brexit Implementation Program (continued)

Regulatory and legal entity readiness

The Firm's legal entities in Germany, Luxembourg and Ireland are now prepared and licensed to provide services to the Firm's EU clients, including a branch network covering locations such as Paris, Madrid and Milan.

These legal entities are now live with new client activity that is expected to expand to the full planned scope by the end of the transition period.

As part of building up the Firm's EU legal entities, the Firm is assessing the most efficient capital allocation across the legal entities in the region. The expected transition of the activities out of the Company would free up capital resources in the Company above its regulatory capital requirements. In these circumstances and where possible, management is planning that the Company would consider distributing any available excess capital to its shareholders. This will enable the allocation of capital to the EU legal entities. These dividend proposals would be assessed by management and the directors in line with the JPMorgan EMEA Capital Management and Internal Capital Adequacy Assessment Process ("ICAAP") framework and the dividend strategy of the Company. The fundamental imperative of the dividend strategy remains that of preserving the Company's capital strength and long-term stability to enable it to build and invest in business activities through normal and stressed environments.

Client readiness

The agreements covering a significant proportion of the Firm's EU client activity have been re-documented to other EU legal entities to help facilitate continuation of service. The Firm continues to actively engage with clients that have not completed re-documentation to ensure preparedness both in terms of documentation and any operational changes that may be required. The Firm may be negatively impacted by any operational disruption stemming from delays of or lapses in the readiness of other market participants or market infrastructures.

During the transition period, EU clients of the Company are expected to gradually start facing the relevant EU legal entity. Depending on the product and the line of business, the market risk will continue to be managed within the Company and in these instances, the EU legal entities have a back to back trade with the Company. As part of the implementation of the Brexit plans, some market risk management will be transferred to the EU legal entities. Further, the extent to which the Company will need to novate historical client trades to the EU legal entities will depend on the final agreement between the UK and EU at the end of the transition period. Any novations of such trades would occur at the relevant fair market values.

Business and operational readiness

The Firm relocated certain employees during 2019 to related EU legal entities, where appropriate, to support the level of client activity that has been migrated. The Firm's longer term staffing plan will develop in accordance with the increasing level of activity in the EU entities and alongside the future legal and regulatory framework between the UK and EU. The Firm continues to closely monitor legislative developments, and its implementation plan allows for flexibility given the continued uncertainties.

The Firm and its EU legal entities' access to market infrastructures such as trading venues, CCPs and central settlement systems ("CSSs") have been adjusted to comply with the evolving regulatory framework. Some uncertainty remains with respect to the readiness of the overall market ecosystem and connectivity between participants. The Firm continues to monitor the regulatory landscape and is preparing to take mitigating action, as needed.

Other considerations

Management's fair value estimates reflect the market data at the balance sheet date and this incorporates any market sentiment relating to Brexit. The expected credit loss model includes the Company's assessment of the most likely outcome of Brexit on macroeconomic variables as of the balance sheet date.

Management have considered the impact of the risk factors associated with Brexit on the Company's ability to continue as a going concern. Whilst, as set out above, the risks associated with Brexit could have adverse impacts to the Company's business, operations, and earnings and the Company will see a reduction in its EU client footprint, the Company is expected to continue to be a principal subsidiary of the Firm in the region and continue to remain profitable and well-capitalised.

COVID-19

The Firm is monitoring the Coronavirus Disease 2019 ("COVID-19"), based on the guidance being provided by the relevant health and government authorities, and continues to implement protocols and processes in response to the spread of the virus. For more detail on Firmwide measures refer to operational risk (pages 31 - 33). As at the date on which this set of financial statements were authorised for issue, as the situation is ongoing and eventual outcome unknown, the Company cannot quantify the final impact as a result of COVID-19, refer to post balance sheet events (note 37).

Section 172(1) Companies Act 2006 Statement

This section is the section 172(1) statement required under section 414CZA(1) of the Companies Act 2006. The financial services regulatory requirements and expectations to which the Company is subject provide a framework for the Company to demonstrate how the board makes decisions for the long term success of the Company and its stakeholders, including having regard to how the board makes sure the Company complies with the requirements of section 172 of the Companies Act 2006. Please see the Company's statement of corporate governance arrangements, set out on pages (46 - 56), for more information on the ways in which the Company fulfils regulatory requirements and expectations in relation to corporate governance which, in turn, demonstrates how the Company's directors act in a way which is likely to promote the success of the Company, as set out in section 172(1). The statement of corporate governance responsibilities also contains the disclosures on employee engagement and business relationships required by Schedule 7.11(1)(b) and Schedule 7.11B(1) (respectively) of the Companies (Miscellaneous Reporting) Regulations 2018.

The structure and content of the information provided to the board has been enhanced so as to better reflect the impact of any deliberations or decision on the factors set out in section 172(1) of the Companies Act 2006, including by reviewing the template used for materials provided to the board in board meetings.

The board will continue to review and challenge how the Company can improve engagement with its stakeholders and further enhance its decision-making processes throughout 2020 and beyond.

Regulatory developments

In the EU, there is an extensive and complex program of final and proposed regulatory enhancement that reflects, in part, the EU's commitments to policies of the Group of Twenty Finance Ministers and Central Bank Governors ("G20") together with other plans specific to the EU. The EU operates a European Systemic Risk Board that monitors financial stability, together with European Supervisory Authorities ("ESA") that set detailed regulatory rules and encourage supervisory convergence across the EU's Member States. The EU is currently reviewing the ESA framework and the European Commission ("EC") has proposed legislation to change the roles and responsibilities of the ESAs. The EU has also created a Single Supervisory Mechanism for the euro-zone, under which the regulation of all banks in that zone will be under the auspices of the European Central Bank, together with a Single Resolution Mechanism and Single Resolution Board, having jurisdiction over bank resolution in the zone. At both the G20 and EU levels, various proposals are under consideration to address risks associated with global financial institutions.

The EU is also currently considering or implementing significant revisions to laws covering securities settlement; mutual funds and pensions; payments; anti-money laundering controls; data security and privacy; transparency and disclosure of securities financing transactions; benchmarks; resolution of banks, investment firms and market infrastructures; and capital and liquidity requirements for banks and investment firms.

Consistent with the G20 and EU policy frameworks, UK regulators have adopted a range of policy measures that have significantly changed the markets and prudential regulatory environment in the UK. After the Brexit transitional period ends, there is uncertainty as to future UK policy initiatives as it will depend on the future relationship between the EU and UK. Therefore the impact will be assessed post the transition period.

Trading and clearing legislation

The EU continues to implement an extensive and complex program of regulatory enhancement.

During 2019, the European Market Infrastructure Regulation ("EMIR") Regulatory Fitness and Performance programme ("REFIT") entered into force, which made targeted amendments to EMIR to make the rules more streamlined and proportionate. While most of the changes have already started to apply, some will take effect in 2020 and 2021. This will include a new requirement for clearing firms to provide clearing services on 'fair, reasonable, non-discriminatory and transparent commercial terms' (FRANDT) as well as changes to the EMIR reporting rules.

The review of The Markets in Financial Instruments Directive II ("MiFID II") has begun and will continue into 2020, with the European Commission expected to publish a legislative proposal for changes to MiFID II during 2020. MiFID II, which became effective in January 2018, requires the trading of shares and certain OTC derivatives to take place on trading venues, and also significantly enhanced requirements for pre- and post-trade transparency, transaction reporting and investor protection, and introduced position limits and a reporting regime for commodities. At this stage, it is unclear the extent of the changes that will be proposed under the MiFID II review.

Regulatory developments (continued)

Loss absorbency requirements under the EU Bank Recovery and Resolution Directive and CRRII

The Financial Stability Board ("FSB") Total Loss Absorbing Capacity ("TLAC") standard[1] issued in November 2015 specified minimum TLAC requirements for global systemically important banks, including at the level of their material sub-groups. Within the EU, the Bank Recovery and Resolution Directive ("BRRD") (and its transposition into local law in the UK) established a requirement for the Bank of England ("BoE") to set a minimum requirement for own funds and eligible liabilities ("MREL"). Both TLAC and MREL are intended to facilitate the resolution or recapitalization of a financial institution without causing financial instability and without recourse to public funds. The BoE updated Statement of Policy on its Approach to Setting MREL, published in June 2018, included requirements on the internal MREL resources to be held by UK material subsidiaries of overseas groups. In line with the FSB's TLAC standard, these rules came into effect, on a transitional basis, from 1 January 2019, with full compliance required by 1 January 2022. Amendments to the EU MREL framework have subsequently been agreed by member states through the finalisation of the CRD V / BRRD II package. These included the implementation of the FSB TLAC standard for EU Global Systemically Important Institutions (G-SIIs) and material subsidiaries of non-EU G-SIIs within CRRII. These rules came into effect, on a transitional basis, from 27th June 2019, with full compliance required by 1st January 2022 and apply at the level of the consolidated E.U parent entity.

Following BoE communication of firm-specific MREL targets in 2018, the Company replaced a portion of its existing senior funding notes with Tier 2 qualifying subordinated notes in order to ensure compliance with these requirements. The Company continues to meet applicable UK MREL requirements.

PRA rules on ensuring operational continuity in resolution, published in July 2016, came into effect from 1 January 2019. These rules require firms to ensure their operational arrangements support operational continuity of critical services to facilitate recovery actions, orderly resolution and post-resolution restructuring. The Company is compliant with these requirements.

London interbank offered rate ("LIBOR")

The Financial Stability Board ("FSB") and the Financial Stability Oversight Council ("FSOC") have observed that the secular decline in interbank short-term funding poses structural risks for unsecured benchmark interest rates such as Interbank Offered Rates ("IBORs"), and therefore regulators and market participants in various jurisdictions have been working to identify alternative reference rates that are compliant with the International Organization of Securities Commission's standards for transaction-based benchmarks. In the UK and EU, the Working Group on Sterling Risk-Free Reference Rates ("Sterling RFR WG") and the Working Group on Euro Risk-Free Rates ("Euro RFR WG") respectively, groups composed of market and official sector participants, have identified the Sterling Overnight Index Average Rate ("SONIA") and the Euro Short-Term Rate ("€STR") as the recommended alternative benchmark rates.

JPMorgan Chase established a Firmwide LIBOR Transition program in early 2018. The Firmwide CFO and the CEO of the CIB oversee the program as senior sponsors. When assessing risks associated with IBOR transition, the program considers three possible scenarios: disorderly transition, measured/regulated transition, and IBOR in continuity. The Firm continues to monitor the potential risks associated with each of these scenarios, along with any new risks that emerge as the program progresses.

Market participants are continuing to work closely with public sector representation as part of National Working Groups ("NWGs") towards the common goal of facilitating an orderly transition from IBORs. The Firm has been closely following announcements made by the Sterling RFR WG and is engaged in several of its sub-groups to understand the ongoing requirements for the implementation of SONIA. The Firm is monitoring the Working Group's measures to accelerate transition efforts and continues to work towards implementing confirmative changes arising from these announcements.

Developments have also been observed for international industry groups. The Firm is monitoring and providing input in the development of the IBOR Fallbacks Protocol of the International Swaps and Derivatives Association ("ISDA"), which is expected to be published in 2020. The International Accounting Standards Board ("IASB") has made amendments to the IFRS hedge accounting requirements providing relief to market participants on the accounting treatment of LIBOR-linked products in the period leading up to the expected cessation of LIBOR. In 2019, the IASB initiated a second phase to its LIBOR project. This second phase will amend modification accounting requirements in order to provide further relief to market participants. Guidance is expected to be published by the IASB in 2020. The Firm has been actively looking to implement these changes.

The Firm continues to monitor the advancements made by NWGs and industry groups, and facilitate the transition by clients from the current IBOR-referencing products to products referencing the new alternative reference rates. Impacts to the Company as a result of transition will be managed through the Firmwide LIBOR transition program.

[1] The FSB Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution and Total Loss-absorbing Capacity (TLAC) Term Sheet published on 9 November 2015

Regulatory developments (continued)

EU securitisation framework

The new EU securitisation framework finalised in December 2017 came into effect on 1 January 2019. It includes a 'Securitisation Regulation' which outlines general requirements for all securitisation activity in the EU as well as amendments to the Capital Requirements Regulation ("CRR") to implement revisions to the Basel securitisation capital framework. The revisions to the securitisation capital framework tackle shortcomings in the pre-crisis framework as observed during the financial crisis. The revisions seek to reduce mechanistic reliance on external ratings, increase risk weights for highly-rated securitisation exposures, reduce risk weights for low-rated senior securitisation exposures, reduce cliff effects, and enhance the risk sensitivity of the framework. The UK has adopted the EU securitisation framework into UK law.

Capital Requirements Directive V ("CRD V")/Capital Requirements Regulation 2 ("CRR 2")

The CRD V/CRR 2 legislation for revised capital and liquidity legislation for banks and investment firms will implement in the EU many of the finalised Basel III capital and liquidity standards, including changes in relation to the leverage ratio, market risk capital, and a stable funding ratio.

The legislation was published in the Official Journal of the EU on 7 June 2019 and many of the requirements will only take effect from 28 June 2021. The UK Government has published Statutory Instruments to apply many of the changes in the CRD V/CRR II to UK law post-Brexit. The changes to the capital framework will require significant preparatory work both in terms of interpretation and implementation of the new rules, the proposals of which are discussed below.

- The legislation proposes an intermediate parent undertaking ("IPU") requirement for foreign banks, which will require non-EU banks operating in Europe (with total EU assets > EUR 40bn to establish a single EU-located IPU or dual IPU structure (to accommodate home country requirements).The UK Government has not indicated whether this requirement will be implemented in the UK.

- The Fundamental Review of the Trading Book ("FRTB") overhauls the market risk capital requirements and aims to develop a new trading book framework. The final legislation has implemented FRTB as a reporting-only requirement, with further technical standards and delegated legislation to implement the final Basel changes.

- Standardised approach to measuring counterparty credit risk exposures ("SA-CCR") includes provisions differentiating between margined and un-margined transactions and improving the capital framework's risk sensitivity. SA-CCR also provides clearer recognition of netting benefits and the degree of volatility in counterparty exposures.

- The leverage ratio was introduced in Basel 3 (and transposed into CRR), as a non-risk based measure of the level of capital held by a firm. It is calculated by assessing Tier 1 capital to Total Exposures. The amendments now mandate a binding ratio, set at 3%, with discretion afforded to national authorities to increase this requirement if they deem necessary. It is not expected that the European implementation of the leverage ratio requirements will be a binding constraint on the Company.

- The Basel Committee recently finalised certain changes to the Basel III framework which includes revisions to the standardised approach to credit risk and operational risk calculation methods. They will affect the Company only once implemented in the UK. Note that no firm plans for implementation of these changes have been set out by the UK legislative bodies.

Risk management

Risk is an inherent part of the Company's business activities. The Company's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients and customers and protects the safety and soundness of the Company.

For details on JPMorgan Chase and the Company's risk governance framework, please refer to the specific section in the Statement of Corporate Governance Arrangements.

All disclosures in the Risk management section (pages 8 - 37) are unaudited unless otherwise stated.

The following sections outline the key risks that are inherent in the Company's business activities.

A detailed description of the policies and processes adopted by the Firm may be found within the JPMorgan Chase & Co. 2019 Annual Report on Form 10-K. The report is available at https://jpmorganchaseco.gcs-web.com/financial-information/sec-filings

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Strategic report (continued)

Risk management (continued)

Capital risk (audited)

Capital risk is the risk the Company has an insufficient level or composition of capital to support the Company's business activities and associated risks during both normal economic environments and under stressed conditions.

A strong capital position is essential to the Company's business strategy and competitive position. The Firm and Company's capital management strategy focuses on maintaining long-term stability to enable the Firm to build and invest in market-leading businesses, even in a highly stressed environment. Prior to making any decisions on future business activities, senior management considers the implications on the Company's capital.

Key capital risks include the risk of not meeting capital requirements including the impact of adverse changes in FX rates impacting capital ratios.

Accordingly, its capital management framework is designed to ensure that the Company is adequately capitalised at all times primarily in relation to:

- Minimum risk-based regulatory capital requirements (Pillar 1 capital under CRD IV[a] plus Pillar 2A set by the PRA and relevant CRD IV buffers);
- Assumed minimum leverage requirements[b] (calculated per the final rules in the Capital Requirements Regulation ("CRR") post the delegated act (October 2014));
- The risks faced by the entity, through regular comparisons of regulatory and internal capital requirements;
- Changes in FX rates that may impact the capital ratios of the Company due to mismatches between the currency in which Risk Weighted Assets ("RWAs") are denominated and the equity is being held (U.S. dollar); and
- Senior management's risk appetite expressed, for example, through the application of an internal capital buffer and preferred minimum capital ratios above those prescribed in regulation.

The EMEA Capital Committee, which has senior business and control function representation, receives monthly updates of the Company's capital positions and projections and has oversight on decisions related to capital usage and capital strategy. The framework used to manage capital within the Company is based around a regular cycle of point-in-time capital calculations and reporting, supplemented by forward-looking projections and stress-testing, with corrective action taken as and when required to maintain an appropriate level of capitalisation. Each part of the process is subject to rigorous control, including capital adequacy reporting with weekly and quarterly frequency to ensure the Company maintains appropriate oversight in line with the Capital framework. Escalation of issues is driven by a business as usual ("BAU") framework of specific triggers, set in terms of capital and leverage ratios, movements in those ratios and other measures.

In addition to the BAU capital monitoring framework, through the quarterly Internal Capital Adequacy Assessment Process ("ICAAP"), the Company ensures that it is adequately capitalised in relation to its risk profile and appetite, not only as at the ICAAP date, but through the economic cycle and under a range of severe but plausible stress scenarios. The quarterly ICAAP results are reviewed by the EMEA Capital Committee and annually, the ICAAP is reviewed and approved by the Board of Directors. In addition, the annual 'reverse stress testing' exercise is used to identify potential, extreme scenarios which might threaten the viability of the Company's business model, so that any required mitigation can be put in place.

FX Risk to Capital Ratio

Changes in FX rates may impact the capital ratios of the Company due to mismatches between the currency in which Risk Weighted Assets ("RWAs") are denominated and the functional currency (U.S. dollar). The Non-U.S. dollar FX risk to capital ratio is managed through the capital stress testing program which tests the Company and Firm's financial resilience in a range of severe economic and market conditions.

[a] CRD IV implemented Basel III in the EU, and came into force on 1 January 2014.
[b] Disclosure requirement applicable from 1 January 2015.

Risk management (continued)

Capital risk (audited) (continued)

The composition of the Company's capital is as follows. All tiers of capital are shown net of applicable deductions.

31 December	2019	2018
	$'000	$'000
Common Equity Tier 1 (Equity share capital and reserves)	43,641,102	43,583,506
Tier 2 (Subordinated loan) (note 26)	12,000,000	12,000,000
Total capital resources	**55,641,102**	**55,583,506**
Pillar 1 capital requirement (unaudited)	19,972,421	18,984,019
Excess of total capital resources over Pillar 1 capital requirements (unaudited)	35,668,681	36,599,486
Common Equity Tier 1 ratio ("CET 1") (unaudited)	17.4%	18.4%
Pillar 1 capital ratio (unaudited)	22.2%	23.4%

As of 31 December 2019 and 2018, the Company was adequately capitalised and met all external capital requirements. Capital resources utilised to calculate capital ratios are inclusive of audited current year profits. Additionally, the operational risk requirement included within the Pillar 1 Capital Requirement has been recalculated to incorporate current year net income.

Company information is included as part of the Pillar 3 disclosures and is made available on the Firm's website (https://jpmorganchaseco.gcs-web.com/financial-information/basel-pillar-3-us-lcr-disclosures) in accordance with Part Eight of the European Capital Requirements Regulation. These are published on an annual basis or more frequently where the Firm has assessed a further need to do so under the guidelines (EBA GL2014/14) set out by the European Banking Authority. These disclosures are not subject to external audit.

Amendments to the EU Minimum Requirement for own funds and Eligible Liabilities ("MREL"). MREL framework are being agreed through the finalisation of the CRD V proposal. The potential impacts of these amendments on the MREL requirements applicable to the Company will be considered once the final package has been agreed.

Credit risk (audited)

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. Credit risk management is an independent risk management function that monitors, measures and manages credit risk throughout the Firm and defines credit risk policies and procedures. The credit risk function reports to the Firm's Chief Risk Officer ("CRO").

The Firm's credit risk management governance includes the following activities:

- Establishing a credit risk policy framework
- Monitoring, measuring and managing credit risk across all portfolio segments, including transaction and exposure approval
- Setting industry and geographic concentration limits, as appropriate, and establishing underwriting guidelines
- Assigning and managing credit authorities in connection with the approval of credit exposure
- Managing criticised exposures and delinquent loans
- Estimating credit losses and ensuring appropriate credit risk-based capital management

The Company is exposed to credit risk through its underwriting, lending, market-making, capital markets and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as clearing activities), securities financing activities, investment securities portfolio, and cash internally swept to other group entities. Whilst the Firm has established a comprehensive Firmwide risk policy framework, this is supplemented (as required), by legal entity-specific risk policies. As such, the Company's Credit Risk Management policy supplements the Firmwide risk policy framework and is approved by the Company's Board of directors and EMEA Risk Committee.

Risk identification and measurement

The Credit Risk Management function monitors, measures, manages and limits credit risk across the Firm's businesses. To measure credit risk, the Firm employs several methodologies for estimating the likelihood of obligor or counterparty default. Methodologies for measuring credit risk vary depending on several factors, including type of asset, risk measurement parameters, and risk management and collection processes. Credit risk measurement is based on the probability of default of an obligor or counterparty, the loss severity given a default event and the exposure at default.

Risk management (continued)

Credit risk (audited) (continued)

Stress testing

Stress testing is important in measuring and managing credit risk in the Company's credit portfolio. The process assesses the potential impact of alternative economic and business scenarios on estimated credit losses for the Firm. Economic scenarios and the underlying parameters are defined centrally, articulated in terms of macroeconomic factors and applied across the businesses. The stress test results may indicate credit migration, changes in delinquency trends and potential losses in the credit portfolio. In addition to the periodic stress testing processes, management also considers additional stresses outside these scenarios, including industry and country specific stress scenarios, as necessary. The Firm uses stress testing to inform decisions on setting risk appetite both at a Firm, Company and LOB level, as well as to assess the impact of stress on individual counterparties.

Risk monitoring and management

The Company is subject to the policies and practices developed by the Firm. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio review parameters and guidelines for management of distressed exposures. In addition, certain models, assumptions and inputs used in evaluating and monitoring credit risk are independently validated by groups that are separate from the LOB.

Credit risk is monitored regularly at an aggregate portfolio, industry, and individual client and counterparty level with established concentration limits that are reviewed and revised as deemed appropriate by management, typically on an annual basis. Industry and counterparty limits, as measured in terms of exposure and economic risk appetite, are subject to stress-based loss constraints. In addition, wrong-way risk (the risk that exposure to a counterparty is positively correlated with the impact of a default by the same counterparty, which could cause exposure to increase at the same time as the counterparties capacity to meet its obligations is decreasing) is actively monitored as this risk could result in greater exposure at default compared with a transaction with another counterparty that does not have this risk.

Management of the Firm's credit risk exposure is accomplished through a number of means, including:

- Loan underwriting and credit approval process
- Loan syndications and participations
- Loan sales and securitisations
- Credit derivatives
- Master netting agreements
- Collateral and other risk-reduction techniques

Credit Portfolio Group ("CPG")

CPG in the Markets division of the CIB is responsible for the strategic risk management of certain risks of the Firm, primarily on behalf of CIB, including:

- Retained credit risk from traditional credit products ("TCP") such as loans and commitments (originated by Banking)
- Counterparty credit risk ("CVA") and certain funding risks ("FVA") associated with client derivative trades (originated by CIB Markets businesses)
- Discounting risk from client-specific Credit Support Annex ("CSA") terms in collateralised derivative transactions

CPG is also responsible for centralised governance and oversight for collateral on behalf of the CIB derivatives franchise; and optimising the sourcing, posting and pricing of variation and initial margin in partnership with the client facing businesses.

Risk reporting

To enable monitoring of credit risk and effective decision making by the Company, aggregate credit exposure, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry; clients, counterparties and customers; product and geographic concentrations are prepared, and the appropriateness of the allowance for expected credit losses is reviewed by senior management at least on a quarterly basis. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with senior risk management, EMEA Risk Committee ("ERC"), Company Risk Committee and the Board of directors as appropriate.

Risk management (continued)

Credit risk (audited) (continued)

Risk measurement (continued)

Expected credit loss measurement

Approach to measuring expected credit losses

The Company estimates credit impairment through an allowance for expected credit losses ("ECLs"). ECLs are recognised for financial assets that are measured at amortised cost or at fair value through other comprehensive income ("FVOCI") and for specified lending-related commitments such as loan commitments and financial guarantee contracts. The measurement of ECLs must reflect:

- An unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes;
- The time value of money; and
- Reasonable and supportable information about past events, current economic conditions, and forecasts of future economic conditions.

The measurement of ECL also reflects how the Company manages the financial instruments for credit risk purposes such as Traditional Credit Products ("TCP"), and Non-Traditional Credit Products ("Non-TCP"). TCP are wholesale loans and lending-related commitments from extensions of credit to borrowers; whereas Non-TCP are all other debt financial assets measured at amortised cost.

The following table sets out the gross carrying amount (before ECL) of the Company's financial assets that are measured at amortised cost or FVOCI by the respective TCP and Non-TCP categories.

At 31 December 2019					
Gross carrying amount	**TCP**			**Non-TCP**	
	$'000	**$'000**	**$'000**	**$'000**	**$'000**
Assets	**Amortised Cost**	**FVOCI**	**Total**	**Amortised Cost**	**Total**
Cash and balances at central banks	—	—	—	2,485,491	2,485,491
Loans and advances to banks	—	—	—	4,415,118	4,415,118
Loans and advances to customers	579,883	839,031	1,418,914	—	1,418,914
Securities purchased under agreements to resell	—	—	—	37,173,888	37,173,888
Debtors	—	—	—	88,090,591	88,090,591
Other assets					
Accrued income	—	—	—	925,356	925,356
Total financial assets measured at Amortised cost and FVOCI	**579,883**	**839,031**	**1,418,914**	**133,090,444**	**134,509,358**

At 31 December 2018					
Gross carrying amount	**TCP**			**Non-TCP**	
	$'000	**$'000**	**$'000**	**$'000**	**$'000**
Assets	**Amortised Cost**	**FVOCI**	**Total**	**Amortised Cost**	**Total**
Cash and balances at central banks	—	—	—	29,880,787	29,880,787
Loans and advances to banks	—	—	—	9,690,343	9,690,343
Loans and advances to customers	832,751	1,343,178	2,175,929	—	2,175,929
Securities purchased under agreements to resell	—	—	—	19,132,226	19,132,226
Debtors	—	—	—	82,800,597	82,800,597
Other assets					
Accrued income	—	—	—	716,617	716,617
Other	—	—	—	98,459	98,459
Total financial assets measured at Amortised cost and FVOCI	**832,751**	**1,343,178**	**2,175,929**	**142,319,029**	**144,494,958**

Risk management (continued)

Credit risk (audited) (continued)

Risk measurement (continued)

Expected credit loss measurement (continued)

Approach to measuring expected credit losses (continued)

ECL on off-balance sheet lending-related commitments, which are categorised as TCP, are reported in provisions for liabilities and are not included in the table above. These lending-related commitments are disclosed in note 30.

The Company uses statistical models to estimate ECLs for TCP on a collective basis; however ECL for credit-impaired instruments is estimated on an individual borrower basis. When determining how exposures should be grouped for collective assessment, the Company considers many factors including, but not limited to, internal credit risk ratings, tenor, borrower geography and industry. The Company's internal risk ratings generally correspond to the ratings as defined by Standard & Poor's ("S&P") and Moody's Investors Service. See further detail in the Maturity and ratings section . For Non-TCPs, the Company utilises a combination of an established provision matrix, as well as quantitative and qualitative considerations to estimate ECLs. See further detail in the ECL measurement for Non-TCP portfolios section.

Impact of staging on measuring expected credit losses

ECLs are measured using a three stage model based on changes in credit quality of the financial instrument since it was initially recognised ("initial recognition"):

- Stage 1 - performing financial instruments that have not had a significant increase in credit risk since initial recognition;
- Stage 2 - performing financial instruments that have experienced a significant increase in credit risk; and
- Stage 3 - non-performing financial instruments that have been determined to be credit-impaired.

Default and credit-impairment (Stage 3)

Financial instruments are included in Stage 3 when there is objective evidence of impairment at the reporting date. For Stage 3 instruments, ECL is calculated considering the probability of default over the remaining life of each instrument ("Lifetime ECL") on an individual asset basis and interest revenue is calculated on the net carrying amount (that is, net of the allowance for credit losses). All financial assets, regardless of their category as TCP, Non-TCP or debt security, are considered to be credit-impaired and are included in Stage 3 when one or more of the following events that have a detrimental impact on the estimated future cash flows of that financial asset has occurred:

- Significant financial difficulty of the issuer or the borrower;
- A default or past due event;
- The Company has granted a concession to the borrower for economic or contractual reasons relating to the borrower's financial difficulty;
- It has become probable the borrower will enter bankruptcy or other financial reorganisation;
- An active market for that financial asset no longer exists because of the borrower's financial difficulties; or
- A financial asset is purchased or originated at a deep discount that reflects a credit loss has been incurred.

The criteria above are consistent with how the Company defines 'default' for internal credit risk management purposes.

A financial asset is considered to no longer be in default (i.e. the default has been cured) when the borrower has made payments for a minimum of six months and there is other objective evidence of credit improvement.

Significant increase in credit risk (Stage 2)

Financial instruments that have experienced a significant increase in credit risk ("SICR") since initial recognition for which there is no objective evidence of impairment are included in Stage 2. For Stage 2 instruments, ECL is calculated considering the probability of default over the remaining life of the instrument on a collective basis and interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for the credit loss allowance).

The Company assesses for evidence of a SICR by considering whether there has been a change in the risk of a default occurring since the financial instrument was initially recognised.

For TCP, the Company considers a financial instrument to have experienced a SICR when any of the following quantitative or qualitative criteria have been met:

Risk management (continued)

Credit risk (audited) (continued)

Risk measurement (continued)

Significant increase in credit risk (Stage 2) (continued)

Quantitative criteria

The Company determines whether the probability of a default ("PD") occurring has changed between a financial instruments initial recognition and the reporting date. If the change in PD exceeds certain relative and absolute thresholds, the instrument has experienced a SICR. The assessment of the PD takes into account reasonable and supportable information, including information about past events, current and future economic conditions.

Qualitative criteria

The Company monitors borrowers that may become impaired by including them on its watch list. Obligors that are on the watch list are considered to have experienced a SICR. The Company also monitors changes in internal credit risk ratings (relative to the credit rating on initial recognition) and delinquency triggers to determine if a borrower has experienced a SICR.

The Company's TCP portfolio is mostly comprised of large, international, wholesale borrowers. For these borrowers, short-term delinquencies alone are not considered to be a meaningful credit quality indicator as the Company's experience has shown that other internal credit quality indicators generally identifies increases in credit risk well before delinquency. As such, the Company has determined that using the quantitative and qualitative criteria described above are most appropriate for capturing SICR for TCP.

Financial instruments that are in Stage 2 are moved to Stage 1 as described below in the period that the quantitative and qualitative criteria for a SICR no longer exist.

The approach for determining whether there has been a SICR for Non-TCP portfolios depends on the type of instrument. The Company presumes non-TCP financial assets that are 30 days past due have experienced a SICR and are included in Stage 2 except for certain fee receivables (i.e. fee receivables with institutional clients which follow a different billing and collection cycle) that are classified in Stage 2 at 90 days past due. Inter-company loans and receivables to material legal entities covered by the Firm's resolution and recovery plans are considered to be investment grade and therefore these are included in Stage 1 with no SICR . Finally, the remainder of the Company's Non-TCP are mostly short-term and generally no SICR has arisen prior to the maturity of that instrument and therefore the ECL impacted was anticipated to be immaterial.

Unimpaired and without significant increase in credit risk (Stage 1)

Financial instruments that have not had a SICR since initial recognition are included in Stage 1. For Stage 1 instruments, ECL is calculated by considering the probability of default within 12 months after the reporting date on a collective basis and interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for the credit loss allowance).

Sensitivity analysis of weighting

The Company's allowance for credit losses is sensitive to numerous factors, which may differ depending on the portfolio. Changes in economic conditions or in the Company's assumptions and judgements could affect its estimate of expected credit losses in the portfolio at the balance sheet date.

The Company considers a variety of factors and inputs in estimating the allowance for credit losses. It is difficult to estimate how alternative judgements in specific factors might affect the overall allowance for credit losses due to the idiosyncratic nature of the factors and inputs involved.

To illustrate the potential magnitude of an alternative judgement, the Company estimates that adjusting the downside scenario weighting to 100% as of December 31, 2019 could imply an increase to modelled ECLs of approximately $6.75 million.

The purpose of this sensitivity analysis is to provide an indication of the isolated impact of a hypothetical alternative judgement on modelled ECLs and is not intended to imply management's expectation of future deterioration of the economy nor any specific risk factors.

Sensitivity analysis of ECL due to staging

The impact of staging on the Company's ECL recognised on balance sheet as at 31 December 2019, by comparing the allowance if all performing financial assets were in Stage 1 or if all such assets were in Stage 2 to the actual ECL recorded on these assets was assessed as immaterial.

Risk management (continued)

Credit risk (audited) (continued)

ECL measurement for TCP Portfolios

Key Inputs

In broad terms, ECLs for the Company's TCP portfolios are generally calculated based on the following key inputs:

Probability of Default ("PD"): The PD model estimates the probability of downgrade and default each quarter. The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively. The model considers input variables that are region-, industry- and borrower segment-specific and considers both scenario- and borrower-specific information. PDs are determined at a facility-level based on risk ratings and other characteristics.

Exposure at Default ("EAD"): The EAD model predicts gross exposure upon a borrower's default as a percentage of the total commitment at the reporting date under a given macroeconomic environment. The model estimates the probability of a change in the utilisation, and direction and magnitude of the change. Input variables include exposure and utilisation at the reporting date, facility purpose, industry and macro-economic variables ("MEVs").

Loss Given Default ("LGD"): The LGD model estimates expected losses under given macroeconomic environments on the EAD given the event of default and, taking into account, among other attributes, the mitigating effect of collateral and the time value of money.

The 12-month ECL is calculated by multiplying the 12-month PD, EAD and LGD. Lifetime ECL is calculated using the lifetime PD instead.

Forward-looking information

ECL estimates are derived from the Company's historical experience and future forecasted economic conditions. To incorporate forward-looking information into the ECL calculation, the Company develops three forecasted economic scenarios (base, upside and downside cases). Each of these scenarios contain a set of MEVs that reflect forward-looking economic and financial conditions. MEVs include, but are not limited to FX rates, inflation and GDP per country or country block (group of countries that have similar economic circumstances). MEVs for each scenario are projected over a reasonable and supportable forecast period of two years. After the forecast period, the losses revert to historical averages over a one-year transition period.

On a quarterly basis, the three economic scenarios are updated and probability weighted. The Company uses judgement to develop the scenarios and assign probability weightings. The most likely economic scenario in management's view is the base case which would generally be expected to be weighted more heavily than the other two scenarios.

The PD, LGD and EAD models are designed to forecast the credit quality and performance of a TCP portfolio based on industry, geography, rating and size of obligors, among other attributes of the portfolio. PD, LGD and EAD models are calibrated based on historical MEVs and use forecasted macroeconomic scenarios for projecting PD, LGD and EAD values.

ECL calculation

The Company uses the forward-looking PD, LGD, and EAD values for each of the scenarios to produce the scenario credit losses ("SCLs"). The modelled ECL estimate is a probability-weighted calculation of the three SCLs discounted using the original effective interest rate or an approximation thereof.

The modelled ECL results are reviewed by management and adjustments ("management overlays") are considered to ensure final results reflect the Company's best estimate of ECLs on its exposures. Management overlays are only applied if necessary to account for significant idiosyncratic risks which are not yet reflected in underlying risk ratings, LGD, exposure profile or scenario weights used and which are expected to have a high probability of occurrence. No management overlays were applied in 2019 in determining the ECL of the Company.

The final ECL estimate and assumptions require significant management judgement and certain assumptions are subjective. The Company has a robust review, challenge and approval process of the ECL estimates as part of credit risk governance forums.

There have not been any significant changes in estimation techniques or assumptions made during the reporting period.

Stage 3 portfolio estimation techniques

The Company also uses three scenarios to estimate ECL for Stage 3 loans. However, these scenarios focus on the microeconomic conditions applicable to a specific borrower as those considered the most relevant in predicting losses for that borrower are applied. The borrower may be experiencing a variety of specific difficulties, and no one macroeconomic theme can be applied to the total impaired loan portfolio. For stage 3 loans a discounted cash flow model is used to determine ECL.

Risk management (continued)

Credit risk (audited) (continued)

Quantitative and qualitative information about the change in ECL and how significant changes in the gross carrying amount drive changes in ECL

ECL and gross carrying amount reconciliation

The following tables provide an explanation of the change in the loss allowance during the year ended 31 December 2019 and 31 December 2018 respectively by respective product classes. The tables also set out how significant changes in the gross carrying amount of financial instruments contributed to the changes in the loss allowance:

1. Traditional credit products

The ECL recognised in the year is impacted by the judgements made by management as described below:

- Determining criteria for significant increase in credit risk;
- Choosing appropriate models and assumptions for the measurement of ECL;
- Establishing the number and relative weightings of forward-looking scenarios for each type of product/market and the associated ECL; and
- Establishing groups of similar financial assets for the purposes of measuring ECL.

Wholesale loans

Loans and advances to customers at amortised cost

	ECL				Gross carrying amount			
$'000	**Stage 1 12-Month ECL**	**Stage 2 Lifetime ECL**	**Stage 3 Lifetime ECL**	**Total**	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
At 1 January 2019	**393**	**3,601**	**—**	**3,994**	**616,882**	**215,869**	**—**	**832,751**
New loans originated or purchased[1]	90	50	—	140	200,762	10,935	—	211,697
Loans derecognised or repaid	(44)	(3,602)	—	(3,646)	(173,740)	(215,868)	—	(389,608)
Existing loans (including credit quality changes)	(199)	—	—	(199)	(75,022)	65	—	(74,957)
Changes in macroeconomic variables ("MEV")	—	—	—	—	—	—	—	—
Total changes	**(153)**	**(3,552)**	**—**	**(3,705)**	**(48,000)**	**(204,868)**	**—**	**(252,868)**
At 31 December 2019	**240**	**49**	**—**	**289**	**568,882**	**11,001**	**—**	**579,883**

	ECL				Gross carrying amount			
$'000	**Stage 1 12-Month ECL**	**Stage 2 Lifetime ECL**	**Stage 3 Lifetime ECL**	**Total**	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
At 1 January 2018	**409**	**175**	**—**	**584**	**1,034,534**	**61,825**	**—**	**1,096,359**
New loans originated or purchased1	195	3,549	—	3,744	268,230	180,425	—	448,655
Loans derecognised or repaid	(285)	(99)	—	(384)	(558,864)	(19,576)	—	(578,440)
Existing loans (including credit quality changes)	(2)	(32)	—	(34)	(127,018)	(6,805)	—	(133,823)
Changes in macroeconomic variables ("MEV")	76	8	—	84	—	—	—	—
Total changes	**(16)**	**3,426**	**—**	**3,410**	**(417,652)**	**154,044**	**—**	**(263,608)**
At 31 December 2018	**393**	**3,601**	**—**	**3,994**	**616,882**	**215,869**	**—**	**832,751**

[1] New loans originated or purchased reflected as Stage 2 were acquired during the year and subsequently experienced a SICR or are committed facilities where SICR is measured from the commitment date.

J.P. MORGAN SECURITIES PLC
Strategic report (continued)

Risk management (continued)

Credit risk (audited) (continued)

Traditional credit products (continued)

Wholesale loans (continued)

Loans and advances to customers at FVOCI

	ECL				Gross carrying amount				
$'000	Stage 1 12-Month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Far value adjustment	Total
At 1 January 2019	**1,558**	**1,289**	**15,181**	**18,028**	**1,149,151**	**129,546**	**50,835**	**13,646**	**1,343,178**
New loans originated or purchased[1]	307	—	—	307	258,704	—	—	—	258,704
Loans derecognised or repaid	(734)	(1,155)	(15,076)	(16,965)	(626,485)	(122,396)	(50,835)	—	(799,716)
Existing loans (including credit quality changes)	2,437	288	—	2,725	46,866	—	—	—	46,866
Changes in macroeconomic variables ("MEV")	(279)	(31)	—	(310)	—	851	—	—	851
Stage transfers:	—	—	—	—	—	—	—	—	—
Stage 1 to stage 2	(1,097)	—	—	(1,097)	(62,625)	—	—	—	(62,625)
Stage 2 to stage 1		1,835	—	1,835	—	62,625	—	—	62,625
Fair value adjustment	—	—	—	—	—	—	—	(10,852)	(10,852)
Total changes	**634**	**937**	**(15,076)**	**(13,505)**	**(383,540)**	**(58,920)**	**(50,835)**	**(10,852)**	**(504,147)**
At 31 December 2019	**2,192**	**2,226**	**105**	**4,523**	**765,611**	**70,626**	**—**	**2,794**	**839,031**

	ECL				Gross carrying amount			
$'000	Stage 1 12-Month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At 1 January 2018	**633**	**1,224**	**126,635**	**128,492**	**1,057,639**	**168,930**	**333,731**	**1,560,300**
New loans originated or purchased[1]	856	538	—	1,394	567,366	72,866	—	640,232
Loans derecognised or repaid	(118)	(541)	(126,580)	(127,239)	(584,157)	(104,327)	(333,731)	(1,022,215)
Existing loans (including credit quality changes)	19,379	8	—	19,387	159,138	(7,923)	—	151,215
Changes in macroeconomic variables ("MEV")	118	60	—	178	—	—	—	—
Stage transfers:				—				—
Stage 1 to stage 3	(19,310)	—	15,126	(4,184)	(50,835)	—	50,835	—
Fair value adjustment	—	—	—	—	—	—	—	13,646
Total changes	**925**	**65**	**(111,454)**	**(110,464)**	**91,512**	**(39,384)**	**(282,896)**	**(217,122)**
At 31 December 2018	**1,558**	**1,289**	**15,181**	**18,028**	**1,149,151**	**129,546**	**50,835**	**1,343,178**

[1] New loans originated or purchased reflected as Stage 2 were acquired during the year and subsequently experienced a SICR or are committed facilities where SICR is measured from the commitment date.

The decrease in ECL of loans and advances to customers at FVOCI is primarily driven by a decrease in stage 3 exposures reducing lifetime ECL.

Risk management (continued)

Credit risk (audited) (continued)

Loan commitments and financial guarantee contracts

$'000	ECL Stage 1 12-Month ECL	ECL Stage 2 Lifetime ECL	Total
At 1 January 2019	**3,103**	**3,067**	**6,170**
New loan commitments/ financial guarantees	136	174	310
Loan commitments/ financial guarantees drawn	(1,371)	(313)	(1,684)
Existing loan commitments/financial guarantees (including credit quality changes)	346	634	980
Changes in Macroeconomic variables ("MEV")	(593)	(652)	(1,245)
Stage transfers:			
Stage 1 to stage 2	(218)	643	425
Stage 2 to stage 1	66	(145)	(79)
Total changes	**(1,634)**	**341**	**(1,293)**
At 31 December 2019	**1,469**	**3,408**	**4,877**

$'000	ECL Stage 1 12-Month ECL	ECL Stage 2 Lifetime ECL	Total
At 1 January 2018	**1,400**	**633**	**2,033**
New loan commitments/ financial guarantees	1,949	985	2,934
Loan commitments/ financial guarantees drawn	(785)	(293)	(1,078)
Existing loan commitments/financial guarantees (including credit quality changes)	1,363	(68)	1,295
Changes in Macroeconomic variables ("MEV")	187	63	250
Stage transfers:			
Stage 1 to stage 2	(1,014)	1,760	746
Stage 2 to stage 1	3	(13)	(10)
Total changes	**1,703**	**2,434**	**4,137**
At 31 December 2018	**3,103**	**3,067**	**6,170**

The increase in ECL was driven by an increase in new stage 1 exposures and changes in existing facilities credit quality, offset by loan commitments and financial guarantee contracts drawn during the period.

2. Non-traditional credit products

Non-TCPs include all other instruments measured at amortised cost and subject to the impairment provisions of International Financial Reporting Standard 9 ("IFRS 9"). The Company has recognised no ECL on non-TCP balances as the ECL related to these exposures is assessed as immaterial.

The Company's approach to measuring ECLs for Non-TCP portfolios depends on the type of instrument. Refer to the Credit exposures section for an analysis per balance sheet line item.

J.P. MORGAN SECURITIES PLC

Strategic report (continued)

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited)

The following tables provide an analysis of the Company's credit risk exposure from financial assets. The gross balance sheet exposure represents the Company's maximum exposure to credit risk from these assets. Gross balance sheet exposure is reported on a net-by-counterparty basis for derivatives and securities purchased under agreements to resell when the legal right and intention of offset exists under an enforceable netting agreement as required under IAS 32 'Financial Instruments: Presentation' ("IAS 32"). Net exposure after risk mitigants is presented after taking into account assets which are primarily exposed to market risk, enforceable master netting agreements (where the offsetting criteria under IAS 32 is not met) and the value of any collateral received.

			Risk mitigants			*Net balance sheet exposure held with:*	
	Gross balance sheet exposure [a]	Exposures captured by market risk	Master netting agreements and other	Cash & security collateral [b]	Net credit exposure	JPMorgan Chase undertakings	External counter parties
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Financial assets at 31 December 2019							
Cash and balances at central banks	2,485,491	—	—	—	2,485,491	—	2,485,491
Loans and advances to banks	4,415,118	—	—	—	4,415,118	2,557,297	1,857,821
Loans and advances to customers [c]	1,414,102	—	—	(646,151)	767,951	—	767,951
Securities purchased under agreements to resell [d]	142,607,770	—	(18,725,000)	(121,581,496)	2,301,274	132,988	2,168,286
Securities borrowed [d]	36,948,541	—	(10,045,547)	(22,111,553)	4,791,441	288,429	4,503,012
Financial assets at fair value through profit and loss	380,934,921	(106,472,793)	(238,396,108)	(26,689,865)	9,376,155	—	9,376,155
Debtors	88,090,591	—	—	—	88,090,591	40,487,394	47,603,197
Accrued income	925,356	—	—	—	925,356	188,398	736,958
Total	657,821,890	(106,472,793)	(267,166,655)	(171,029,065)	113,153,377	43,654,506	69,498,871

						Net balance sheet exposure held with:	
	Gross balance sheet exposure [a]	Assets captured by market risk	Master netting agreements and other	Cash & security collateral [b]	Net exposure after risk mitigants	JPMorgan Chase undertakings	External counter parties
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Financial assets at 31 December 2018:							
Cash and balances at central banks	29,880,787	—	—	—	29,880,787	—	29,880,787
Loans and advances to banks	9,690,343	—	—	—	9,690,343	6,490,420	3,199,923
Loans and advances to customers [c]	2,153,908	—	—	(1,259,225)	894,683	—	894,683
Securities purchased under agreements to resell [d]	155,084,582	—	(22,035,763)	(127,778,723)	5,270,096	99,932	5,170,164
Securities borrowed [d]	45,507,924	—	(16,692,007)	(24,236,047)	4,579,870	140,977	4,438,893
Financial assets at fair value through profit and loss (e)	339,955,399	(98,854,529)	(202,101,306)	(24,629,365)	14,370,199	—	14,370,199
Debtors	82,800,597	—	—	—	82,800,597	38,072,088	44,728,509
Accrued income	716,617	—	—	—	716,617	117,203	599,414
Total	665,790,157	(98,854,529)	(240,829,076)	(177,903,360)	148,203,192	44,920,620	103,282,572

(a) Gross exposure of $273,540 million (2018: $228,505 million) is held with other JPMorgan Chase undertakings. For further details of these amounts by line item category, refer to the notes to the financial statements.

(b) Cash and securities collateral received in respect of financial assets at fair value through profit and loss is limited to net balance sheet exposure, after taking into account master netting and other arrangements.

(c) The net balance sheet exposure on loans and advances to customers is presented without taking into account credit risk mitigants such as financial guarantees, or other non-financial collateral.

(d) The fair value of the securities collateral in respect of securities financing transactions is, in aggregate, greater than the net amounts reported on balance sheet, and therefore, the related amounts included as cash and securities collateral have been limited to the extent of the net amount (of remaining exposure) by counterparty.

(e) The majority of Debt and equity instruments are primarily exposed to market risk and are therefore deducted to determine the net credit risk exposure.

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Off balance sheet exposure consists of lending-related commitments and financial guarantees of $12,494 million (2018: $21,711 million). Refer to note 30.

The Company's credit exposures and credit risk mitigants are described below. An ECL allowance is only recognised on loans and advances to customers held at amortised cost and FVOCI. The Company's approach to measuring ECL for Non-TCP portfolios is further discussed below.

Cash and balances at central banks

Cash and balances with central banks include interest-bearing deposits, and are held with investment-grade institutions.

In evaluating the lifetime ECL related to receivables from a bank, the Company determined the expected probability of default was extremely remote, and the magnitude of lifetime ECL related to exposures would be negligible as these are regulated investment-grade institutions that have significant capital, loss absorbing capacity and liquidity. The majority of the deposits held are short term in nature and can be withdrawn at short notice (typically overnight).

The Company includes cash and balances at central banks in Stage 1 as they are short-term and investment-grade and banking institutions are considered to have high quality credit with low risk of default and therefore the Company has concluded there is no material SICR.

Loans and advances to banks

The Company places substantially all of its deposits with investment-grade banks. Similar to cash and balances at central banks, the Company includes loans and advances to banks in Stage 1 as investment-grade institutions are considered to have high quality credit with low risk of default and therefore the Company has concluded there is no material SICR.

Loans and advances to customers

The table below presents the Company's credit exposure and contractual maturity profile to gross loans and advances to customers before any provision for impairment. The credit quality and credit concentration of loans and advances to customers is managed within JPMorgan Chase's Credit Risk Management function. The ratings scale is based on JPMorgan Chase's internal risk ratings, which generally correspond to the ratings as defined by S&P and Moody's Investors Service

Maturity profile

Loans and advances to customers at amortised cost and FVOCI

At 31 December	2019	2018
	$'000	$'000
Maturity		
5 years or more	2,241	116,125
5 years or less but over 1 year	1,215,237	1,706,117
1 year or less but over 3 months	201,436	236,722
3 months or less	—	116,965
Total	**1,418,914**	**2,175,929**

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Loans and advances to customers (continued)

Ratings profile

At 31 December 2019	Stages			
	Stage 1	Stage 2	Stage 3	
	Gross carrying amount			Total
Loans and advances to customers at amortised cost				
	$'000	$'000	$'000	$'000
Investment grade				
AAA/Aaa to BBB-Baa3	59,008	4,188	—	63,196
Non-investment grade				—
BB+/Ba1 -> B-/B3	509,874	6,813	—	516,687
CCC+/Caa1 and below	—	—	—	—
Gross carrying amount	**568,882**	**11,001**	**—**	**579,883**
Loans and advances to customers at FVOCI				
	$'000	$'000	$'000	$'000
Investment grade				
AAA/Aaa to BBB-Baa3	312,528	—	—	312,528
Non-investment grade				
BB+/Ba1 -> B-/B3	419,803	—	—	419,803
CCC+/Caa1 and below	33,280	70,626	—	103,906
Gross carrying amount	**765,611**	**70,626**	**—**	**836,237**
Fair value adjustment				2,794
Total	**765,611**	**70,626**	**—**	**839,031**
Total	**1,334,493**	**81,627**	**—**	**1,418,914**

J.P. MORGAN SECURITIES PLC
Strategic report (continued)

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Loans and advances to customers (continued)

Ratings profile (continued)

31 December 2018		Stages		
	Stage 1	Stage 2	Stage 3	
		Gross carrying amount		Total
Loans and advances to customers at amortised cost				
	$'000	$'000	$'000	$'000
Investment grade				
AAA/Aaa to BBB-Baa3	45,479	43,439	—	88,918
Non-investment grade				—
BB+/Ba1 -> B-/B3	571,045	172,430	—	743,475
CCC+/Caa1 and below	358	—	—	358
Gross carrying amount	**616,882**	**215,869**	**—**	**832,751**
Loans and advances to customers at FVOCI				
	$'000	$'000	$'000	$'000
Investment grade				
AAA/Aaa to BBB-Baa3	547,975	92,081	—	640,056
Non-investment grade				
BB+/Ba1 -> B-/B3	584,541	30,313	—	614,854
CCC+/Caa1 and below	16,636	7,151	50,835	74,622
Gross carrying amount	**1,149,152**	**129,545**	**50,835**	**1,329,532**
Fair value adjustment				13,646
Total	**1,149,152**	**129,545**	**50,835**	**1,343,178**
Total	**1,766,034**	**345,414**	**50,835**	**2,175,929**

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Loans and advances to customers (continued)

Ratings profile (continued)

Analysis of concentration credit risk

Concentrations of credit risk arise when a number of customers are engaged in similar business activities or activities in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions.

Loans and advances to customers at amortised cost and FVOCI

At 31 December	2019	2018
	$'000	$'000
Credit risk concentration		
Geographic region		
United Kingdom	70,165	154,710
Other European	718,771	1,419,564
Rest of the world	629,978	601,655
Total	**1,418,914**	**2,175,929**
Industry concentration		
Commercial and industrial	666,342	1,157,189
Real estate	498,605	352,552
Financial institutions	199,246	394,455
Other	54,721	271,733
Total	**1,418,914**	**2,175,929**

Securities purchased under agreements to resell and securities borrowed

The Company generally bears credit risk related to resale agreements and securities borrowed where cash advanced to the counterparty exceeds the expected value of the collateral received on default. The Company's credit exposure on these transactions is significantly lower than the amounts recorded on balance sheet as the substantial majority represent contractual value before consideration of any collateral received.

Where a fully collateralised arrangement exists (for example a reverse repurchase agreement), the estimate of the allowance is immaterial due to the following credit mitigants:

Continuous margining requirements: The contractual terms of these agreements are designed to ensure that they are fully collateralised based on continuous margining requirements, even when the credit risk of the borrower increases significantly. The contractual terms provide the Company (as lender) with the legal right to receive additional margin from the borrower each day a margin deficit exists. The contractual terms also allow the Company to increase margin requirements, and to revoke or reduce lending commitments to the borrower at any time.

Inter-company arrangements may be repayable on demand: The vast majority of the Company's collateralised inter-company lending arrangements are executed under master contracts that provide additional protections for the Firm, such as stipulating that extensions of credit are repayable on demand.

High quality collateral: If, in the extremely rare circumstance that the borrower were to default, because the collateral is generally of high quality (G5 government obligations) or is otherwise considered highly liquid, the Company has the legal right and operational ability, as well as the intent, to immediately seize the collateral and liquidate it in a timely and price-efficient manner to minimize any loss.

The majority of securities purchased under agreements to resell are held at fair value. The fair value of the security collateral in respect of securities financing transactions is, in aggregate, greater than the net amounts reported on balance sheet.

Securities financing arrangements tend to be short-term in nature with no history of credit losses. These arrangements are included in Stage 1 as the Company has determined there is no SICR during the short tenor of the instrument as at 31 December 2019.The Company recognises no ECL on these balances as the ECL related to these exposures is assessed as immaterial.

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Debtors

Debtors consist of trade and other debtors. Trade debtors mainly consist of fee receivables and unsettled trades. Unsettled trades constitute receivables related to sales of securities which have not yet settled. These receivables generally have minimal credit risk due to the low probability of a clearing organisation default and failure to deliver, and the short-term nature of receivables related to securities settlements which are predominately on a delivery versus payment basis. The Company recognises no ECL on these balances as the ECL related to these exposures is assessed as immaterial.

Fee receivables

Fee receivables arise out of revenue from contracts with customers, such as a management fee or distribution revenue. Staging and write off policies depend on the nature of the asset. Fee receivables for institutional clients are included in Stage 1 if they are less than 90 days past due ("dpd"), and instruments less than 180 dpd are included in Stage 2. A fee receivable from an institutional client is deemed to be credit-impaired and 100% reserved when it is 180 dpd or more. The Company has not had significant losses on its fee receivable portfolios and based on the immateriality of these losses, the provision matrix and staging approach described is applied. The Company continues to monitor the fee receivable population to ensure the described framework is appropriate and ECLs on this portfolio are adequately reflected.

The accounting policy for other assets requires they be written-off when the asset is (i) deemed to be uncollectible or (ii) past due for more than 90 days, whichever occurs first. The Company believes that the 90 day write-off policy materially limits the non-TCP exposure recorded on the balance sheet.

The Company relies on the staging backstops in IFRS 9 and presumes that other assets that are 30 dpd have experienced a SICR and are included in Stage 2. Other assets that are greater than 90 days past due are deemed to be credit-impaired and are included in Stage 3. Other assets that are current or less than 30 dpd are included in Stage 1.

Other Debtors

Other debtors primarily comprise receivables related to cash collateral paid to counterparties in respect of derivative financial instruments. Margin posted in cash is reflected as a receivable from the counterparty and is carried at amortised cost. Furthermore, the Company provides clearing services to its clients wherein it facilitates the execution and settlement of derivative transactions by intermediating between a Central Clearing Party ("CCP") and a client, the associated cash collateral is recognised at amortised cost. In evaluating the lifetime ECL related to receivables from a CCP, the Company determined the expected probability of CCP default was extremely remote, and the magnitude of lifetime expected credit losses related to CCP exposures would be negligible due to the robust multi-layered credit protection inherent in the design and operations of the CCP clearing model. As such, the Firm includes these receivables in Stage 1.

For inter-company transactions where the borrower is a Material Legal Entity ("MLE"), the Company's anticipated ECL was determined to not be material and no loss was recognised, for the following reasons:

- The MLE borrower has been prepositioned with funding in an extremely efficient manner from both a liquidity and a capital perspective.
- JPMorgan Chase Bank, N.A. ("JPMCB") and the JP Morgan Chase's Intermediate Holding Company ("IHC") are obligated to provide financial support to their direct and indirect subsidiaries in connection with the Support Agreement that is put in place as part of the Firm's resolution planning process, which effectively functions as a guarantee/backstop for inter-company lending arrangements with an MLE borrower.

As MLEs are adequately capitalised to ensure the MLE can fulfil all of its debt obligations even in the event of an orderly liquidation of JPMorgan Chase and are of investment grade, these inter-company receivables are included in Stage 1 as they are held with MLEs and considered to not have an increase in credit risk that would result in material expected credit losses. Receivables from MLEs are only included in Stage 2 if the obligor is no longer considered an MLE and there is evidence of credit deterioration of the obligor, or if certain support triggers defined in the JPMorgan Chase's Resolution Plan occur. Receivables from MLEs are not credit-impaired as the Firm ensures MLEs are more than adequately capitalised as required by the Firms Resolution Plan.

The Company's anticipated ECL for other receivables from non MLEs was determined to not be material and no loss was recognised.

Risk management (continued)

Credit risk (audited) (continued)

Credit risk exposures (audited) (continued)

Accrued income

Accrued income primarily represents accrued interest on securities purchased under resale agreements and loans and other accruals. The majority of accrued income owed by other JPMorgan Chase undertakings are MLE's, refer to assessment as included within debtors above.

Loan commitments and financial guarantee contracts

The following table summarises the contractual amounts and loss allowance recognised on off-balance sheet lending-related commitments and standby letters of credit.

31 December 2019	Stages		
	Stage 1	Stage 2	
	Gross carrying amount		Total
At Amortised cost			
Rating profile	**$'000**	**$'000**	**$'000**
Investment-grade			
AAA/Aaa to BBB-Baa3	6,765,474	1,014,770	7,780,244
Non-investment-grade			
BB+/Ba1 -> B-/B3	2,209,531	446,109	2,655,640
CCC+/Caa1 and below	42,316	150,385	192,701
Contractual amount	**9,017,321**	**1,611,264**	**10,628,585**

At 31 December 2018	Stages		
	Stage 1	Stage 2	
	Gross carrying amount		Total
At Amortised cost			
Rating profile	**$'000**	**$'000**	**$'000**
Investment-grade			
AAA/Aaa to BBB-Baa3	13,104,239	3,073,306	16,177,545
Non-investment-grade			
BB+/Ba1 -> B-/B3	3,635,367	161,710	3,797,077
CCC+/Caa1 and below	61,284	79,633	140,917
Contractual amount	**16,800,890**	**3,314,649**	**20,115,539**

Impact of collateral/credit enhancements on ECL

If a non-derivative credit enhancement is deemed to be part of the same unit of account as the related loan, pool of loans or loan commitment, and the Company has not elected the fair value option for the related instruments, the expected credit loss under IFRS 9 may be reduced for losses expected to be recovered from the enhancement provider, as long as there is evidence that the third party providing the credit enhancement has the ability and willingness to reimburse the Company for the losses. If a non-derivative credit enhancement is not deemed to be part of the same unit of account as the loan, pool of loans or loan commitment, the credit enhancement must be accounted for separately and must not be used to reduce expected credit losses. The Company may hold a security interest in various types of collateral including cash, securities, receivables, inventory, equipment, real estate or other non-financial assets.

Loan modifications

Gains and losses on financial assets and loan commitments that were modified while they had a loss allowance measured at an amount equal to lifetime ECL were immaterial for the year ended 31 December 2019 and 31 December 2018.

Risk management (continued)

Country risk

The Firm has a country risk management framework for monitoring and assessing how financial, economic, political or other significant developments adversely affect the value of the Firm's exposures related to a particular country or set of countries. The Country Risk Management group actively monitors the various portfolios which may be impacted by these developments to ensure the Firm's and Company's exposures are diversified and that exposure levels are appropriate given the Firm and Company's strategy and risk tolerance relative to a country.

Risk organisation and management

Country Risk Management is an independent risk management function that assesses, manages and monitors country risk originated across the Firm. The Firmwide Risk Executive for Country Risk reports to the Firm's CRO. The Firm's country risk management function includes the following activities:

- Establishing policies, procedures and standards consistent with a comprehensive country risk framework
- Assigning sovereign ratings and assessing country risks and establishing risk tolerance relative to a country
- Measuring and monitoring country risk exposure and stress across the Firm
- Managing and approving country limits and reporting trends and limit breaches to senior management
- Developing surveillance tools, such as signalling models and ratings indicators for early identification of potential country risk concerns
- Providing country risk scenario analysis

Risk sources and measurement

The Firm and Company are exposed to country risk through their lending and deposits, investing, and market-making activities, whether cross-border or locally funded. Country exposure includes activity with both government and private-sector entities in a country. Under the Firm's internal country risk management approach, country exposure is reported based on the country where the majority of the assets of the obligor, counterparty, issuer or guarantor are located or where the majority of its revenue is derived, which may be different than the domicile (legal residence) or country of incorporation of the obligor, counterparty, issuer or guarantor. Country exposures are generally measured by considering the Firm's and Company's risk to an immediate default of the counterparty or obligor, with zero recovery. Assumptions are sometimes required in determining the measurement and allocation of country exposure, particularly in the case of certain non-linear or index exposures. The use of different measurement approaches or assumptions could affect the amount of reported country exposure.

Under the Firm's internal country risk measurement framework used by the Company:

- Lending exposures are measured at the total committed amount (funded and unfunded), net of the allowance for credit losses and cash and marketable securities collateral received
- Deposits are measured as the cash balances placed with central and commercial banks
- Securities financing exposures are measured at their receivable balance, net of collateral received
- Debt and equity securities are measured at the fair value of all positions, including both long and short positions
- Counterparty exposure on derivative receivables is measured at the derivative's fair value, net of the fair value of the related collateral. Counterparty exposure on derivatives can change significantly because of market movements
- Credit derivatives protection purchased and sold is reported based on the underlying reference entity and is measured at the notional amount of protection purchased or sold, net of the fair value of the recognised derivative receivable or payable. Credit derivatives protection purchased and sold in the Firm's market making activities is measured on a net basis, as such activities often result in selling and purchasing protection related to the same underlying reference entity; this reflects the manner in which the Firm manages these exposures

Some activities may create contingent or indirect exposure related to a country (for example, providing clearing services or secondary exposure to collateral on securities financing receivables). These exposures are managed in the normal course of business through the Firm's and Company's credit, market, and operational risk governance, rather than through Country Risk Management.

Risk stress testing

Stress testing is an important component of the Firm's country risk management framework, which aims to estimate and limit losses arising from a country crisis by measuring the impact of adverse asset price movements to a country based on market shocks combined with counterparty specific assumptions. Country Risk Management periodically designs and runs tailored stress scenarios to test vulnerabilities to individual countries, or group of countries, in response to specific or potential market events, sector performance concerns and geopolitical risks.

Risk management (continued)

Country risk (continued)

Risk reporting

The Company's top five country exposures as of 31 December 2019 are the United Kingdom $7.65bn, France $3.89bn, Germany $2.69bn, Spain $2.64bn and Italy $2.39bn. The selection of countries represent the Company's largest total exposures by country, based on the Firm's internal country risk management approach, and does not represent the Firm's view of any actual or potentially adverse credit conditions. Country exposures may fluctuate from period to period due to client activity and market flows.

Liquidity risk (audited)

Liquidity risk is the risk that the Company will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities.

Liquidity risk oversight

The Firm has a Liquidity Risk Oversight function whose primary objective is to provide independent assessment, measurement, monitoring, and control of liquidity risk across the Firm. Liquidity Risk Oversight's responsibilities include:

- Defining, monitoring and reporting liquidity risk metrics;
- Establishing and monitoring limits and indicators including liquidity risk appetite;
- Developing a process to classify, monitor and report limit breaches;
- Performing an independent review of liquidity risk management processes;
- Monitoring and reporting internal Firmwide and legal entity liquidity stress tests as well as regulatory defined liquidity stress tests;
- Approving or escalating for review new or updated liquidity stress assumptions; and
- Monitoring liquidity positions, balance sheet variances and funding activities.

Liquidity management

Treasury and Chief investment Office ("CIO") are responsible for liquidity management. The primary objectives of effective liquidity management are to:

- Ensure that the Firm's core businesses and material legal entities are able to operate in support of client needs and meet contractual and contingent financial obligations through normal economic cycles as well as during stress events, and
- Manage an optimal funding mix, and availability of liquidity sources.

As part of the Firm's overall liquidity management strategy, the Firm manages liquidity and funding using a centralised, global approach in order to:

- Optimise liquidity sources and uses;
- Monitor exposures;
- Identify constraints on the transfer of liquidity between the Firm's legal entities; and
- Maintain the appropriate amount of surplus liquidity at a Firmwide and legal entity level, where relevant.

In the context of the Firm's liquidity management, Treasury and CIO is responsible for:

- Analysing and understanding the liquidity characteristics of the assets and liabilities of the Firm, lines of business and legal entities, taking into account legal, regulatory, and operational restrictions;
- Developing internal liquidity stress testing assumptions;
- Defining and monitoring Firmwide and legal entity-specific liquidity strategies, policies, guidelines, reporting and contingency funding plans;
- Managing liquidity within approved liquidity risk appetite tolerances and limits;
- Managing compliance with regulatory requirements related to funding and liquidity risk; and
- Setting transfer pricing in accordance with underlying liquidity characteristics of balance sheet assets and liabilities as well as certain off-balance sheet items.

Risk management (continued)

Liquidity risk (audited) (continued)

Liquidity management (continued)

Liquidity Requirements (unaudited)

The Company is regulated by the PRA and is expected to comply with the liquidity coverage ratio ("LCR") guidance set out in the Delegated Act (Commission delegated regulation (EU) 2015/61) The LCR is intended to measure the amount of "high quality liquid assets ("HQLA") held by the Company in relation to estimated net liquidity outflows within a 30 calendar day stress period. At 31 December 2019, the Company was compliant with the LCR requirement.

The Basel Committee final standard for net stable funding ratio ("Basel NSFR") is intended to measure the "available" and "required" amounts of stable funding over a one-year horizon. The European Commission introduced its legislative proposal for the NSFR ("EU NSFR"), amending Regulation (EU) No 575/2013. The Company is expected to comply with the EU NSFR at a level of 100% from 28 June 2021.

Risk governance and measurement

Committees responsible for liquidity governance include the Firmwide Asset and Liability Committee ("ALCO"), as well as line of business and regional ALCOs, Treasurer Committee and Corporate ("CTC") Risk Committee. In addition, the Board Risk Committee reviews and recommends to the Board of Directors, for formal approval, the Firm's liquidity risk tolerances, liquidity strategy, and liquidity policy.

Internal stress testing

Liquidity stress tests are intended to ensure that the Company has sufficient liquidity under a variety of adverse scenarios, including scenarios analysed as part of the Firm's resolution and recovery planning. Stress scenarios are produced for the Company on a regular basis and other stress tests are performed in response to specific market events or concerns. Liquidity stress tests assume all of the Company's contractual financial obligations are met and take into consideration:

- Varying levels of access to unsecured and secured funding markets;
- Estimated non-contractual and contingent cash outflows; and
- Potential impediments to the availability and transferability of liquidity between jurisdictions and material legal entities such as regulatory, legal or other restrictions.

Liquidity outflow assumptions are modelled across a range of time horizons and currency dimensions and contemplate both market and idiosyncratic stress.

Results of stress tests are considered in the formulation of the Company's funding plan and assessment of its liquidity position.

Liquidity risk stress testing is established at the Firm and material legal entity level. The Company's liquidity stress testing is incorporated within the JPMorgan Chase legal entity liquidity risk framework and follows Firmwide liquidity assumptions, with additional considerations for intercompany positions and the definition of local liquid asset buffer.

Contingency funding plan

The Firm's contingency funding plan ("CFP") is approved by the Firmwide ALCO and the Board risk Committee. The Company's addendum to the CFP is approved by the Company's Board of directors. The CFP and the addendum is a compilation of procedures and action plans for managing liquidity through stress events. The CFP and the addendum incorporate the limits and indicators set by the Liquidity Risk Oversight group. These limits and indicators are reviewed regularly to identify emerging risks or vulnerabilities in the Company's liquidity position. The CFP identifies the alternative contingent funding and liquidity resources available to the Company in a period of stress.

Funding

The Company's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase. Securities loaned or sold under agreements to repurchase are secured predominantly by high-quality securities collateral, including government-issued debt, agency debt and agency mortgage-backed securities ("MBS). The directors believe that the Company's unsecured and secured funding capacity is sufficient to meet its on and off-balance sheet obligations *(unaudited)*.

The table below presents the maturity details of all financial liabilities. Securities sold under agreements to repurchase, securities loaned, financial liabilities at fair value through profit and loss, and liabilities designated at fair value through profit and loss have been disclosed at their fair values, consistent with how these financial liabilities are managed. Amounts greater than one year represent undiscounted cash flows. Due to the nature and contractual maturity of all other financial liabilities they are presented at the carrying amount, which is not materially different to the undiscounted cash flow.

J.P. MORGAN SECURITIES PLC
Strategic report (continued)

Risk management (continued)

Liquidity risk (audited) (continued)

Funding (continued)

	Less than 1 year 2019	More than 1 year 2019	Total 2019	Less than 1 year 2018	More than 1 year 2018	Total 2018
	$'000	$'000	$'000	$'000	$'000	$'000
Securities sold under agreements to repurchase	62,435,449	3,282,054	65,717,503	87,280,799	4,670,738	91,951,537
Securities loaned	12,011,127	—	12,011,127	20,646,594	—	20,646,594
Financial liabilities at fair value through profit and loss	338,163,550	—	338,163,550	312,225,100	—	312,225,100
Financial liabilities designated at fair value through profit or loss	616,886	—	616,886	795,709	440,767	1,236,476
Trade creditors	37,924,561	—	37,924,561	55,301,485	—	55,301,485
Amounts owed to JPMorgan Chase undertakings	40,921,990	73,900,000	114,821,990	41,442,931	60,860,000	102,302,931
Other liabilities	30,091,231	—	30,091,231	25,668,487	—	25,668,487
Subordinated liabilities	399,600	15,196,797	15,596,396	493,967	16,445,700	16,939,667
	522,564,394	92,378,851	614,943,244	543,855,072	82,417,205	626,272,277

The majority of short term funding transactions by way of repurchase agreements and stock lending have short-dated maturities, typically less than one month. Trade creditors predominantly includes unsettled trades and other liabilities includes cash collateral received. Both have short-dated maturities. Financial liabilities designated at fair value through profit or loss represent a long term margin loan. Financial liabilities at fair value through profit and loss include derivatives and short positions and are ordinarily classified as liabilities falling due within one year for the purpose of disclosure under IFRS 7 'Financial Instruments: Disclosures'.

Credit ratings

The Company is rated on a standalone non-guaranteed basis. Independent credit ratings agencies Moody's Investors Service, S&P and Fitch Ratings have rated the Company as 'Aa3/P-1', 'A+/A-1' and "AA/F1+' respectively. On October 25, 2018, Moody's upgraded the Company's long-term issuer rating to Aa3 (previously A1). On June 21, 2018, Fitch upgraded the Company's long-term issuer ratings to AA (previously AA-).

Market risk (audited)

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

The following sections detail the market risk management framework at both the Firmwide and Company levels.

Market Risk Management monitors market risks throughout the Firm and defines market risk policies, procedures and other guidance as appropriate. The Market Risk Management function reports to the Firm's Chief Risk Officer ('CRO'), and seeks to manage risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the Firm's market risk profile for senior management, the Board of Directors and regulators.

Risk Governance & Policy Framework

The Company's approach to market risk governance mirrors the Firmwide approach and is outlined in the Company's Market Risk Framework. The Company's Market Risk Framework outlines the following:

- Responsibilities of the CRO and Market Risk Officer ("MRO")
- Market Risk measures utilised such as VaR, Stress and non-statistical measures
- Controls such as the Company's market risk limit framework (limit levels, limit signatories, limit reviews and escalation)

The Company's Board of Directors approves substantive changes to the Framework and approves this Framework annually.

Risk management (continued)

Market risk (audited) (continued)

Risk Measurement

There is no single measure to capture market risk and therefore the Firm and Company uses various metrics both statistical and non-statistical to assess risk. The appropriate set of risk measures utilised for a given business activity is tailored based on business mandate, risk horizon, materiality, market volatility and other factors.

Value-at-Risk ("VaR")

The Firm utilises VaR, a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment. The Firm has a single VaR framework used as a basis for calculating Risk Management VaR and Regulatory VaR.

The VaR framework is employed across the Firm using historical simulation based on data for the previous 12 months. Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. These VaR results are reported to senior management, the Firm's Board of Directors and regulators.

Separately, Regulatory VaR, also applied across the Firm, assumes a ten business-day holding period and an expected tail loss methodology which approximates a 99% confidence level. Regulatory VaR is applied to "covered" positions as defined by Basel III, which may be different than the positions included in the Firm's Risk Management VaR.

The Company applies the Firmwide approach for Risk Management VaR as described above, for internal risk management purposes. The Company also utilises Regulatory VaR, as described above, for the calculation of model based regulatory capital under Internal Models Approach ("IMA") for a subset of the trading book population in Global Credit Trading and Global Equities.

The table below shows the result of the Company's Risk Management VaR:

	2019			2018			At 31 December	
	Avg.	Min	Max [a]	Avg.	Min	Max [a]	2019 [b]	2018
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
95 % VaR	19,200	11,288	31,733	17,112	11,723	32,640	16,439	31,998

(a) Positional changes were primarily driven by positions in Global Rates and Global Equities - this also explains the Maximum VaR level in 2019, which occurred during early Jan 2019. Maximum VaR ($32.6 million) for 2018 was driven by a combination of positional changes and higher observed market volatility.

(b) 2019 end of year VaR is considerably lower due to reduced market volatility and reduction of risk

The Company's market risk profile is driven by Credit, Equities, FX, IR and Commodity market related exposures. Of the standard stress scenarios that the Company is subject to, the worst case stress loss during 2019 was primarily driven by the Credit Crisis scenario.

Stress testing

Along with VaR, stress testing is an important tool to assess risk. While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behaviour, stress testing reflects the risk of loss from hypothetical changes in the value of market risk sensitive positions applied simultaneously.

The Firm and the Company run weekly stress tests on market-related risks across the lines of business using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates or commodity prices.

The Firm and the Company use a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. The flexibility of the stress testing framework allows risk managers to construct new, specific scenarios that can be used to form decisions about future possible stress events.

Risk management (continued)

Market risk (audited) (continued)

Stress testing (continued)

Stress testing complements VaR by allowing risk managers to shock current market prices to more extreme levels relative to those historically realised, and to stress test the relationships between market prices under extreme scenarios. Stress-test results, trends and qualitative explanations based on current market risk positions are reported to the respective LOB, Firm and Company senior management as appropriate, to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency.

Stress scenarios are defined and reviewed by Market Risk, and significant changes are reviewed by the relevant LOB Risk Committees and may be redefined on a periodic basis to reflect current market conditions.

Other Non-statistical risk measures

Aside from VaR and stress testing, other specific risk measures, such as, but not limited to, credit spread sensitivities, net open positions, basis point values, option sensitivities, are also utilised within specific market context and aggregated across businesses.

The Company utilises non-statistical risk measures, such as but not limited to FX delta and IR BPV, to measure and monitor risk.

Risk Monitoring and Control

Limits

Market risk limits are employed as the primary control to align the Firm's and the Company's market risk with certain quantitative parameters within the Firm's and the Company's Risk Appetite framework, respectively.

Market Risk sets limits and regularly reviews and updates them as appropriate, with any changes approved by Firm or LOB or Company management, as appropriate, and Market Risk. Limits that have not been reviewed within a specified time period by Market Risk are escalated to senior management.

Limit breaches are required to be reported in a timely manner to limit approvers, which include Market Risk and senior management. In the event of a limit breach, Market Risk consults with senior management to determine the course of action required to return to compliance, which may include a reduction in risk in order to remedy the breach or granting a temporary increase in limits to accommodate an expected increase in client activity and/or market volatility. Certain Firm, LOB or Company level limit breaches are escalated to senior management, the LOB Risk Committee, Regional Risk Committee and/or the Firmwide Risk Committee, as appropriate.

The Company's limits include VaR and Stress limits established for the legal entity, in aggregate, and for individual businesses operating out of the legal entity:

- The Company's CEO, CRO and Market Risk Officer ('MRO') are limit approvers of limits for the legal entity in aggregate
- Appropriate business area representatives and Market Risk representatives are approvers of business area specific limits

Risk Reporting

The Firm and the Company have their own set of regular market risk reports, which include daily notifications of limit utilisations and limit breaches and where applicable, granular market risk metrics which provide transparency into potential risk concentrations.

Risk management (continued)

Structural interest rate risk

Interest Rate Risk in the Banking Book ("IRRBB") is defined as interest rate risk resulting from the firm's traditional banking activities (accrual accounted on- and off-balance sheet positions) which include the extension of loans and credit facilities, taking deposits and issuing debt (collectively referred to as 'non-trading' activities); and also the impact from Treasury and Chief Investment Office (T/CIO) investment securities portfolio and other related T/CIO activities. IRR from non-trading activities can occur due to a variety of factors, including but not limited to:

- Difference in the timing of re-pricing of assets, liabilities and off-balance sheet instruments;
- Differences in the balances of assets, liabilities and off-balance sheet instruments that re-price at the same time;
- Differences in the amounts by which short-term and long-term market interest rates change; and
- Impact of changes in the duration of various assets, liabilities or off-balance sheet instruments as interest rates change .

Oversight and governance

Governance for Firmwide IRR is defined in the IRR Management policy which is approved by CTC CRO. The CIO, Treasury and Other Corporate Risk Committee (CTC RC) is the governing committee with respect to IRRBB.

- Reviews the IRR Management policy;
- Reviews the IRR profile of the Firm and adherence to limits;
- Reviews significant changes to IRR models and/or assumptions; and
- Provides Governance on legal entity related exposures.

IRR exposures, significant models and/or assumptions including the changes are reviewed by Firmwide ALCO. The ALCO provides a framework for overseeing the IRR of LOBs, foreign jurisdictions and key legal entities to appropriate LOB ALCOs, Country ALCOs and other local governance bodies. In addition, oversight of structural interest rate risk is managed through IRR Management, a dedicated risk function reporting to the CTC CRO. IRR Management is responsible for, but not limited to:

- Measuring and monitoring IRR and establishing limits; and
- Creating and maintaining governance over IRR assumption

The Firmwide risk framework applies to the Company as described above.

Risk Identification and Measurement

T/CIO manages IRRBB exposure on behalf of the Firm by identifying, measuring, modelling and monitoring IRR across the Firm's balance sheet. T/CIO identifies and understands material balance sheet impacts of new initiatives and products and executes market transactions to manage IRR through T/CIO investment portfolio's positions. Execution by T/CIO will be based on parameters established by senior management, per the T/CIO Investment Policy. LOBs are responsible for developing and monitoring the appropriateness of LOB specific IRR modelling assumptions.

Measures to manage IRR include:

- Earnings-at-risk ("EAR"): Primary metric used to gauge the Firm's shorter term IRR exposure is EAR, or the sensitivity of pre-tax income to changes in interest rates over a rolling 12 months compared to a base scenario; and
- Economic Value Sensitivity ("EVS"): An additional Firmwide metric utilised to determine changes in asset/liability values due to changes in interest rates.

Operational risk

Operational risk is the risk associated with an adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting the Firm's processes or systems; it includes compliance, conduct, legal, and estimations and model risk.

Operational risk is inherent in the Company's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, cybersecurity attacks, inappropriate employee behaviour, failure to comply with applicable laws and regulations or failure of vendors to perform in accordance with their agreements. Operational Risk Management attempts to manage operational risk at appropriate levels in light of the Company's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates.

Risk management (continued)

Operational risk (continued)

Risk management

The Firm's Compliance, Conduct, and Operational Risk ("CCOR") Management Framework is designed to enable the Firm to govern, identify, measure, monitor and test, manage and report on the Firm's operational risk. The Company's approach mirrors the Firmwide approach.

Operational risk can manifest itself in various ways. Operational risk subcategories such as Compliance risk, Conduct risk, Legal risk and Estimations and Model risk, as well as other operational risks, can lead to losses which are captured through the Firm's operational risk measurement processes. More information on these risk subcategories can be found in the respective risk management sections. Details on cybersecurity risk, business and technology resiliency risk, payment fraud risk, together with third-party outsourcing risk, are provided below.

Cybersecurity risk

Cybersecurity risk is an important, continuous and evolving focus for the Firm. The Firm devotes significant resources to protecting and continuing to improve the security of the Firm's computer systems, software, networks and other technology assets. The Firm's security efforts are designed to protect against, among other things, cybersecurity attacks by unauthorised parties attempting to obtain access to confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage. The Firm continues to make significant investments in enhancing its cyber-defence capabilities and to strengthen its partnerships with the appropriate government and law enforcement agencies and other businesses in order to understand the full spectrum of cybersecurity risks in the operating environment, enhance defences and improve resiliency against cybersecurity threats. The Firm actively participates in discussions of cybersecurity risks with law enforcement, government officials, peer and industry groups, and has significantly increased efforts to educate employees and certain clients on the topic.

Third parties with which the Firm does business or that facilitate the Firm's business activities (e.g., vendors, exchanges, clearing houses, central depositories, and financial intermediaries) are also sources of cybersecurity risk to the Firm. Third party cybersecurity incidents such as system breakdowns or failures, misconduct by the employees of such parties, or cyber-attacks could affect their ability to deliver a product or service to the Firm or result in lost or compromised information of the Firm or its clients. Clients can also be sources of cybersecurity risk to the Firm, particularly when their activities and systems are beyond the Firm's own security and control systems. As a result, the Firm engages in regular and ongoing discussions with certain vendors and clients regarding cybersecurity risks and opportunities to improve security. However, where cybersecurity incidents are due to client failure to maintain the security of their own systems and processes, clients are responsible for losses incurred.

To protect the confidentiality, integrity and availability of the Firm's infrastructure, resources and information, the Firm maintains a cybersecurity programme to prevent, detect, and respond to cyber-attacks. The Audit Committee is updated periodically on the Firm's Information Security Programme, recommended changes, cybersecurity policies and practices, ongoing efforts to improve security, as well as its efforts regarding significant cybersecurity events. In addition, the Firm has a detailed cybersecurity incident response plan ("IRP") designed to enable the Firm to respond to attempted cybersecurity incidents, coordinate such responses with law enforcement and other government agencies, and notify clients and customers. Among other key focus areas, the IRP is designed to mitigate the risk of insider trading connected to a cybersecurity incident, and includes various escalation points.

The Cybersecurity and Technology Control functions are responsible for governance and oversight of the Firm's Information Security Programme. In partnership with the Firm's lines of business, the Cybersecurity and Technology Control organisation identifies information security risk issues and champions programmes for the technological protection of the Firm's information resources including applications, infrastructure as well as confidential and personal information related to the Firm's customers. The Cybersecurity and Technology Control organisation is comprised of Business Aligned Information Security Managers that are supported within the organisation by the following products that execute the Information Security Program for the Firm:

- Cyber Defense & Fraud
- Data Management, Protection & Privacy
- Identity & Access Management
- Governance & Controls
- Production Management & Resiliency
- Software & Platform Enablement

Risk management (continued)

Operational risk (continued)

The Global Cybersecurity and Technology Control governance structure is designed to identify, escalate, and mitigate information security risks. This structure uses key governance forums to disseminate information and monitor technology efforts. These forums are established at multiple levels throughout the Firm and include representatives from each LOB and Corporate. Reports containing overviews of key technology risks and efforts to enhance related controls are produced for these forums, and are reviewed by management at multiple levels. The forums are used to escalate information security risks or other matters as appropriate.

Information Risk Management ("IRM") provides oversight of the activities which identify, assess, manage and mitigate cybersecurity risk.

The Firm's Security Awareness Programme includes training that reinforces the Firm's Information Technology Risk and Security Management policies, standards and practices, as well as the expectation that employees comply with these policies. The Security Awareness Programme engages personnel through training on how to identify potential cybersecurity risks and protect the Firm's resources and information. This training is mandatory for all employees globally on an annual basis, and it is supplemented by Firmwide testing initiatives, including periodic phishing tests. Finally, the Firm's Global Privacy programme requires all employees to take periodic awareness training on data privacy. This privacy-focused training includes information about confidentiality and security, as well as responding to unauthorised access to or use of information.

Business and technology resiliency risk

Business disruptions can occur due to forces beyond the Firm's control such as severe weather, power or telecommunications loss, accidents, failure of a third party to provide expected services, cyberattack, flooding, transit strikes, terrorist threats or infectious disease. The safety of the Firm's employees and customers is of the highest priority. The Firm's global resiliency programme is intended to enable the Firm to recover its critical business functions and supporting assets (i.e., staff, technology and facilities) in the event of a business interruption. The programme includes governance, awareness training, and testing of recovery strategies, as well as strategic and tactical initiatives to identify, assess, and manage business interruption and public safety risks.

The Firm is monitoring the COVID-19 pandemic closely, based on the guidance being provided by the relevant health and government authorities, and continues to implement protocols and processes in response to the spread of the virus. In line with the Firm's own standards and regulatory expectations, the Firm and its Senior Managers are taking reasonable steps to:

- Ensure that we are able to meet our responsibilities to customers and staff and assist with challenges posed to markets due to COVID-19;
- Continue to preserve the safety and soundness of the firm with particular focus on financial and operational resilience, and;
- Ensure the Firm meets regulatory expectations of specific senior manager functions in relation to our response to COVID-19.

The Firm has organised a central team to continue to consider what steps should be taken around the globe to protect our employees, prepare our businesses, and serve our clients and the communities where we live and work. In addition, teams across functions, businesses and regions continue to meet regularly to understand the global situation and to ensure any emerging developments relating to the well-being of our employees or the resiliency of our businesses are addressed quickly. Our businesses remain fully operational, and management across the firm continue to monitor key operational metrics.

The strength and proficiency of the Firmwide resiliency programme has played an integral role in maintaining the Firm's business operations during and after various events.

Payment fraud risk

Payment fraud risk is the risk of external and internal parties unlawfully obtaining personal monetary benefit through misdirected or otherwise improper payment. The risk of payment fraud remains at a heightened level across the industry. The complexities of these incidents and the strategies used by perpetrators continue to evolve. Under the Payments Control Program, methods are developed for managing the risk, implementing controls, and providing employee and client education and awareness trainings. The Firm's monitoring of customer behaviour is periodically evaluated and enhanced in an effort to detect and mitigate new strategies implemented by fraud perpetrators.

Third-party outsourcing risk

The Firm's Third-Party Oversight ("TPO") and Inter-affiliates Oversight ("IAO") framework assist the lines of business and Corporate in selecting, documenting, onboarding, monitoring and managing their supplier relationships including services provided by affiliates. The objective of the TPO framework is to hold suppliers to a high level of operational performance and to mitigate key risks including data loss and business disruption. The Firm's TPO and IAO frameworks continuously evolve to ensure ongoing compliance with any new or changed regulatory requirements, including the European Banking Authority ("EBA") Guidelines (EBA/GL/2019/02), on outsourcing. The Corporate Third-Party Oversight group is responsible for Firmwide training, monitoring, reporting and standards.

Risk management (continued)

Compliance risk

Compliance risk, a subcategory of operational risk, is the risk of failing to comply with laws, rules, regulations or codes of conduct and standards of self-regulatory organisations applicable to the business activities of the Firm.

Each LOB and Corporate within the Company holds primary ownership and accountability for managing compliance risks. The Firm's Compliance Organisation ("Compliance"), which is independent of the line of business, works closely with senior management to provide independent review, monitoring and oversight of business operations with a focus on compliance with the regulatory obligations applicable to the offering of the Firm's products and services to clients and customers.

These compliance risks relate to a wide variety of legal and regulatory obligations, depending on the LOB and the jurisdiction, and include those related to products and services, relationships and interactions with clients and customers, and employee activities. For example, compliance risks include those associated with anti-money laundering compliance, trading activities, market conduct, and complying with the rules and regulations related to the offering of products and services across jurisdictional borders. Compliance risk is also inherent in the Firm's activities, including a failure to exercise an applicable standard of care, to act in the best interest of clients and customers or to treat clients and customers fairly.

Other functions provide oversight of significant regulatory obligations that are specific to their respective areas of responsibility.

CCOR Management implements policies and standards designed to govern, identify, measure, monitor and test, manage, and report compliance risk.

Governance and oversight

Compliance is led by the Firm's Chief Compliance Officer ("CCO") who reports to the Firm's CRO. The regional CCOs, including the EMEA CCO, are part of this structure. The Firm maintains oversight and coordination of its compliance risk through the implementation of the CCOR Risk Management Framework. At a Company level, in the UK the regional CCO is a member of the EMEA Management Committee and the UK Audit & Compliance Committee.

The Firm has a Code of Conduct ("Code") that sets out the Firm's expectation that employees will conduct themselves with integrity at all times and provides the principles that govern employee conduct with clients, customers, shareholders and one another, as well as with the markets and communities in which the Firm does business. The Code requires employees to promptly report any known or suspected violation of the Code, any internal Firm policy, or any law or regulation applicable to the Firm's business. It also requires employees to report any illegal conduct, or conduct that violates the underlying principles of the Code, by any of the Firm's employees, customers, suppliers, contract workers, business partners, or agents.

All newly hired employees are assigned Code training and current employees are periodically assigned Code training on an ongoing basis. Employees are required to affirm their compliance with the Code periodically. Employees can report any potential or actual violations of the Code through the Code Reporting Hotline by phone or the internet. It is administered by an outside service provider. The Code prohibits retaliation against anyone who raises an issue or concern in good faith.

Conduct risk

Conduct risk, a subcategory of operational risk, is the risk that any action or inaction by an employee or employees could lead to unfair client or customer outcomes, impact the integrity of the markets in which the Firm operates, or compromise the Firm's reputation.

Overview

Each LOB and Corporate is accountable for identifying and managing its conduct risk to provide appropriate engagement, ownership and sustainability of a culture consistent with the Firm's How We Do Business Principles (the "Principles"). The Principles serve as a guide for how employees are expected to conduct themselves. With the Principles serving as a guide, the Firm's Code sets out the Firm's expectations for each employee and provides information and resources to help employees conduct business ethically and in compliance with the law everywhere the Firm operates. For further discussion of the Code, refer to Compliance Risk Management.

Governance and oversight

The Conduct Risk Program is governed by the CCOR Management policy, which establishes the framework for governance, identification, measurement, monitoring and testing, management and reporting conduct risk in the Firm. The Conduct Risk Steering Committee (CRSC) provides oversight of the Firm's conduct initiatives to develop a more holistic view of conduct risks and to connect key programs across the Firm in order to identify opportunities and emerging areas of focus. Each committee of the Board oversees conduct risks within its scope of responsibilities, and the CRSC may escalate to such committees as appropriate. Conduct risk management encompasses various aspects of people management practices throughout the employee life cycle, including recruiting, onboarding, training and development, performance management, promotion and compensation processes. Each LOB, Treasury and CIO, and designated corporate functions completes an assessment of conduct risk periodically, reviews metrics and issues which may involve conduct risk, and provides business conduct training as appropriate.

Risk management (continued)

Legal risk

Legal risk is the risk of loss primarily caused by the actual or alleged failure to meet legal obligations that arise from the rule of law in jurisdictions in which the Firm and the Company operates, agreements with clients and customers, and products and services offered by the Company and the Firm.

Overview

The global Legal function ("Legal") provides legal services and advice to the Company and the Firm. Legal is responsible for managing the Firm's exposure to legal risk by:

- Managing actual and potential litigation and enforcement matters, including internal reviews and investigations related to such matters;
- Advising on products and services, including contract negotiation and documentation;
- Advising on offering and marketing documents and new business initiatives;
- Managing dispute resolution;
- Interpreting existing laws, rules and regulations, and advising on changes thereto;
- Advising on advocacy in connection with contemplated and proposed laws, rules and regulations; and
- Providing legal advice to the LOBs, inclusive of LOB aligned Operations, Technology and Oversight & Controls (the "first line of defence"), Risk Management and Compliance (the "second line of defence"), and the Internal Audit function (the "third line of defence").

Legal selects, engages and manages outside counsel for the Firm on all matters in which outside counsel is engaged. In addition, Legal advises the Firm's Conflicts Office which reviews the Firm's wholesale transactions that may have the potential to create conflicts of interest for the Firm.

Governance and oversight

The Firm's General Counsel reports to the CEO and is a member of the Operating Committee, the Firmwide Risk Committee and the Firmwide Control Committee. The Firm's General Counsel and other members of Legal report on significant legal matters to the Firm's Board of Directors and periodically to the Audit Committee. Each region, including EMEA, has a General Counsel who is responsible for managing legal risk across all lines of business and functions in the region. Legal serves on and advises various committees (including new business initiative and reputation risk committees) and advises the Firm's LOBs and Corporate on potential reputation risk issues.

Model risk

Estimations and Model risk is the potential for adverse consequences from decisions based on incorrect or misused estimation outputs.

Risk profile

The model risk profile depends on which models are used and their respective purposes such as valuation of derivatives and capital calculations. The model risk will primarily increase according to the tiering of the model: the lower the tier the higher the models risk, with Tier 1 posing the highest risk and Tier 4 the lowest. As described below in more detail, this is because tiering attempts to captures the complexity of the models used, the exposure to each model, and the reliance placed on model output. Model risk will also increase as issues are identified regarding the model in use.

Risk management objectives

The model risk management objectives are to identify, monitor, measure where possible and manage model risk as well as defining model risk policies and procedures including the following:

- Robust review of models in order to identify model risks
- Ensure compensating controls are in place where necessary;
- Perform ongoing performance monitoring of models to ensure that they continue to perform throughout their life; and
- Ensure all models are adequately documented and tested.

Risk management (continued)

Model risk (continued)

Approach to risk management

Under the Firm's Estimation and Model Risk Management policy, the Model Risk function reviews and approves new models, as well as material changes to existing models, prior to implementation in the operating environment. In certain circumstances exceptions may be granted to the Firm's policy to allow a model to be used prior to review or approval. The Model Risk function may also require the user to take appropriate actions to mitigate the model risk if it is to be used in the interim. These actions will depend on the model and may include, for example, limitation of trading activity.

Models are tiered based on an internal standard according to their complexity, the exposure associated with the model and the Firm's reliance on the model. This tiering is subject to the approval of the Model Risk function. In its review of a model, the Model Risk function considers whether the model is suitable for the specific purposes for which it will be used. When reviewing a model, the Model Risk function analyses and challenges the model methodology and the reasonableness of model assumptions and may perform or require additional testing, including back-testing of model outcomes. Model reviews are approved by the appropriate level of management within the Model Risk function based on the relevant model tier.

A model review will end up with one of three outcomes: "Approved," "Allowed with Compensating Controls ("AwCC")," or "Disapproved." An Approved conclusion will be granted to models that are conceptually sound and that, in the opinion of the Model Risk function, do not have critical issues affecting a broad range of products or usage segments. Models with critical issues that relate to a large portion of the model's intended scope will not be approved. There are two types of Non-Approval outcomes: "AwCC" and "Disapproved." "AwCC" will be granted to models with critical importance issues that relate to the model as a whole, or to an unacceptably large portion of the products or segments within the model's intended scope, but which are nevertheless needed for business activities and that, with the appropriate compensating controls, can produce acceptable and (where appropriate) conservative results. "Disapproved" will be assigned to models that are not approvable because the model does not produce acceptable results, and the model is not necessary for ongoing use. If the model is in use, the model user must make immediate plans to cease the use of the model in the near term.

Reputation risk

Reputation risk is the risk that an action or inaction may negatively impact the Firm's integrity and reduce confidence in the Firm's competence held by various constituents, including clients, counterparties, customers, investors, regulators, employees, communities or the broader public.

Organisation and management

Reputation Risk Management is an independent risk management function that establishes the governance framework for managing reputation risk across the Firm. As reputation risk is inherently difficult to identify, manage, and quantify, an independent reputation risk management governance function is critical.

The Firm's reputation risk management function includes the following activities:

- Establishing a Firmwide Reputation Risk Governance policy and standards consistent with the reputation risk framework
- Managing the governance infrastructure and processes that support consistent identification, escalation, management and monitoring of reputation risk issues Firmwide; and
- Providing guidance to LOB Reputation Risk Offices ("RRO"), as appropriate.

The types of events that give rise to reputation risk are broad and could be introduced in various ways, including by the Firm's employees and the clients, customers and counterparties with which the Firm does business. These events could result in financial losses, litigation and regulatory fines, as well as other damages to the Firm.

Governance and oversight

The Firm's Reputation Risk Governance policy establishes the principles for managing reputation risk for the Firm. It is the responsibility of employees in each LOB and Corporate to consider the reputation of the Firm when deciding whether to offer a new product, engage in a transaction or client relationship, enter a new jurisdiction, initiate a business process or other matters. Increasingly, sustainability, social responsibility and environmental impacts are important considerations in assessing the Firm's reputation risk, and are considered as part of reputation risk governance.

Annual updates are provided to the EMEA Risk Committee ("ERC") on matters reviewed by the EMEA CIB RRC.

Reputation risk issues deemed material are escalated as appropriate.

Risk management (continued)

Climate-related financial risk

Overview

Climate driven changes could have a material adverse impact on asset values and the financial performance of JPMorgan Chase's businesses, and those of its clients and customers.

The Firm and the Company operate in regions, countries and communities where its businesses, and the activities of its clients and customers, could be disrupted by climate change. Potential physical effects from climate change may include:

- altered distribution and intensity of rainfall
- prolonged droughts or flooding
- increased frequency of wildfires
- rising sea levels
- rising heat index

In addition, these physical effects may prompt changes in regulations or consumer preferences which in turn could have negative consequences for the business models of the Firm and the Company's clients.

These climate driven changes could manifest as a number of risks to the Firm and the Company, including the following:

- Credit and Investment - pressure on the expense base of those companies that operate in carbon-intensive sectors could lead to credit or investment losses for clients or the Firm

- Operational - property damage or business interruption for clients and customers in impacted areas

Governance and oversight

The Firm is developing an approach to initially identify and assess the financial risks from climate change, which can also be leveraged at Company level. A multi-year working plan was approved by the board of the Company in 2019, while the Company has also established internal Senior Manager responsibility for the financial risks from climate change.

The Firm additionally published its first report on its approach toward managing climate-related risks and capitalizing on the opportunities that arise through a transition to a lower carbon economy. This report was informed by the recommendations of the Task Force on Climate-related Financial Disclosures and is available on our website.

The Firm and Company continue to refine their approach to assessing climate-related risks, in part because of the expectation that climate impacts will continue to emerge and evolve over time.

Critical accounting estimates

The Company's accounting policies and use of estimates are integral to understanding its reported results. The Company's most complex accounting estimates require management's judgement to ascertain the appropriate carrying value of assets and liabilities. The Firm and the Company has established policies and control procedures intended to ensure that estimation methods, including any judgements made as part of such methods, are well-controlled, independently reviewed and applied consistently from period to period. The methods used and judgements made reflect, among other factors, the nature of the assets or liabilities and the related business and risk management strategies, which may vary across the Company's businesses and portfolios. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. The Company believes its estimates for determining the carrying value of its assets and liabilities are appropriate. A description of the Company's critical accounting estimates involving significant judgements is set out in note 4 to the financial statements.

Key corporate events

On 11 November 2019, the Company distributed 100% of its investment in J.P. Morgan Europe Limited to J.P. Morgan Capital Holdings Limited at the book value of $2.1 billion.

Non-financial policies

An overview of the environmental and social, human rights, employee, anti-bribery and anti-corruption policy aspects of non-financial reporting is provided below. A detailed description of the policies and processes adopted by the Firm may be found on the JPMorgan Chase & Co. website.

Environmental and social

The Firm works with companies in nearly every sector of the economy - as well as with development finance institutions, governments, and investors - to help advance environmental and social best practices and capitalise on opportunities created by the transition to a lower-carbon, more sustainable future. The Firm also strives to promote sustainability, including energy efficiency and renewable energy, across its operations globally.

Assessing its clients' approach to, and performance on, environmental and social issues is an important component of the Firm's risk management process. The Firm's Environmental and Social Policy Framework, which is available on our website, outlines the Firm's approach to evaluating reputational and financial risks posed by environmental and social matters, including certain activities that the Firm will not finance, and sectors and activities subject to environmental and social due diligence. For additional details please refer to the Risk Management section of the report (page 37).

In February 2020, the Firm announced additional steps in its initiatives to address climate change and further promote sustainable development by committing to facilitate $200 billion in financing in 2020 that will align with the objectives of the United Nations Sustainable Development Goals. This new commitment includes $50 billion in financing for green initiatives. The new commitment is intended to address a broader set of challenges in the developing world and developed countries where social and economic development gaps persist. Across the Firm's buildings and retail branches globally, sustainability efforts focus on reducing energy use and greenhouse gas ("GHG") emissions. In 2017, the Firm established a goal to source renewable energy for 100% of its global power needs by 2020.

The Firm discloses relevant data and metrics on its scope 1, 2 and 3 GHG emissions and energy consumption in its Environmental, Social, and Governance Report, which is published annually and available at www.jpmorganchase.com/esg.

The Company supports the Firm's efforts in achieving established targets on environmental and social matters.

Human Rights

The Firm supports fundamental principles of human rights across all lines of business and in each region of the world in which it operates. The Firm believes it is the role of government in every country to protect human rights, and that the Firm has a role to play in promoting respect for human rights.

The Firm's respect for the protection and preservation of human rights is guided by the principles set forth in the United Nations Universal Declaration of Human Rights. Further, the Firm acknowledges the United Nations Guiding Principles on Business and Human Rights as the recognised framework for corporations to respect human rights in their own operations and through business relationships.

To view the Firms' Human Rights Statement, including the UK Modern Slavery Act Group Statement, please visit https://www.jpmorganchase.com/corporate/About-JPMC/ab-human-rights.htm.

Non-financial policies (continued)

Corporate employee policy

The Company is committed to providing equal opportunity for all persons without discrimination on the basis of race, colour, religion, sex, national origin, age, disability, veteran status, marital status, sexual orientation or any other protected status in accordance with applicable law. This policy of equal opportunity applies to all employment practices including, but not limited to recruitment, employment, promotion, training, benefits and compensation. Where existing employees become disabled, the Company makes reasonable adjustments in accordance with applicable law.

Employee consultation has continued at all levels. Communication with all employees continues through the intranet and other forums. Reporting on the financial and economic performance of their business units enables employees to be made aware of this information.

The Firm operates an employee share scheme for all eligible employees, including those of the Company, to acquire a proprietary and vested interest in the growth and performance of the Firm.

Anti-bribery and Anti-corruption

The Firm has zero tolerance for bribery and corruption, and is deeply committed to participating in international efforts to combat corruption. The Firm has established an Anti-Corruption Policy that seeks to promote ethical business practices and requires compliance with applicable anti-corruption laws and regulation. This Anti-Corruption Policy ("the Policy") is referenced in the Firm's publicly available Code of Conduct, and is applicable to the Company.

The Firm has identified the key areas of corruption-related risk as including:

- the giving or receiving of anything of value
- third parties acting on the Firm's behalf; and
- transactions entered into by the Firm or by funds or accounts controlled or managed by the Firm

The Policy therefore prohibits offering or giving anything of value (including gifts, hospitality, travel, employment, and work experience) to-and soliciting or accepting anything of value from-anyone for a corrupt purpose, such as improper payments or benefits to government officials or private parties for a business advantage. The Policy further prohibits making facilitation payments to cause a government official to perform or expedite performance of a routine duty. Other key features of the Policy include requirements to:

- Obtain Compliance review and approval before offering or giving anything of value to government officials (subject to certain thresholds relating to gifts and business hospitality)
- Keep accurate books, records, and accounts that relate to the business of the Firm, its clients, suppliers, and other partners
- Conduct due diligence and oversight of intermediaries/agents, joint venture partners, and entities over which the Firm has or may obtain control or influence
- Report potential corruption-related issues (including through the Code Reporting Hotline), with a prohibition on retaliation against those who make good faith reports

Any violation of the Policy may result in disciplinary action up to and including dismissal.

J.P. MORGAN SECURITIES PLC
Strategic report (continued)

Non-financial policies (continued)

Anti-bribery and Anti-corruption (continued)

The Firm's Anti-Corruption Compliance Program ("the Program") is reasonably designed to implement the Policy's requirements, as well as identify, manage, and mitigate the risk of non-compliance with those requirements. Key components of the Program include:

- A governance structure managed by anti-corruption professionals with senior management oversight
- Training and awareness activities
- Monitoring and testing for compliance
- Periodic assessment of corruption risks and control effectiveness
- Protocols for managing and reporting material issues

The Strategic Report on pages 2 - 40 was approved by the Board of Directors on 22 April 2020.

Viswas Raghavan
Chief Executive Officer
23 April 2020

London

J.P. MORGAN SECURITIES PLC
Directors' report

The directors present their report and the audited financial statements of J.P. Morgan Securities plc (the "Company") for the year ended 31 December 2019. The Company is part of JPMorgan Chase & Co. group (together with its subsidiaries, "JPMorgan Chase" or the "Firm"). The registered number of the Company is 02711006.

Results and dividends

The results for the year are set out on page 62 and show the Company's profit for the financial year after taxation is $2,041 million (2018: $3,370 million).

No dividend was paid or proposed for 2019 (2018: nil).

On the 11 November 2019, the Company distributed 100% of its investment in J. P. Morgan Europe Limited to J.P. Morgan Capital Holdings Limited at the book value of $2.1 billion via dividend in specie.

Post balance sheet events

Dividends

The Company paid a dividend of $250 million to J.P. Morgan Capital Holdings Limited ($193 dividend per share) on 9 April 2020.

Other

Following the outbreak of the COVID-19 pandemic in early 2020, the Company and the Firm are monitoring the development of the pandemic and evaluating its impact on the financial position and operating results of the Company. As at the date on which this set of financial statements were authorised for issue as the situation is ongoing and eventual outcome unknown, the Company cannot quantify the impact on the financial position, operations or capital position as a result of the COVID-19 pandemic. The Company does not currently anticipate a significant reduction in their capital and liquidity positions over the coming year. For more detail on Firmwide measures refer to operational risk (pages 31 - 33).

Financial risk management

Please refer to the Strategic report for details on financial risk management.

Branches

The Company continues to operate a number of overseas European Union ("EU") branches and a Swiss branch.

Other matters

HM Treasury adopted the requirements set out under Capital Requirements Directive IV ("CRD IV") and issued the Capital Requirements Country-by-Country Reporting Regulations 2013. The legislation requires the Company to publish additional information, in respect of the year ended 31 December 2019, by 31 December 2020. This information will be available at the time on the JPMorgan Chase website: https://jpmorganchaseco.gcs-web.com/financial-information/european-union-eu-disclosures-country.

Refer to the Strategic report for future outlook and corporate employee policy.

Directors

The directors of the Company who served during the year and up to the date of signing the financial statements were as follows:

Sir Winfried Bischoff	Chairman & Non-Executive Director
Laban Jackson	Non-Executive Director
Scott Moeller	Non-Executive Director
Jane Moran	Non-Executive Director
Clive Adamson	Non-Executive Director (appointed 30 January 2019)
Monique Shivanandan	Non-Executive Director (resigned 30 April 2019)
Viswas Raghavan	Director & Chief Executive Officer
Andrew Cox	Director & Chief Risk Officer
Anna Dunn	Director & Chief Financial Officer (appointed 26 February 2019)
Elena Korablina	Director & Chief Financial Officer (resigned 26 February 2019)
Mark Garvin	Director (resigned 30 April 2019)
Julia Meazzo	Director
Daniel Pinto	Director
Jason Sippel	Director

Directors' interests

None of the directors have any beneficial interest in the Company. The Company is a subsidiary of a company incorporated in England and Wales. The ultimate holding company is a body corporate incorporated outside England and Wales. The directors are not required to notify the Company of any interests in shares of that or any other body incorporated outside England and Wales.

Statement of directors' responsibilities in respect of the financial statements

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", 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 affairs of the company and of the profit or loss of the company for that period.

In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable United Kingdom Accounting Standards, comprising FRS101 have been followed, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The directors are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006.

J.P. MORGAN SECURITIES PLC
Directors' report (continued)

Directors' confirmations

In the case of each director in office at the date the Directors' Report is approved:

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

Qualifying third party indemnity provisions

An indemnity is provided to the directors of the Company under the by-laws of JPMorgan Chase against liabilities and associated costs which they could incur in the course of their duties to the Company. The indemnity was in force during the financial year and also at the date of approval of the financial statements and a copy of the by-laws of JPMorgan Chase & Co. is kept at the registered office of the Company.

Section 172(1) Companies Act 2006 Statement

Section 172(1) Companies Act 2006 Statement is discussed in the strategic report under the heading "Section 172(1) Companies Act 2006 Statement".

Company secretary

The secretaries of the Company who served during the year were as follows:

Abimbola Adesanya (appointed 1 January 2019)
J.P. Morgan Secretaries (UK) Limited

Registered address

25 Bank Street
Canary Wharf
London
E14 5JP
England

Independent auditors

Resolutions to reappoint PricewaterhouseCoopers LLP as auditors of the Company and to authorise the directors to set the auditors' remuneration will be proposed at the annual general meeting.

Mandatory Audit Firm Rotation

EU legislation in the form of the Statutory Audit Regulation and Directive came into force in June 2016, and requires Mandatory Audit Firm Rotation for Public Interest Entities after a certain period of time. In accordance with the EU legislation, the Company conducted the Mandatory Audit Firm re-tender in 2019 and and have selected to re-appoint PricewaterhouseCoopers LLP as the Statutory Auditor for the 31 December 2021 year-end audit.

The Directors Report on pages 41 - 43 was approved by the Board of Directors on 22 April 2020.

Sir Winfried Bischoff
Chairman and Non Executive Director

23 April 2020

London

J.P. MORGAN SECURITIES PLC
Chairman's Statement

Overview

During the year, operational resilience, resolvability, regulatory reporting, LIBOR transition, climate change risk, cyber security and Brexit planning were key focuses for the Company. The Board took an active role in discussing the progress being made under the LIBOR transition program and the challenges associated with transitioning to the preferred alternative. The Board also periodically engaged on other thematic issues particularly those with regulatory focus to enable it to oversee and monitor developments.

The central theme at our annual Board Strategy day this year was climate change, its challenges and risks, management proposals covering new areas of activity and wider aspects and requirements of technology, including cyber security. These issues will continue to be at the forefront of our future planning as we develop and implement our strategy. Also included in our discussion at the Strategy day were emerging risks and the Firm's digital agenda.

The Board remains committed to ensuring that the Group's culture and core values are embedded throughout the Company. As part of this commitment, during 2019 the non-executive directors continued with their informal employee engagement across the Corporate and Investment Bank through joint breakfast sessions, skip-level sessions and individual meetings in order to gain an understanding of how the Group's culture is filtering through the Company. The Board also monitors conduct issues via its Risk Committee, receives regular conduct updates at its meetings and monitors its robust Whistleblowing framework.

The Board, in all its deliberations, ensured that the Company complied with the requirements of section 172 of the Companies Act 2006 by promoting the success of the Company and its stakeholders as set out in section 172(1). The Company's statement of corporate governance arrangements, set out on pages 46 - 56, provides further information on how this was done in practice.

Outlook

Looking ahead to the immediate near term, COVID-19 global outbreak contingency planning is a key area of focus for the Board and it goes without saying these are unprecedented and challenging times for everyone as the Firm does everything it can to provide its employees and workers with the safest possible work environment whilst continuing to provide the vital services to clients. The Firm will continue to monitor the situation closely and work with all its stakeholders to manage the impact of COVID-19 and the resulting market volatility. The Board will continue to focus on other areas including the regulatory environment, climate change, emerging risks, diversity and board succession planning in 2020. We are fully supported in these areas by the Company's Risk Committee, the UK Audit & Compliance Committee, the UK Remuneration Committee, the Company's Nomination Committee and the EMEA Management Committee to all of whose members I want to express my gratitude for their judgement and valuable work.

Brexit planning will also continue to be an area of focus for the Board in 2020. We have put in place suitable arrangements to ensure that our clients continue to be served with as little disruption as possible after the transition period which is currently due to come to an end on 31 December 2020.

Board composition and succession planning

During the year, as part of succession planning the Board and its Nomination Committee have continued to review the Board's skills matrix to ensure the right balance of skills, experience and background. As part of our and the individuals' succession plans, Ms Elena Korablina stepped down from the Board on 26th February 2019, Ms Monique Shivanandan on 30th April 2019 and Mr Mark Garvin on 30th April 2019. I want to use this opportunity to express my and the Board's thanks to Elena, Monique and Mark for their contributions to the Board deliberations during their tenure as directors of the Company.

Looking ahead, Mr Laban Jackson informed the Board sometime ago of his intention to retire as a director of the Company and as chair of the UK Audit and Compliance Committee during 2020. In view of this, Mr Timothy Flynn, like Mr. Jackson a director of the ultimate holding company in New York, JPMorgan Chase & Co., will join the Board as a non-executive director, subject to regulatory approval. He brings with him a wealth of business experience which adds to and complements the balance of skills, expertise and experience on the Board.

As for myself, I have informed the Board of my intention to step down as Board chair in the next twelve months while ensuring sufficient time for a smooth handover. The process to identify my successor is in progress.

I want to use this opportunity to express my and the Board's thanks to Labe for his contributions to our deliberations, for his business judgement and his commitment over the past ten years.

The Board, through its Nomination Committee, will retain its focus on diversity as it develops its succession plans for both executive and non-executive directors for the future.

J.P. MORGAN SECURITIES PLC
Chairman's Statement

Board performance and evaluation

The annual Board effectiveness review for the year ending 31st December 2018 was carried out with the assistance of the Company Secretariat. The findings overall were positive and helpful and enhancements have been made to the areas highlighted.

The annual Board effectiveness review for the year ending 31st December 2019 has been deferred until the end of 2020 in view of the planned change of Board Chair.

Acknowledgement

I would like to thank my fellow Board members, the management, and our employees for their continued commitment, skill, dedication and engagement throughout 2019 which was a year of some uncertainty but also of progress in a number of important areas.

Sir Winfried Bischoff

Chairman

23 April 2020

J.P. MORGAN SECURITIES PLC
Governance report

Statement of Corporate Governance Arrangements

This section is the Statement of Corporate Governance Arrangements required under Part 8 of Schedule 7 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008. The content contained within the statement satisfies the requirements set out by Section 172 (1) of the Companies Act as 2006, please refer to the strategic report (page 5).

The Company does not apply a single Corporate Governance Code, but is required under the UK financial services regulatory regime to comply with a number of different regulations and regulatory expectations that relate directly or indirectly to corporate governance matters. In this Statement, the Company has highlighted the ways in which it complies with these requirements and expectations and, where appropriate, has mapped them to the Wates Corporate Governance Principles for Large Private Companies (the "Wates Principles").

The Company (or, as applicable, the JPMorgan Chase & Co. group (the "Firm" or the "Group")) makes certain disclosures that include information about its governance. A list of these disclosures is at the end of this statement.

In addition, the Company is required to comply with provisions relating to its governance that do not require public disclosures to be made, including:

- EBA/ESMA Joint Guidelines on Management Body Suitability (the "Suitability Guidelines")
- EBA Guidelines on Internal Governance (the "Internal Governance Guidelines")
- The Senior Managers and Certification Regime under the Financial Services and Markets Act 2000 (the "SMCR")
- PRA Supervisory Statement on Corporate governance: Board responsibilities (SS 5/16, as updated in July 2018, the "Supervisory Statement")EBA/ESMA Joint Guidelines on Management Body Suitability (the "Suitability Guidelines")
- The principle set out in the FCA Handbook (the "FCA Principles")
- The fundamental rules set out in the PRA Rulebook (the "PRA Fundamental Rules")
- Internal Capital Adequacy Assessment Process under the PRA ICAA rules (the "ICAAP")

Strategy, leadership and culture

The Company has a Board of Directors which is accountable for overall oversight of the Company. The Board of Directors has responsibility for maintaining the safety and soundness of the Company, and for ensuring that the Company is acting within the strategy, values, standards and controls of the wider JPMorgan Chase & Co. group of companies (the "**Group**" or the "**Firm**"). (Pillar 3 disclosures under CRD IV and the Capital Requirements Regulation (EU 575/2013) *("Pillar 3 Disclosures"), Capital Requirements Directive IV (2013/36/EU, "CRD IV") governance disclosures ("CRD IV Disclosures"), Wates Principles I: Purpose; II: Balance and Diversity; III: Accountability; IV: Opportunity, Risk)*

The directors are expected to act with honesty, integrity and independence of mind in assessing and challenging senior management, and to commit enough time to the role in order to perform these duties effectively, as required by the Suitability Guidelines. *(CRD IV Disclosures; Wates Principles II: Balance and Diversity, Effectiveness)*

The Company has a Matters Reserved for the Board which requires that the Board defines, oversees and is accountable for the implementation of governance arrangements that ensure effective and prudent management. This includes requirements that the Board will approve and oversee the Company's strategic objectives, risk strategy and internal governance, including the segregation of duties in the organisation and the prevention of conflicts of interest. *(CRD IV Disclosures, Wates Principles I: Strategy; II: Effectiveness; III: Accountability)*

The Board reserves for itself the approval of significant changes to accounting policies and practices, and the approval of annual reports and financial statements. The Board also oversees compliance with regulations. *(CRD IV Disclosures; Wates Principle III: Integrity of information)*

The Board is supported in its work by four Board Committees, whose responsibilities are delegated by the Board and described further below and by the Europe, Middle East and Africa ("EMEA") Management Committee ("EMC").

- ***UK Audit and Compliance Committee*** - The UK Audit and Compliance Committee's membership is three independent non-executive directors of the Company, chaired by Mr Laban Jackson. The committee meets at least four times a year (in 2019, five times). Its purpose, delegated by the Board, includes oversight of the integrity of the financial statements; monitoring and reviewing internal financial controls and the effectiveness of the internal audit function; making recommendations with respect to the appointment, appraisal and independence of the external auditor of the Company; and overseeing the process for non-audit services. The Company's auditors attend the committee meetings to report on the status of their audit and any findings. This enables the committee to monitor the effectiveness of the auditors during the year.

Statement of Corporate Governance Arrangements (continued)

Strategy, leadership and culture (continued)

- ***J.P. Morgan Securities plc Risk Committee*** - The Company's Risk Committee membership is three independent non-executive directors of the Company, chaired by Professor Scott Moeller. The committee meets at least four times a year (in 2019, four times). Its purpose, delegated by the Board, is to challenge and contribute to the development of the Company's risk strategy and review any significant risk decisions taken, while aligning the risk appetite of the Company to that of the Group. The committee's responsibilities include oversight of management's exercise of its responsibility to assess and manage the Company's key risks; an effective system of controls to evaluate and control such risks; capital and liquidity planning and analysis; and an effective risk management function.

- ***J.P. Morgan Securities plc Nomination Committee*** - The committee is made up of three independent non-executive directors of the Company, chaired by Sir Winfried Bischoff. The committee meets at least two times a year (in 2019, three times). Its purpose, delegated by the Board, is to lead the process for Board appointments and to identify and nominate candidates to the Board, having considered the skills, knowledge, experience and diversity of the Board. It is also responsible for succession planning.

- ***UK Remuneration Committee*** - The committee consists of three independent non-executives, chaired by Sir Winfried Bischoff. It meets at least two times a year (in 2019, twice). Its purpose, delegated by the Board, is oversight of compliance by the Company with UK and EU remuneration regulations.

Board composition, suitability and effectiveness

In selecting candidates for director of the Board, the Board looks for individuals with strong personal attributes, diverse backgrounds and demonstrated knowledge, skills and expertise in one or more disciplines relevant to the Company's business. The goal is to have a Board consisting of individuals with a combination of skills, experience and personal qualities that will well serve it, its committees, the JPMorgan Chase group and its shareholders. *(CRD IV Disclosures; Wates Principle II: Balance and Diversity, Size and Structure).*

In 2014 the JPMorgan Chase group set an internal target to achieve 30% representation of women on its boards in EMEA. The Company has formally adopted this target in a diversity statement approved by the Board and included in the terms of reference of its Nominations Committee. At 31 December 2019, female directors represented 27% of the Board. In addition to gender diversity, the statement addresses the need to consider other diverse attributes, including race, educational background and geographical provenance, in selecting Board members, as required by the Suitability Guidelines. *(Gender Diversity Boards Disclosure; Wates Principle II: Balance and Diversity).*

The role of the chairman and the chief executive officer are held by different individuals, as expected by the PRA under the Supervisory Statement. *(CRD IV Disclosures; Wates Principle II: Chair).*

As required by the Suitability Guidelines and expected by the PRA under the Supervisory Statement, the composition and suitability of the Board and the suitability of its members are regularly reviewed, and any resulting recommendations are considered and, where approved, implemented. The Company has appointed five independent non-executive directors to oversee and challenge the executive management. *(Suitability Guidelines; Supervisory Statement; Wates Principle II: Balance and Diversity, Size and Structure).*

Board composition, suitability and effectiveness (continued)

The current directors of the Board are:

Sir Winfried Bischoff	Independent Non-Executive Chairman of J.P. Morgan Securities plc, of its Nomination Committee and the UK Remuneration Committee. Member of the Risk Committee. Member of International Advisory Board, Akbank TAS, Turkey
Laban Jackson	Independent Non-Executive Director and Chairman of the UK Audit and Compliance Committee and member of the UK Remuneration Committee. Director of JPMorgan Chase & Co. and member of the JPMorgan Chase & Co. Audit Committee. Chairman of Clear Creek Properties Inc.
Timothy Flynn (subject to regulatory approval)	Director of JPMorgan Chase & Co. and member of the JPMorgan Chase & Co. Audit Committee Chair of Public Responsibility Committee and Member of Risk Committee. Non-Executive Director, Chair of Audit Committee and member of Technology Committee Wal-Mart; Non-Executive Director, Chair of Compensation Committee and member of Safety Committee Alcoa Corporation; Non-Executive Director and member of Compensation Committee United Healthcare Group
Professor Scott Moeller	Independent Non-Executive Director and Chairman of the Risk Committee; Member of the Nomination Committee. Director, M&A Research Centre, Cass Business School Non-Executive Deputy Chairman, Aufsichtsrat (Supervisory Board) of Investors Marketing AG
Jane Moran	Independent Non-Executive Director and member of the Nomination Committee and UK Audit and Compliance Committee. Chief Information Officer, Unilever plc
Clive Adamson	Independent Non-Executive Director and member of the Risk Committee and UK Audit and Compliance Committee. Non-Executive Director and Chair Board Risk and Capital Committee Prudential Assurance Company Limited. Non-Executive Director and Chair of the Board Risk Committee M&G plc. Senior Independent Director and Chair of the Audit and Risk Committee Ashmore Group plc. McKinsey & Company; Senior Advisor
Daniel Pinto	Director; Co-President and Co-Chief Operating Officer for JPMorgan Chase & Co; Chief Executive Officer of Corporate and Investment Bank
Andrew Cox	Director and Chief Risk Officer; Head of CIB Reputational Risk and Risk Executive for Underwriting and Due Diligence
Anna Dunn	Director; Chief Financial Officer, EMEA
Julia Meazzo	Director; Head of Human Resources, EMEA
Viswas Raghavan	Director and Chief Executive Officer; Chief Executive Officer, EMEA; Head of EMEA Banking and Chair EMEA Management Committee
Jason Sippel	Director; Head of Global Equities

(Suitability Guidelines; Supervisory Statement; Wates Principle II: Balance and Diversity, Size and Structure)

Executive governance

A regional governance structure has been established to allow the Board to delegate certain matters, not included in the Matters Reserved for the Board, to a governance framework. The Board monitors and periodically assesses the effectiveness of this governance framework and take appropriate steps to address any deficiencies. The Board may also delegate levels of authority to senior management, and has responsibility for providing effective oversight of these individuals. *(CRD IV Disclosures; Wates Principle III: Accountability).*

The Board delegates certain matters to a number of key regional committees, including for regional risk control and oversight. The EMEA governance framework connects legal entity, line of business and global governance structures. The key committees of relevance are the EMEA Management Committee, the EMEA Risk Committee, the EMEA Operating Committee and the EMEA Assets and Liabilities Committee. *(Pillar 3 Disclosures; Wates Principle IV: Risk).*

The Company is required under the Senior Managers and Certification Regime ("SMCR") to submit a Management Responsibilities Map to the PRA, which includes detailed descriptions of the firmwide, regional and legal entity governance committees and the delegation, reporting and escalation lines between them. This information is also included in the ICAAP submitted to the PRA by the Company's regional parent, J.P. Morgan Capital Holdings Limited. These regulatory submissions allow the PRA to review the Company's governance arrangements and facilitate an open dialogue with the PRA on the effectiveness of those arrangements. *(SMCR; ICAAP; Wates Principle III: Committees; VI: Stakeholders).*

Board and director responsibilities

In addition to their duties under the Companies Act 2006, the Company's directors have responsibilities under the SMCR. The directors who hold executive positions or who are the chair of the board or a board committee have been approved and registered as Senior Managers by the PRA and FCA. The SMCR requires that each of these directors sets out their responsibilities (including any prescribed responsibilities under SMCR) in a Statement of Responsibilities; these are then aggregated and mapped, together with the responsibilities of non-director Senior Managers, into a Management Responsibilities Map. The Statements of Responsibilities and the Management Responsibilities Map are periodically updated and filed with the regulators when any material change is made.

Non-executive directors who are not Senior Managers are notified to the regulators and are subject to certain conduct rules in the FCA Handbook and the PRA Rulebook.

The Firm has established a Corporate Governance Policy - Firmwide that sets out the expectations that the Firm has of the directors of the material entities within the Group; the policy applies to the Company. Its provisions cover, among other things, board meeting attendance and board composition. The policy seeks to establish an internal governance framework, as set out in the Internal Governance Guidelines. (SMCR; Internal Governance Guidelines; Supervisory Statement Wates Principles II, Size and Structure, Effectiveness; III: Accountability)

Risk management and long-term sustainability

Risk Management Framework

Risk is an inherent part of JPMorgan Chase's business activities. The Firm's overall objective is to manage its business, and the associated risks, in a manner that balances serving the interest of its clients, customers and investors and protects the safety and soundness of the Firm. Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm believes that effective risk management requires:

- Acceptance of responsibility, including escalation of risk issues, by all individuals within the Firm;
- Ownership of risk assessment, data and management within each line of business ("LOB") and corporate functions; and
- Firmwide structures for risk governance.

The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight (see *Remuneration* below).

The Firm's risk governance and oversight framework is managed on a Firmwide basis. The Firm has an Independent Risk Management ("IRM") function, which consists of the Risk Management and Compliance organizations. The Chief Executive Officer ("CEO") appoints, subject to approval by the Risk Committee of the Board ("Risk Committee" or "Board Committee"), the Firm's Chief Risk Officer (CRO) to lead the IRM organization and manage the risk governance framework of the Firm.

The Firm places reliance on each of its LOBs and other functional areas giving rise to risk to operate within the parameters identified by the IRM function, and within its own management-identified risk and control standards. Each LOB and Treasury and Chief Investment Office ("CIO"), inclusive of their aligned Operations, Technology and Control Management are considered the "first line of defense" and own the identification of risks, as well as the design and execution of controls, inclusive of IRM-specified controls, to manage those risks. The first line of defense is responsible for adherence to applicable laws, rules and regulations and for the implementation of the risk management structure.

The IRM function is independent of the businesses and is "the second line of defense". The IRM function sets and oversees the risk management structure for firmwide risk governance, and independently assesses and challenges the first line of defense risk management practices.

The Internal Audit function operates independently from other parts of the Firm and performs independent testing and evaluation of processes and controls across the entire enterprise as the Firm's "third line of defense". The Internal Audit Function is headed by the General Auditor, who functionally reports directly to the Audit Committee and administratively to the CEO.

In addition, there are other functions that contribute to the firmwide control environment including Finance, Human Resource and Legal. (Pillar 3 Disclosures; Wates Principle IV: Risk)

Risk management and long-term sustainability (continued)

Risk Management Organisation

The independent status of the Risk Management organisation is supported by a governance structure that provides for escalation of risk issues to senior management, the Firmwide Risk Committee, and the Board of Directors, as appropriate.

Each LOB and function owns the identification of risks, as well as the design and execution of controls, inclusive of IRM-specified controls, to manage those risks. This includes continuously identifying material risks and maintaining its respective Material Risk Inventory (MRI) which is reviewed at the LOB risk committee on a quarterly basis. Each LOB and function must establish processes to identify material risks.

LOBs and functions must establish the appropriate committee structure within their organizations, as necessary, to provide escalation channels for issues relating to both risk management governance and the risks the firm is taking.

The Firmwide Risk Committee (FRC), co-chaired by the JPMC CEO and CRO, is the firm's highest management-level risk committee. The FRC provides oversight of the risks inherent in the firm's businesses and is the recipient of topics and issues raised by its members or the Chair(s) of a subordinate committee. The escalation channel is defined within each committee's or forum's governing documents. The FRC escalates significant issues to the Board Risk Committee as appropriate.

In addition to the governance bodies described above, the firm has other forums in the Finance division and at the LOB, regional and local office levels, where risk-related topics are discussed and escalated, as necessary. The membership of these committees is comprised of senior management of the firm including representation from the LOB and various functions. These committees may have other sub-committees as deemed necessary to deliver against the escalation mandate . (Pillar 3 Disclosures; Wates Principles III: Committees; IV: Risk, Responsibilities)

Global Legal Entity Risk Governance

JPMorgan Chase utilizes Legal Entities ("LEs") around the world to implement its overall strategy. It is incumbent on lines of business to manage risk at the level of the LE and to comply with associated regulatory expectations. The Independent Risk Management function focuses on the control and management of risk and has established the Legal Entity Risk Framework to create a firmwide approach to LE risk:

- The Legal Entity Risk Forum oversees the framework as the governing body, supported by the LE Risk Framework team
- LEs are tiered based on risk, which define appropriate levels of LE risk governance and the requirement for appointment of LE Risk Managers ("LERMs") or Chief Risk Officers where required by regulatory designations)
- LERMs are accountable for the holistic oversight of risk at an entity level
- LERMs may delegate responsibility for certain tasks to Regional CRO teams
- Risk functions/stripes are responsible for setting global standards and executing legal entity requirements with respect to risk oversight

The LE Risk Forum is the governing body for the Legal Entity Risk Framework and oversees how the framework is implemented across all regions. The LE Risk Forum promotes alignment with established firmwide processes and procedures; any divergence driven by local laws and regulations is reviewed by the Forum and subsequently documented by the LE Risk Framework Team.

The LE Risk Forum exercises oversight and control of the legal entity risk management and governance standards across all regions. It is responsible for:

- Periodic review and update of LE Risk Framework and Governance documentation, as required
- Establishment, review, recommendation and consideration of exceptions to standards, guidance and procedures that relate to LE Risk governance
- Acting as a steering group to hold project leaders and participants accountable for implementation
- Reviewing and addressing matters relating to the LE Risk governance support model

Risk Management oversight of LEs is executed according to the risk profile of a LE. The risk profile of a LE is derived by applying the LE Risk Tiering methodology, the result of which will determine a LE's 'Risk Tier'. Risk Tiering comprises four categories ranging from one to four, with Risk Tier one representing the highest requirement for LE Risk governance and oversight. The tiering methodology is comprised of qualitative and quantitative elements and a different level of oversight is established for each Tier, driven by a range of internal and external risk governance requirements. The core and recommended governance standards have been created for each Tier of governance. JPMS plc has been classified as a Risk tier 1 legal entity under this framework.

Risk management and long-term sustainability (continued)

Regional Risk Governance

To complement the global line of business structure, there is a regional governance construct as below:

- The EMEA Risk Committee ("ERC") provides oversight of the risks inherent in the Firm's business conducted in EMEA or booked into EMEA entities and relevant branches as well as EMEA branches of ex-EMEA firms, focusing on Risk tier 1 legal entities including JPMSplc. Oversight of Tier 2 and 3 entities is delegated to the EMEA Risk Forum, a sub-forum of the ERC.
- The ERC is accountable to the EMC and the boards, Risk Committees and Oversight Committees of the relevant legal entities. It reports to the FRC, the HR Control Forum, in addition to the EMC and the relevant legal entity boards.
- The EMEA CRO leads the Risk Management function in the region and chairs the ERC. The EMEA CRO is a member of the EMC and meets with local regulators on a regular basis.

Whilst J.P. Morgan has established a comprehensive firmwide risk policy framework, this is supplemented as required by legal entity-specific risk policies, which are approved by the relevant entity Boards and Risk Committees. (Pillar 3 Disclosures; Wates Principle IV: Responsibilities)

Risk Appetite

The Firm's overall risk appetite is established by management taking into consideration the Firm's capital and liquidity positions, earnings power, and diversified business model. The Risk Appetite framework is a tool to measure the capacity to take risk and is expressed through qualitative factors and quantitative parameters at the Firm and/or LOB levels, including quantitative parameters on stressed net income, capital, liquidity risk, credit risk, market risk and structural interest rate risk. Performance against these parameters informs management's strategic decisions and is reported to the FRC and JPMC board Risk Committee.

The Firm's Risk Appetite framework is reviewed on an ongoing basis, and is reviewed with the FRC and JPMC board Risk Committee at least annually. The Company has its own risk appetite policy including quantitative and qualitative parameters leveraging the Firm's framework and approved annually by its Board. The ERC and the Company's Board Risk Committee review the risk appetite parameters quarterly. (Pillar 3 Disclosures; Wates Principle I: Strategy; Wates Principle IV: Opportunity, Risk, Responsibilities)

Internal Capital Adequacy Assessment Process ("ICAAP")

The Company completes an ICAAP on a periodic basis (which forms part of the ICAAP submitted to the PRA by J.P. Morgan Capital Holdings Limited), which provides management with a view of the impact of severe and unexpected events on earnings, risk-weighted assets and capital. The Company's ICAAP integrates stress testing protocols with capital planning. The process assesses the potential impact of alternative economic and business scenarios on the Company's earnings, capital resources, risk-weighted assets and balance sheet. These scenarios are articulated in terms of macroeconomic factors, which are key drivers of business results; global market shocks, which generate short-term but severe trading losses; and idiosyncratic operational risk events. The scenarios are intended to capture and stress key vulnerabilities and idiosyncratic risks facing the entities in scope. However, when defining a broad range of scenarios, realised events can always be worse. ICAAP results are reviewed by management and challenged and approved by the Company's Board. (Pillar 3 Disclosures; Wates Principle IV: Risk, Responsibilities; VI: Stakeholders)

New Business Initiatives

For new products and services, failure to identify new or changed risks may expose the Group to financial loss or harm its reputation. Accordingly the New Business Initiative Approval ("**NBIA**") policy provides a framework that governs the review and approval of new or materially changed products and services, while making sure that risks are identified, measured, monitored and controlled. LOBs are authorised to introduce new products, services and processes and are responsible for the new products and services they introduce.

Under the NBIA policy, the business is required to undertake an analysis of the economic, regulatory and legal entity capital impact of the new business, as appropriate. Signoffs for NBIAs impacting the Company include Compliance, Legal Risk, Operational Risk, Finance, Corporate Tax, Treasury, Technology and Operations. (Pillar 3 Disclosures; Wates Principle IV: Opportunity, Risk, Responsibilities)

J.P. MORGAN SECURITIES PLC
Governance report

Remuneration

Compensation Philosophy

The Firm's well established compensation philosophy provides guiding principles that drive compensation-related decision-making across all levels of the Group, including the Company. The Firm strives to clearly communicate its compensation philosophy to promote firmwide fairness and consistency.

The table below sets forth a summary of that philosophy:

Compensation philosophy	
Tying pay to performance and aligning with shareholders' interests	• In making compensation-related decisions, the Firm focuses on long-term, risk-adjusted performance (including assessment of performance by the Firm's risk and control professionals) and rewards behaviours that generate sustained value for the Firm. This means compensation should not be overly formulaic, rigid or focused on the short term.
Encouraging a shared success culture	• Teamwork should be encouraged and rewarded to foster a "shared success" culture. • Contributions should be considered across the Firm, within business units, and at an individual level when evaluating an employee's performance.
Attracting and retaining top talent	• The Firm's long-term success depends on the talents of its employees. The Firm's compensation system plays a significant role in its ability to attract, properly motivate and retain top talent. • Competitive and reasonable compensation should help attract and retain the best talent to grow and sustain the Firm's business.
Integrating risk management and compensation	• Risk management, compensation recovery, and repayment policies should be robust and disciplined enough to deter excessive risk-taking. • HR Control Forums should generate honest, fair and objective evaluations and identify individuals responsible for meaningful risk-related events and their accountability. • Recoupment policies include recovery of cash and equity compensation. • The Firm's pay practices must comply with applicable rules and regulations, both in the U.S. and worldwide.
No special perquisites and non-performance based compensation	• Compensation should be straightforward and consist primarily of cash and equity incentives. • The Firm does not have special supplemental retirement or other special benefits just for executives, nor does it have any change in control agreements, golden parachutes, merger bonuses, or other special severance benefit arrangements for executives.
Maintaining strong governance	• Strong corporate governance is fostered by independent oversight by the board of J.P. Morgan Chase & Co. of the executive compensation program, including defining the Firm's compensation philosophy, reviewing and approving the Firm's overall incentive compensation pools, and approving compensation for the Operating Committee, including the terms of compensation awards. • The Firm has a rigorous process in place to review risk,control and conduct issues at the Firm, line of business, function, and region level, which can and has led to impacts on compensation pools as well as reductions in compensation at the individual level, in addition to other employee actions.
Transparency with shareholders	• Transparency to shareholders regarding the Firm's executive compensation program is essential. In order to provide shareholders with enough information and context to assess its program and practices, and their effectiveness, the Firm discloses all material terms of its executive pay program, and any actions on the part of the Firm in response to significant events, as appropriate.

(Pillar 3 Disclosures; Wates Principle V: Setting remuneration, Policies)

Remuneration (continued)

Alignment of practices with compensation philosophy

The Group believes the effectiveness of its compensation program is dependent on the alignment of sound pay-for-performance practices with its compensation philosophy as illustrated in the table below:

Alignment of pay practices with compensation philosophy	
Principles-based compensation philosophy Provides guiding principles that drive compensation-related decision-making across all levels of the Firm.	**Pay-at-Risk** Appropriately balanced short-, medium-, and long-term incentives that are linked to long-term, sustainable value, safety and soundness.
Strong Clawback Provisions Comprehensive recovery provisions enable the Firm to cancel or reduce unvested awards and require repayment of previously paid compensation, if appropriate.	**Robust anti-hedging/anti-pledging provisions** Strict prohibition on hedging and pledging of unvested awards and unexercised stock appreciation rights for all employees, as well as on shares owned outright by Operating Committee members.
Risk, Controls and Conduct impacts pay In making pay decisions, the Firm considers material risk, controls and conduct issues and makes adjustments to compensation, when appropriate.	**Robust Shareholder Engagement** Each year, the Board of J.P. Morgan Chase & Co is provided with feedback from shareholders on a variety of topics, including the Firm's compensation programs and practices.
Competitive Benchmarking To make informed decisions on pay levels and pay practices, the Firm benchmarks itself against relevant market data.	**Responsible use of equity** The Firm manages its equity program responsibly, using less than 1% of weighted average diluted shares in 2019 for employee compensation.

(Pillar 3 Disclosures; Wates Principle V: Setting Remuneration, Policies)

Remuneration Governance

The UK RemCo, which is a committee of the Company's Board, reviews the remuneration policy applicable to the Company (the "Remuneration Policy") on an annual basis, and oversees its implementation. The UK RemCo last reviewed the Remuneration Policy in June 2019 and was satisfied with its implementation. That policy is subject to independent oversight and control by the Compensation and Management Development Committee ("CMDC"), a committee of the board of J.P. Morgan Chase & Co., the Company's ultimate parent Company. The UK RemCo held two meetings during 2019, plus its annual executive session.

The CMDC oversees the Group's compensation programs on an ongoing basis throughout the year, which enables the programs to be proactive in addressing both current and emerging developments and challenges. *(Pillar 3 Disclosures; Wates Principle V: Policies, Delegating remuneration decisions, Subsidiary companies)*

Relationships with stakeholders

The JPMC board, as a group or as a subset of one or more directors, meets periodically throughout the year with the Firm's shareholders, employees and regulators, and with non-governmental organisations, and other persons interested in the Firm's strategy, business practices, governance, culture and performance.

JPMC shareholder engagement

The Firm engages with institutional and retail shareholders, fixed-income investors, proxy advisory firms, Environmental, Social & Governance ("ESG") firms and industry thought leaders. Engagement opportunities include the Annual Investor Day, quarterly earnings calls, investor conferences, the Annual Shareholder Meeting (along with the related Proxy Statement) and the twice-yearly Shareholder Outreach Program. In addition, JPMC communicates with shareholders through its Annual Report, Securities & Exchange Commission filings, press releases, the JPMC website and the Environmental Social and Governance Reports ("ESG Report") Report *(Proxy Statement; Wates Principle VI: External impacts, Stakeholders)*

Relationships with stakeholders (continued)

Engagement with employees

The JPMorgan Chase Business Principles (the "**JPMC Business Principles**") set out the Firm's principles relating to A Great Team and Winning Culture.

The JPMC board is committed to maintaining a strong corporate culture that instils and enhances a sense of personal accountability on the part of all of the Firm's employees. In addition to discussions at Board meetings with senior management about these efforts, JPMC directors participate in meetings with employees to emphasize this commitment. These meetings include employee town halls, lines of business and leadership team events, annual senior leaders' meetings and informal sessions with members of the JPMC Operating Committee and other senior leaders. In addition, the Firm conducts a periodic Employee Opinion Survey, the results of which are shared with the Company's board for discussion and feedback is taken and actioned upon by management. (JPMC Business Principles, Proxy Statement; Wates Principles II: Balance & Diversity, VI: Workforce)

Engagement with regulators

The Company's board and senior leaders commit significant time to meeting with regulators from the UK and other countries. Frequent interaction helps the Firm learn first-hand from regulators about matters of importance to them and their expectations of the Firm. It also gives the Company's board and management a forum for keeping our regulators well-informed about the Company's performance and business practices. (Proxy Statement; Wates Principle VI: Stakeholders)

Under the FCA Principles and the PRA Fundamental Rules, a firm must deal with its regulators in an open and cooperative way, and must disclose to the FCA/PRA appropriately anything relating to the firm of which that regulator would reasonably expect notice. In adhering to this principle, the Company's directors and senior managers (under SMCR) regularly meet with the PRA and the FCA to discuss matters relating to the regulatory supervision of the Company. (FCA Handbook; PRA Rulebook; Wates Principle VI: Stakeholders)

Relationships with Customers and Suppliers

The Company is committed to always deal fairly, ethically and in good faith with its customers, suppliers, competitors, business partners, regulators and employees. Discrimination, harassment or inappropriate or abusive conduct by or against its stakeholders is not tolerated. In addition to compliance with applicable laws and regulations, the Company expects all its employees to hold themselves to the highest standards of ethical conduct and has put in place comprehensive policies and procedures to monitor culture and conduct within the organisation. Trust is essential to the organisation's business success and particular focus has been put on being a reliable steward of customers and suppliers' information, whether that information relates to financial, personal or business matters.

The Company works to achieve a competitive advantage through superior products and services, never through unethical or illegal business practices. The organisation prohibits taking unfair advantage of any of its stakeholders through manipulation, concealment, abuse of privileged or confidential information, misrepresentation of material facts or any other unfair dealings or practices. In addition, the Company has fiduciary obligations to its clients to act in their best interest and avoids or otherwise addresses through controls, disclosures or other appropriate steps, any actual or potential conflicts of interest. Accountability, transparency and integrity are the cornerstones of doing good business, which includes simplifying disclosures, products and operations, and effectively managing environmental, social and governance matters. This preserves the organisation's reputation for integrity.

In line with UK legal requirements, the Company discloses its payment practices information on a semi-annual basis (Code of Conduct; Corporate Responsibility Report; Wates Principle VI: Stakeholders)

The JPMC Business Principles set out the Firm's Focus on the Customer:

- Exceed expectations by listening to customers and anticipating their needs, making it easy for them to do business with us
- Earn trust by always focusing on customers' best interests; high-quality customers will grow along with the Company
- Give customers a good, fair deal - offer high-quality, competitively priced products and services
- Consider the full range of products and services that will fit customer needs, cross selling when appropriate
- Never allow short-term profit considerations to get in the way of doing what's right for the customer
- Use our own products - when it comes to understanding the customer, nothing beats being a customer

(JPMC Business Principles; Wates Principle VI: Stakeholders)

Relationships with stakeholders (continued)

Engagement with ESG stakeholders

The Firm engages with numerous non-governmental organizations on a diverse range of issues that are important to communities and consumers about the Firm's business. For example, through the Chase Advisory Panel program, senior executives engage with national consumer policy groups to discuss issues related to the Firm's products, policies, customer-facing practices, communications and public policy issues. The Firm also engages with organisations on environmental and social issues and provides philanthropic support to a broad range of non-profit organisations that work on issues that are important to the Firm. Management shares insights and feedback from these relationships and engagements with the JPMC board, providing the board with valuable insights to the issues that matter to the Firm's various stakeholders. This helps the Firm understand how the Firm's products and services can better serve its stakeholders and the communities in which it operates.

The Firm is committed to being transparent about how we do business and reporting on its efforts. One way the Firm does this is by publishing an annual ESG Report, which provides information on how the Firm is addressing ESG matters that it and its stakeholders view as among the most important to the Firm's business.

Engagement and transparency with the Firm's stakeholders help the Firm gain useful feedback and help us improve our governance processes. Information garnered from these meetings is shared regularly with the JPMC board and senior management. (Proxy Statement; Wates Principle VI: Stakeholders)

Engagement with the community

The Firm endeavours to promote inclusive economic growth and opportunity in communities where it operates. The Firm also works to advance environmental sustainability within its business activities and facilities. The Company's board works to support the UK involvement in those endeavours. Highlights of recent progress include:

- Purchasing renewable energy: advancing sustainability within the Firm's physical operations is an important part of global sustainability strategy. The Firm has made progress towards its commitment, established in 2017, to source renewable energy for 100% of its global power needs by 2020. This commitment builds on the Firm's long-standing efforts to reduce its carbon footprint.

- Supporting climate disclosure: the Firm participated in the Task Force for Climate-related Financial Disclosures, and in 2019 the Firm published a voluntary report about how it is addressing climate-related risks and opportunities.

- Driving inclusive growth: as announced in early 2018, the Firm will invest $1.75 billion by 2023 to drive inclusive growth in communities around the world. The firm's efforts focus on four pillars of opportunity: jobs and skills, small business expansion, neighbourhood revitalisation and financial health. In 2018, the Firm continued to open new pathways to opportunity and drive inclusive growth by leveraging the Firm's global presence, data, relationships and expertise. The Firm also announced *Advancing*Cities, a $500 million, five-year initiative to invest in solutions that bolster the long-term vitality of the world's cities and the communities within them that have not benefited equally from economic growth. Through this initiative, the Firm will deploy up to $250 million as low-cost, long-term loan capital - combining the Firm's philanthropic efforts with the lending and investing expertise of its Community Development Banking business.

In the UK we support

- demand-led training programs that help individuals, particularly those from disadvantaged backgrounds and low-income communities, to acquire the knowledge, skills and expertise necessary to obtain good-paying jobs, compete in the global economy and find new pathways to economic opportunity, for example through supporting

    - Education Endowment Foundation (EEF) to identify, evaluate and scale effective interventions that improve the attainment of Maths and English at GCSE for young people across the UK

- initiatives that promote the development and growth of micro- and small businesses to create local jobs, and increase economic opportunity and mobility, for example through supporting

    - Hatch Enterprise and Enterprise Enfield to support women in London with the necessary tools and advice required to achieve business growth, sustainability and jobs creation in their local communities

- programs that help people acquire the necessary knowledge, skills and tools required to understand their finances, how to budget to increase their assets and to increase access to financial services and coaching, increasing their economic stability, for example through supporting

- Fair Money Advice to scale their debt advice service in London to enable people from low-income backgrounds to access a full package of support, including banking, finance and advice.

(Proxy Statement; ESG Report; Corporate Responsibility Report; Wates Principle VI: Stakeholders)

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Further information

For further information on the corporate governance related disclosures made by the Company, please see

- JPMorgan Chase & Co. Business Principles: https://www.jpmorganchase.com/corporate/About-JPMC/ab-business-principles.htm
- JPMorgan Chase & Co. Annual Meeting of Shareholders Proxy Statement: https://www.jpmorganchase.com/corporate/investor-relations/document/proxy-statement2019.pdf
- Capital Requirements Directive IV (2013/36/EU, "CRD IV") governance disclosures: https://www.jpmorgan.com/jpmpdf/1320747737676.pdf.
- Pillar 3 disclosures under CRD IV and the Capital Requirements Regulation (EU 575/2013): https://jpmorganchaseco.gcs-web.com/financial-information/basel-pillar-3-us-lcr-disclosures The Company is not required to make Pillar 3 disclosures at present, but the same governance arrangements apply to the Company as are set out in the sections of the Pillar 3 Disclosures made by other group companies that are referred to in this statement.
- Gender Diversity on EMEA Boards Disclosures: https://www.jpmorgan.com/global/emea/crd4
- Environmental Social and Governance Report: https://www.jpmorganchase.com/corporate/Corporate-Responsibility/document/jpmc-cr-esg-report-2018.pdf [1]
- Corporate Responsibility Report: https://reports.jpmorganchase.com/corporate-responsibility/2018/cr-2018-home.htm [2]
- Transparency Statement under s.54 of the Modern Slavery Act 2015: https://www.jpmorganchase.com/corporate/About-JPMC/document/modern-slavery-act-2018.pdf. [3]

Sir Winfried Bischoff

Non-Executive Chairman

23 April 2020

[1] This links to the 2018 edition of the report. The 2019 report is expected to be published in May 2020
[2] This links to the Transparency Statement for 2018. The 2019 Transparency Statement is expected to be published in May 2020
[3] This links to the Transparency Statement for 2018. The 2019 Transparency Statement is expected to be published in June 2020

Independent auditors' report to the members of J.P. Morgan Securities plc

Report on the audit of the financial statements

Opinion

In our opinion, J.P. Morgan Securities plc's financial statements:

- give a true and fair view of the state of the company's affairs as at 31 December 2019 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual report (the "Annual Report"), which comprise: the balance sheet as at 31 December 2019; the income statement, the statement of comprehensive income, the statement of cash flows, the statement of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

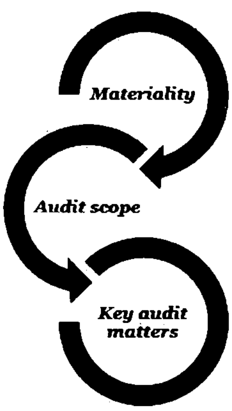
We remained independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the company.

Other than those disclosed in note 12 to the financial statements, we have provided no non-audit services to the company in the period from 1 January 2019 to 31 December 2019.

Our audit approach

Overview



- Overall materiality: $418 million (2018: $413 million), based on 1% of Tier 1 regulatory capital resources as defined by the Prudential Regulatory Authority.

- We tailored the scope of our audit to ensure that we performed sufficient work to be able to give an opinion on the financial statements as a whole. Our scoping considered all account balances and was performed to ensure that specific and appropriate audit procedures were performed over material balances.
- Due to some business process and internal controls being performed in other geographical locations, PwC network firms ("other auditors" were involved in the engagement.

- Valuation of complex financial instruments held at fair value.
- COVID-19

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the company and industry, we identified that the principal risks of non-compliance with laws and regulations related to the Prudential Regulatory Authority (PRA), Financial Conduct Authority (FCA) and United Kingdom Tax Legislation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006 and the FCA's Client Asset Sourcebook. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. The engagement team shared this risk assessment with the other auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the engagement team and/or other auditors included:

- Discussions with senior management, the UK Audit and Compliance Committee, internal audit and internal legal advisors including consideration of known or suspected instances of non – compliance with laws and regulation and fraud;
- Evaluation of entity level controls put in place by management to prevent and detect irregularities;
- Assessment of whistleblowing procedures, reports and management's investigation of such matters;
- Review of key correspondence with regulatory authorities (the PRA and the FCA) in relation to compliance and regulatory proceedings;
- Identification and testing of journal entries with specific risk characteristics, including those journal entries posted by senior management; and
- Challenge of assumptions and judgements made by senior management in their key accounting estimates, in particular in relation to fair value measurement, the expected credit loss allowance, litigation and regulatory proceedings and the valuation of defined benefit pension obligations.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the 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) identified by the auditors, including 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, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter	***How our audit addressed the key audit matter***
Valuation of complex financial instruments held at fair value The fair value of certain financial instruments is determined using valuation methods that involve a varying degree of judgement. In exercising this judgement senior management determine the most appropriate assumptions and valuation methodologies. The valuation of complex financial instruments can have greater estimation uncertainty due to the lack of observable market prices for these instruments. Within this population of financial instruments we observed the most significant judgements relate to the valuation of certain structured products and FX, interest-rate and equity derivatives. These products are non-standard and often require more judgemental valuation methodologies and market information that is not readily available.	We tested the design and operating effectiveness of the key controls supporting the valuation of financial instruments: • Assessed the bank's standardised approach documents for independent valuation by comparing them to industry practice; • Inspected documentation of the independent price verification controls, independently corroborated the market inputs and assessed the pricing sources used; • Engaged our valuation experts to review model validation and approval controls; and • Evaluated controls over data feeds and market information. Our substantive procedures included the following: • Analysed the population of financial instruments to identify those that have a heightened risk of material misstatement;

Key audit matter	*How our audit addressed the key audit matter*
Refer to Note 4 and Note 31 to the financial statements for further details of fair value measurement of financial instruments as a critical accounting estimate and judgment.	• Utilised our valuation experts to re-price a selection of instruments using our models and pricing information from independent sources where possible. Any differences were assessed to confirm the valuation was within a reasonable range; • Recalculated adjustments made to the standard model results; and • Examined collateral disputes, significant gains or losses on disposals and other events which could provide evidence about the appropriateness of the valuations. The above procedures were completed without material exception.
COVID-19 Key Audit Matter Refer to Note 37 "Post Balance Sheet Events" in the financial statements. Since the balance sheet date there has been a global pandemic with the outbreak of Coronavirus (COVID-19). During the course of the latter stages of finalisation of the financial statements, the potential impact of Coronavirus became significant and is causing widespread disruption to financial markets and normal patterns of business activity across the world, including the UK. While it is too early to estimate the financial and business impact of COVID-19, management and the Board have considered the potential implications of these events on the company's going concern assessment.	We have made enquiries and reviewed management's going concern assessment which included a summary of the current capital and liquidity position of the company. We reviewed supporting information, including the company's most recent ICAAP and ILAAP which contain the results of the company's latest stress tests. We made enquiries of management to understand the current impact of COVID-19 on the company's recent financial performance, business operations and regulatory capital and liquidity ratios. We reviewed management's disclosures in relation to COVID-19 in the financial statements. We also read the other information in the Strategic report. The results of the procedures are consistent with our reporting on going concern as set out below.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the company, the accounting processes and controls, and the industry in which it operates.

The company is a corporate and investment banking subsidiary of JPMorgan Chase & Co that provides financial services to customers worldwide. We first established an end-to-end understanding of the key processes that supported material balances, classes of transactions and disclosures within the company's financial statements. We subdivided the account balances into different business processes to ensure that the audit procedures performed were specific and appropriate to the nature of the balance and underlying business.

We then determined the type of work that needed to be performed by us in the UK, or other auditors, operating under our instruction. This reflects that certain operational processes which are critical to financial reporting are undertaken outside the UK. Where the work was performed by other auditors, we determined the level of involvement we needed to have in their audit work to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Overall materiality	$418 million (2018: $413 million).
How we determined it	1% of Tier 1 regulatory capital resources as defined by the Prudential Regulatory Authority.
Rationale for benchmark applied	The company is a regulated bank and wholly owned subsidiary of JPMorgan Chase & Co ("the Firm"). We considered the primary users of the financial statements to be the Firm, regulators and market counterparties, who are focussed on whether the company has sufficient capital resources to meet minimum regulatory requirements, fulfil its future market obligations and absorb any future losses should they arise.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above $21 million (2018: $21 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance 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 an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of 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 this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of directors' responsibilities in respect of the financial statements set out on page 42, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they 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 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 company or to cease operations, or have no realistic alternative but to do so.

Auditors' 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 auditors' 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.

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 auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

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

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the audit committee, we were appointed by the directors on 1 May 1992 to audit the financial statements for the year ended 31 December 1992 and subsequent financial periods. The period of total uninterrupted engagement is 28 years, covering the years ended 31 December 1992 to 31 December 2019. The company became a credit institution in 2011, and hence is considered to be a European Union public-interest entity from 2011 onwards.

Duncan McNab (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
23 April 2020

J.P. MORGAN SECURITIES PLC
Income statement

Year ended 31 December	Note	2019	2018
		$'000	**$'000**
Interest and similar income	7	**6,244,936**	**5,546,209**
Financial instruments at amortised cost and FVOCI		1,588,768	1,568,011
Other similar income		4,656,168	3,978,198
Interest expense and similar charges	7	**(6,736,761)**	**(5,089,067)**
Financial instruments at amortised cost		(3,881,973)	(2,699,681)
Other similar charges		(2,854,788)	(2,389,386)
Net interest (expense)/ income		**(491,825)**	**457,142**
Fee and commission income	8	3,128,187	3,448,891
Fee and commission expense		(1,170,054)	(1,021,365)
Net fee and commission income		**1,958,133**	**2,427,526**
Trading profit		5,843,310	5,113,623
Dividend income		—	2,000,000
Other income	9	16,572	—
Expected credit loss	10	18,552	27,256
Net operating income		**7,344,742**	**10,025,547**
Administrative expenses		(4,486,855)	(4,465,012)
Other impairment	22	—	(1,196,609)
Depreciation		(1,033)	(1,495)
Profit on ordinary activities before taxation	13	**2,856,854**	**4,362,431**
Tax on profit on ordinary activities	14	(815,484)	(992,844)
Profit for the financial year		**2,041,370**	**3,369,587**

The profit for the financial year resulted from continuing operations.

Statement of comprehensive income

Year ended 31 December	Note	2019	2018
		$'000	**$'000**
Profit for the financial year		**2,041,370**	**3,369,587**
Other comprehensive (expense)/income: items that will not be reclassified to profit or loss			
Actuarial (loss)/gain on pension schemes	33	(15,422)	8,892
Tax effect of movement in pension reserve	15	4,430	(3,500)
Fair value movement on loans		(10,852)	11,899
Tax effect of movement in fair value loans		306	3,165
Total other comprehensive (expense)/income		**(21,538)**	**20,456**
Total comprehensive income for the year		**2,019,832**	**3,390,043**

The notes on pages 66 - 114 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Balance sheet

31 December	Note	2019 $'000	2018 $'000
Assets			
Cash and balances at central banks		2,485,491	29,880,787
Loans and advances to banks	16	4,415,118	9,690,343
Loans and advances to customers	17	1,414,102	2,153,908
Securities purchased under agreements to resell	18	142,607,770	155,084,582
Securities borrowed	18	36,948,541	45,507,924
Financial assets at fair value through profit and loss	19	380,934,921	339,955,399
Debtors	20	88,090,591	82,800,597
Other assets	21	1,260,403	820,750
Investments in JPMorgan Chase undertakings	22	17,886	2,144,598
Tangible fixed assets		1,132	3,290
Total assets		**658,175,955**	**668,042,178**
Liabilities			
Securities sold under agreements to repurchase	18	65,604,819	91,697,552
Securities loaned	18	12,011,127	20,646,594
Financial liabilities at fair value through profit and loss	24	338,163,550	312,225,100
Financial liabilities designated at fair value through profit or loss		616,886	1,236,476
Trade creditors	25	37,924,561	55,301,485
Amounts owed to JPMorgan Chase undertakings		114,821,990	102,302,931
Other liabilities	25	32,124,549	27,727,598
Subordinated liabilities with JPMorgan Chase undertakings	26	12,000,000	12,000,000
Total liabilities		**613,267,482**	**623,137,736**
Equity			
Called-up share capital	27	12,443,530	12,443,530
Share premium account		9,950,724	9,950,724
Capital redemption reserve		4,996,040	4,996,040
Other reserves		1,756,161	1,666,788
Retained earnings		15,762,018	15,847,360
Total equity		**44,908,473**	**44,904,442**
Total liabilities and equity funds		**658,175,955**	**668,042,178**

The notes on pages 66 - 114 form an integral part of these financial statements.

The financial statements on pages 62 - 114 were approved by the Board of Directors on 22 April 2020 and signed on its behalf by:

Sir Winfried Bischoff
Chairman & Non-Executive Director
23 April 2020

Anna Dunn
Director & Chief Financial Officer
23 April 2020

J.P. MORGAN SECURITIES PLC
Statement of changes in equity

	Note	Called-up share capital	Share premium account	Capital contribution reserve	Capital redemption reserve	Pension reserve	Other reserves	Retained earnings	Total equity
		$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Balance as at 1 January 2018		**12,443,530**	**9,950,724**	**1,588,615**	**4,996,040**	**(25,057)**	**151,666**	**12,477,773**	**41,583,291**
Profit for the financial year		—	—	—	—	—	—	3,369,587	**3,369,587**
Other comprehensive income for the year:									
Movement in loans at FVOCI		—	—	—	—	—	11,899	—	**11,899**
Actuarial gain on pension schemes	33	—	—	—	—	8,892	—	—	**8,892**
Tax effect on movement in pension reserve		—	—	—	—	(3,500)	—	—	**(3,500)**
Total comprehensive income for the year		**—**	**—**	**—**	**—**	**5,392**	**11,899**	**3,369,587**	**3,386,878**
Movement in other reserves		—	—	—	—	—	(65,727)	—	**(65,727)**
Balance as at 31 December 2018		**12,443,530**	**9,950,724**	**1,588,615**	**4,996,040**	**(19,665)**	**97,838**	**15,847,360**	**44,904,442**
Profit for the financial year		—	—	—	—	—	—	2,041,370	**2,041,370**
Other comprehensive income/(expense) for the year:									
Non-cash dividend - Investment in Group undertakings		—	—	—	—	—	—	(2,126,712)	**(2,126,712)**
Movement in loans at FVOCI		—	—	—	—	—	(10,852)	—	**(10,852)**
Actuarial gain on pension schemes	33	—	—	—	—	(15,422)	—	—	**(15,422)**
Tax effect on movement in pension reserve		—	—	—	—	4,430	—	—	**4,430**
Total comprehensive income for the year		**—**	—	—	—	**(10,992)**	**(10,852)**	**(85,342)**	**(107,186)**
Movement in other reserves		—	—	—	—	—	111,217	—	**111,217**
Balance as at 31 December 2019		**12,443,530**	**9,950,724**	**1,588,615**	**4,996,040**	**(30,657)**	**198,203**	**15,762,018**	**44,908,473**

The notes on pages 66 - 114 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Statement of cash flows

Year ended 31 December	Notes	2019 $'000	2018 $'000
Cash flows from operating activities			
Cash (used in)/generated from operations	29	**(44,190,124)**	**19,006,546**
Income taxes paid		(472,243)	(663,441)
Net cash (used in)/generated from from operating activities		**(44,662,367)**	**18,343,105**
Cash flow generated from investing activities			
Disposals and purchases of tangible fixed assets		1,125	151
Net generated from investing activities		**1,125**	**151**
Cash flow from financing activities			
Change in amounts owed to JPMorgan Chase undertakings		12,519,059	(22,027,542)
Change in subordinated liabilities with JPMorgan Chase undertakings		—	12,000,000
Net cash generated from/(used in) financing activities		**12,519,059**	**(10,027,542)**
Net (decrease)/increase in cash and cash equivalents		**(32,142,183)**	**8,315,714**
Cash and cash equivalents at the beginning of the year		39,571,130	31,489,132
Exchange losses on cash and cash equivalents		(528,338)	(233,716)
Cash and cash equivalents at the end of the year		**6,900,609**	**39,571,130**
Cash and cash equivalents consist of:			
Cash and balances at central banks		2,485,491	29,880,787
Loans and advances to banks, due within three months or less		4,415,118	9,690,343
Cash and cash equivalents		**6,900,609**	**39,571,130**

The notes on pages 66 - 114 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Notes to the financial statements

1. General information

The Company is a public company limited by shares and is incorporated and domiciled in England and Wales. The Company's immediate parent undertaking is J.P. Morgan Capital Holdings Limited, which is also the parent undertaking of the smallest group in which the Company's results are consolidated. The Company's ultimate parent undertaking and controlling party is JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm"), which is incorporated in the state of Delaware in the United States of America. JPMorgan Chase & Co. is also the parent undertaking of the largest group in which the results of the Company are consolidated. The largest and smallest parent groups' consolidated financial statements can be obtained from the Company's registered office at 25 Bank Street, Canary Wharf, London, E14 5JP.

Principal activities

The Company is a principal subsidiary of the Firm in the United Kingdom ("UK"). The Company engages in international investment banking activity, including activity across Markets and Banking lines of business. Within these lines of business, its activities include underwriting government and corporate bonds, equities and other securities; arranging private placements of debt and convertible securities; trading in debt securities, equity securities, commodities, swaps and other derivatives; providing brokerage and clearing services for exchange traded future and options contracts; lending related activities and providing investment banking advisory services. The Company is a member of multiple exchanges and clearing houses, including, among others, LME Clear Limited, LCH Limited and ICE Clear Europe.

The Company is a UK bank and a EEA Capital Requirements Directive IV ("CRD IV") credit institution, legally defined as an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account.

The Company is authorised by the Prudential Regulation Authority ("PRA") and regulated by the PRA and Financial Conduct Authority ("FCA") in the UK. It has branches in Frankfurt, Paris, Milan, Madrid, Stockholm and Zurich. It has Outward Services Passports across the EEA and Outward Branch Passports for the respective branches except Zurich.

The Company is likely to lose its EU passporting rights with the expected departure of the UK from the EU, and as such the Firm has been making the necessary modifications to its legal entity structure and operations in the EU. These plans are discussed in pages 3 - 4 of this report.

2. Basis of preparation

These financial statements have been prepared in accordance with Financial Reporting Standard 101, 'Reduced Disclosure Framework' ("FRS 101"). FRS 101 applies the requirements of International Financial Reporting Standards ("IFRS") as adopted by the European Union, with reduced disclosures.

The financial statements have been prepared on a going concern basis under the historical cost convention as modified by the revaluation of certain financial assets and financial liabilities measured at fair value through profit or loss or measured at fair value through OCI, and in accordance with the Companies Act 2006 as applicable to companies using FRS 101. Reclassification of and adjustments to prior year amounts have been made to conform with current year presentations and to provide additional transparency and information on the nature of the balances in these financial statements.

The following exemptions from the requirements of IFRS as adopted by the EU have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Certain share based payment disclosures in respect of Firm equity instruments (IFRS 2 'Share-based payment' paragraphs 45(b) and 46 to 52);
- Comparative information disclosures for the following (paragraph 38 of IAS 1 'Presentation of financial statements' ("IAS 1"):
    - reconciliation of share capital (paragraph 79(a)(iv) of IAS 1);
    - reconciliation of property, plant and equipment (paragraph 73(e) of IAS 16 'Property, plant and equipment');
    - reconciliation of intangible assets (paragraph 118(e) of IAS 38 'Intangible assets');
- Statement of compliance to IFRSs - Paragraph 16, IAS 1;
- Third balance sheet on retrospective accounting policy changes, restatements, or reclassifications (paragraph 40A-D, IAS 1);
- Disclosures in relation to new or revised standards issued but not yet effective (paragraph 30 and 31, IAS 8, 'Accounting policies, changes in accounting estimates and errors');
- Key management compensation disclosures (paragraph 17, IAS 24 'Related Party Disclosures' ("IAS 24")); and
- Related party transactions with wholly owned Firm undertakings (IAS 24).

3. Accounting and reporting developments

Standards adopted during the year ended 31 December 2019

Adoption of IFRS 16

Effective 1 January 2019, the Company adopted IFRS 16 'Leases'. IFRS 16 supersedes IAS 17 'Leases' and IFRIC 4 *Determining whether an Arrangement contains a Lease* and requires, among other items, the Company to recognize lease right-of-use ("ROU") assets and lease liabilities on the balance sheet for most of its leases.

The impact on the Company has been immaterial.

4. Critical accounting estimates and judgements

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the amounts recognised in the financial statements. The nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements:

Fair value measurement

The Company carries a significant portion of its assets and liabilities at fair value on a recurring basis. Estimating fair value often requires the application of judgement. The type and level of judgement required is largely dependent on the amount of observable market information available to the Company. For instruments valued using internally developed models that use significant unobservable inputs that are classified within level 3 of the valuation hierarchy, judgements used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate model to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs - including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, including unobservable inputs used, see note 31.

For instruments classified in levels 2 and 3, management judgement must be applied to assess the appropriate level of valuation adjustments, the Company's credit-worthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. The Company manages certain portfolios of financial instruments on the basis of net open risk exposure and has elected to estimate the fair value of such portfolios on the basis of a transfer of the entire net open risk position in an orderly transaction. The judgements made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. For further discussion of valuation adjustments applied by the Company, see note 31.

The use of methodologies or assumptions different than those used by the Company could result in a different estimate of fair value at the reporting date. For a detailed discussion of the Company's valuation process and hierarchy, its determination of fair value for individual financial instruments, and the potential impact of using reasonable possible alternative assumptions for the valuations, see note 31.

5. Significant accounting policies

The following are the significant accounting policies applied in the preparation of these financial statements. These policies have been applied consistently in each of the years presented, unless otherwise stated.

5.1 Consolidation

The Company is a subsidiary undertaking of J.P. Morgan Capital Holdings Limited, a company incorporated in England and Wales and of its ultimate parent JP Morgan Chase & Co. a company incorporated in the United States of America. It is included in the consolidated financial statements of J.P. Morgan Capital Holdings Limited which are publicly available. Therefore, the Company has elected not to prepare group financial statements in accordance with the dispensation set out in Section 400 of the Companies Act 2006.

5.2 Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Taking into account the cash flows, the financing structure, including United States ("U.S.") dollar equity and inter-entity financing arrangements with JPMorgan Chase Bank N.A., U.S. dollars is considered as the functional and presentation currency of the Company.

5. Significant accounting policies (continued)

5.3 Foreign currency translation

Monetary assets and monetary liabilities in foreign currencies are translated into U.S. dollars at rates of exchange ruling on the balance sheet date. Income and expense items denominated in foreign currencies are translated into U.S. dollars at exchange rates prevailing at the date of the transactions. Any gains or losses arising on translation are taken directly to the income statement.

Non-monetary items denominated in foreign currencies that are stated at historical cost are translated into U.S. dollars at the exchange rate ruling at the date of the transaction.

5.4 Financial assets and financial liabilities

i. Recognition of financial assets and financial liabilities

The Company recognises financial assets and financial liabilities when it becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognised on the trade-date, which is the date on which the Company commits to purchase or sell an asset.

ii. Classification and measurement of financial assets and financial liabilities

On initial recognition, financial assets are classified and measured at amortised cost, fair value through other comprehensive income or fair value through profit or loss. The classification is based on both the business model for managing the financial assets and their contractual cash flow characteristics. Factors considered by the Company in determining the business model for a group of assets include past experience on how the cash flows for these assets were collected, how the assets' performance is evaluated and reported to key management personnel, how risks are assessed and managed, and how managers are compensated.

On initial recognition, financial liabilities are classified as measured at either amortised cost or fair value through profit or loss.

iii. Financial assets and financial liabilities measured at amortised cost

Financial assets are measured at amortised cost if they are held under a business model with the objective to collect contractual cash flows ("Hold to Collect") and they have contractual terms under which cash flows are solely payments of principal and interest ("SPPI"). In making the SPPI assessment, the Company considers whether the contractual cash flows are consistent with a basic lending arrangement (i.e., interest includes only consideration for the time value of money, credit risk, other basic lending risks and a profit margin that is consistent with a basic lending arrangement). Where the contractual terms introduce exposure to risk or volatility that are inconsistent with a basic lending arrangement, the related financial asset is classified and measured at fair value through profit or loss. Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest. As a result of the application of these criteria, only debt financial assets are eligible to be measured at amortised cost.

Financial assets measured at amortised cost include cash and balances at central banks, loans and advances to banks, certain loans and advances to customers, certain securities purchased under agreements to resell, debtors and accrued income that are in the Hold to Collect business model.

Financial liabilities are measured at amortised cost unless they are held for trading or a designated as measured at fair value through profit or loss. Most of the Company's financial liabilities are measured at amortised cost. Financial liabilities measured at amortised cost include certain securities sold under agreements to repurchase, trade creditors, amounts owed to JPMorgan Chase undertakings and certain other liabilities.

Financial assets and financial liabilities measured at amortised cost are initially recognised at fair value including transaction costs. The initial amount recognised is subsequently reduced for principal repayments and for accrued interest using the effective interest method. In addition, the carrying amount of financial assets is adjusted by recognising an expected credit loss allowance through the profit or loss.

The effective interest method is used to allocate interest income or interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability or a shorter period when appropriate, to the net carrying amount of the financial asset or financial liability. The effective interest rate is established on initial recognition of the financial asset or financial liability. The calculation of the effective interest rate includes all fees and commissions paid or received, transaction costs, and discounts or premiums that are an integral part of the effective interest rate. Transaction costs are incremental costs that are directly attributable to the acquisition, issuance or disposal of a financial asset or financial liability.

Gains and losses arising on the disposal of financial assets measured at amortised cost are recognised in 'trading profit' or other non interest revenue as relevant.

5. Significant accounting policies (continued)

5.4 Financial assets and financial liabilities (continued)

iv. Financial assets measured at fair value through other comprehensive income ("FVOCI")

Financial assets are measured at FVOCI if they are held under a business model with the objective of both collecting contractual cash flows and selling the financial assets ("Hold to Collect and Sell"), and they have contractual terms under which cash flows are SPPI.

Financial assets measured at FVOCI include loans and advances to customers that are held within the Company's Trade Finance and Credit Portfolio Group which are managed with the objective of both collecting contractual cash flows and realising cash flows from sales and have contractual terms that meet the SPPI criteria.

Financial assets measured at FVOCI are initially recognised at fair value, which includes direct transaction costs. The financial assets are subsequently remeasured at fair value with any changes presented in other comprehensive income ("OCI") except for changes attributable to impairment, interest income and foreign currency exchange gains and losses. Impairment losses and interest income are measured and presented in profit or loss on the same basis as financial assets measured at amortised cost (see above).

On disposal of financial assets measured at FVOCI, the cumulative gains or losses in OCI are reclassified from equity, and recognised in the income statement.

v. Financial assets and financial liabilities measured at fair value through profit or loss

Financial assets and financial liabilities are measured at fair value through profit or loss (FVTPL) if they are held for trading. Under IFRS 9, a financial asset or a financial liability is defined as "held for trading" if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term, or forms part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking or it is a derivative. However, such financial instruments are used by the Company predominantly in connection with its client-driven" market-making and/or for hedging certain assets, liabilities, positions, cash flows or anticipated transactions (i.e. risk management activities).

Financial assets and financial liabilities held for trading comprise both debt and equity securities, loans and derivatives, certain securities purchased under agreements to resell and securities borrowed, and the related are unrealised gains and losses.

In addition, certain financial assets that are not held for trading are measured at FVTPL if they do not meet the criteria to be measured at amortised cost or FVOCI. For example, if the financial assets are managed on a fair value basis, have contractual cash flows that are not SPPI or are equity securities. The Company has determined that securities purchased under agreements to resell and securities borrowed within the Corporate and Investment Banking portfolios are managed on a fair value basis, and they are therefore ineligible to be measured at amortised cost or FVOCI under IFRS 9. These financial instruments are classified as FVTPL. The Company did not elect to measure any equity instruments at FVOCI.

Financial instruments measured at FVTPL are initially recognised at fair value in the balance sheet. Transaction costs and any subsequent fair value gains or losses are recognised in profit or loss as they arise.

The Company manages cash instruments, in the form of debt and equity securities, and derivatives on a unified basis, including hedging relationships between cash securities and derivatives. Accordingly the Firm reports the gains and losses on the cash instruments and the gains and losses on the derivatives on a net basis in trading profits.

5. Significant accounting policies (continued)

5.4 Financial assets and financial liabilities (continued)

vi. Financial assets and financial liabilities designated at fair value through profit and loss

Subject to certain criteria, the Company can designate financial assets and financial liabilities to be measured at fair value through profit or loss. Designation is only possible when the financial instrument is initially recognised and cannot subsequently be reclassified. Financial assets can be designated as measured at fair value through profit or loss only if such designation eliminates or significantly reduces a measurement or recognition inconsistency. Financial liabilities can be designated as measured at fair value through profit or loss only if such designation (a) eliminates or significantly reduces a measurement or recognition inconsistency; or (b) applies to a group of financial assets, financial liabilities or both that the Company manages and evaluates on a fair value basis; or (c) relates to an instrument that contains an embedded derivative unless the embedded derivative does not significantly modify the cash flows required by the contract or when a similar hybrid instrument is considered that separation of the embedded derivative is prohibited.

Financial assets and financial liabilities that the Company designates as measured at fair value through profit or loss are recognised at fair value at initial recognition, with transaction costs being recognised in profit or loss and subsequently measured at fair value. Gains and losses on financial assets and financial liabilities designated at fair value through profit or loss are recognised in profit or loss as they arise.

The Company has designated securities sold under agreements to repurchase and securities loaned within the Company's Corporate and Investment Banking portfolios to be measured at FVTPL. These financial instruments are managed together with securities purchased under agreements to resell and securities borrowed, respectively, and the Company elected to designate them as measured at FVTPL to eliminate or significantly reduce measurement inconsistencies (i.e., an accounting mismatch) that would have otherwise been created.

Changes in the fair value of financial assets designated as measured at FVTPL are recognised immediately in trading profit or loss.

5.5 Interest income and expense

Unless a financial asset is credit-impaired, interest income is recognised by applying the effective interest method to the carrying amount of a financial asset before adjusting for any allowance for expected credit losses. If a financial asset is credit-impaired, interest income is recognised by applying the effective interest rate to the carrying amount of the financial asset including any allowance for expected credit losses.

Interest expense on financial liabilities is recognised by applying the effective interest method to the amortised cost of financial liabilities.

Interest income and expense on financial assets and financial liabilities measured at amortised cost and FVOCI are presented separately from financial instruments measured at amortised cost and FVTPL respectively.

Interest generated as a result of 'negative' interest rates is recognised gross, as interest income or interest expense.

5.6 Trading profit

Profits and losses resulting from the purchase and sale of securities and the revaluation of financial instruments are recognised in trading profit on a trade-date basis, including related transaction costs.

5.7 Impairment of financial assets and lending-related commitments

The Company recognises ECL for financial assets that are measured at amortised cost or FVOCI, and specified off-balance sheet lending-related commitments such as loan commitments and financial guarantee contracts that are in the Traditional Credit Products ("TCP") portfolios.

Provisions for ECL are recognised on initial recognition of the financial instrument based on expectations of credit losses at that time. The credit loss allowance includes ECLs for financial instruments that may default in the next 12-month period for financial instruments that have not observed a significant increase in credit risk since initial recognition ("stage 1") or over a lifetime period for financial instruments that have observed a significant increase in credit risk since initial recognition ("stage 2"). The allowance also includes lifetime ECLs for financial instruments where there is objective evidence of credit-impairment at the reporting date ("stage 3"). In determining the appropriate stage for a financial instrument, the Company applies the definition of default consistent with the Basel definition of default to maintain uniformity of the definition across the Firm.

The determination of the stage for credit losses under the ECL model is dependent on the measurement of a significant increase in credit risk ('SICR'). In determining SICR, the Company has conducted quantitative tests, which considers, but is not limited to, existing risk management indicators, credit rating changes and reasonable and supportable forward-looking information. Forward-looking information reflects a range of scenarios that incorporate macro-economic factors that are composed and monitored by JPMorgan Chase's firm-wide specialised economic forecasting team.

5. Significant accounting policies (continued)

5.7 Impairment of financial assets and lending-related commitments (continued)

The key input components for the quantification of expected credit loss through the ECL model includes the probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"). The Company seeks to efficiently and effectively leverage as much as possible existing regulatory and capital frameworks where overlap is present for IFRS 9. Differences observed between content in existing frameworks and requirements under IFRS 9 have been identified and are adjusted accordingly. The inputs to the ECL model capture historical datasets and a reasonable and supportable forecasting horizon to estimate expected credit losses.

5.8 Write-offs

Wholesale loans recognised as loans and advances to customers on the balance sheet are written off when it is highly certain that a loss has been realised. The determination of whether to recognise a write-off includes many factors, including the prioritisation of the Company's claim in bankruptcy, expectations of the workout/restructuring of the loan and valuation of the borrower's equity or the loan collateral.

All other financial assets are written off when there is no reasonable expectation of recovery and the amount of loss can be reasonably estimated or when the asset is past due for a specified period.

5.9 Fee and commission income and expense

The Company earns revenue from providing investment banking, lending and deposit-related services, brokerage services and other commissions.

Investment banking fees

Investment banking revenue includes debt and equity underwriting and advisory fees.

Underwriting fees are recognised as revenue typically upon execution of the client's transaction. Debt underwriting fees also include credit arrangement and syndication fees which are recorded as revenue after satisfying certain retention, timing and yield criteria. Advisory fees are recognised as revenue typically upon execution of the client's transaction.

Lending and deposit related fees

Lending-related fees include fees earned from loan commitments, standby letters of credit, financial guarantees, and other loan-servicing activities. Deposit related fees include fees earned in lieu of compensating balances, and fees earned from performing cash management activities and other deposit account services. Lending and deposit-related fees in this revenue category are recognised over the period in which the related service is provided.

Commissions and other fees

The Company acts as a broker, facilitating its clients' purchase and sale of securities and other financial instruments. It collects and recognises brokerage commissions as revenue upon occurrence of the client transaction. The Company reports certain costs paid to third-party clearing houses and exchanges net against commission revenue.

Fee and commissions obtained through Firm attribution agreements are recognised when the underlying contract becomes legally binding or at the agreed due date if later.

5.10 Dividend recognition

Dividend income is recognised when the right to receive payment is established. Dividends in the form of non-cash assets are recognised at their fair values by the transferee and derecognised at their book value by the transferor. Where the asset received is an investment in the share capital of an entity, the fair value is determined by the market value of the underlying net assets and businesses of the investee (refer note 5.19).

Dividend distributions are recognised in the period in which they are declared and approved.

5. Significant accounting policies (continued)

5.11 Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair values are determined by reference to observable market prices where available and reliable. Fair values of financial assets and financial liabilities are based on quoted market prices or dealer price quotations for financial instruments traded in active markets. Where market prices are unavailable, fair value is based on valuation models that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters, including but not limited to yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value.

For financial assets and liabilities held at fair value, most market parameters in the valuation model are either directly observable or are implied from instrument prices. When input values do not directly correspond to the most actively traded market parameters the model may perform numerical procedures in the pricing such as interpolation.

The Company classifies its assets and liabilities according to a hierarchy that has been established under IFRS for disclosure of fair value measurements. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3 inputs).

A financial instrument's categorisation within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Further details on fair value measurements are provided in note 31 to the financial statements.

5.12 Recognition of day one profit and loss

The Company enters into transactions where fair value is determined using valuation models that use significant unobservable inputs. Such a financial instrument is initially recognised at the transaction price, although the value obtained from the relevant valuation model may differ. The difference between the transaction price and the model value, commonly referred to as 'day one profit and loss', is not recognised immediately in the income statement when based on significant unobservable inputs.

The timing of recognition of deferred day one profit and loss is determined for each class of financial asset and liability. It is either amortised over the life of the transaction, deferred until the instrument's fair value can be determined using market observable inputs, or realised through settlement. The financial instrument is subsequently measured at fair value, adjusted for the deferred day one profit and loss.

5.13 Derecognition of financial assets and financial liabilities

Financial assets are derecognised when the contractual right to receive cash flows from the asset has expired, or has been transferred with either of the following conditions met:

a) the Company has transferred substantially all the risks and rewards of ownership of the asset; or

b) the Company has neither retained nor transferred substantially all of the risks and rewards; but has relinquished control of the asset.

Financial liabilities are derecognised when they are extinguished, that is when the obligation is discharged, cancelled or expires.

The Company also from time to time enters into certain 'pass-through' arrangements whereby contractual cash flows on a financial asset are passed to a third party. Such financial assets are derecognised from the balance sheet if the terms of the arrangement oblige the Company to only pass on contractual cash flows to the third party that are actually received without material delay, and where the terms of the arrangement also prohibit the Company from selling or pledging the underlying financial asset.

5.14 Impairment of non-financial assets

Non-financial assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal at each reporting date.

5. Significant accounting policies (continued)

5.15 Securities purchased under agreement to resell and securities sold under agreement to repurchase

Securities purchased under agreements to resell the securities to the counterparty, and securities sold under agreements to repurchase, are treated as collateralised lending and borrowing transactions respectively. The consideration for the transaction can be in the form of cash or securities. If the consideration for the purchase or sale of securities is given in cash the transaction is recorded on the balance sheet within securities purchased/sold under agreement to resell/repurchase. If the consideration is received or given in the form of securities the transaction is recorded off balance sheet. The difference between the sales and repurchase price is treated as interest and accrued over the life of the agreements using the effective interest method.

5.16 Securities borrowed and securities loaned transactions

Securities borrowed and securities loaned are recorded at the amount of cash collateral advanced or received. Securities borrowed and securities loaned transactions require the borrower to deposit cash, letters of credit or other collateral with the lender. If the consideration is received or given in the form of securities the transaction is recorded off balance sheet. Fees received or paid in connection with securities borrowed and loaned are treated as interest income or interest expense and accrued over the life of the transaction using the effective interest rate method.

5.17 Offsetting financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount reported in the balance sheet when there is currently a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

5.18 Investments in JPMorgan Chase undertakings

Investments in JPMorgan Chase undertakings are stated at cost less impairment. Where the investments in the share capital of JPMorgan Chase undertakings are acquired by way of a dividend in kind, these are initially recognised at fair value (refer to note 5.19). Investments in JPMorgan Chase undertakings are subsequently measured at cost less provision for impairment.

5.19 Business combinations

i. Combination of businesses

Business combinations are accounted for by applying the acquisition method of accounting.

The cost of a business combination is the fair value of the consideration given, liabilities incurred or assumed and of equity instruments issued plus the costs directly attributable to the business combination. Where control is achieved in stages, the cost is the consideration at the date of each transaction.

On acquisition of a business, fair values are attributed to the identifiable assets, liabilities and contingent liabilities unless the fair value cannot be measured reliably, in which case the value is incorporated in goodwill. Where the fair value of contingent liabilities cannot be reliably measured they are disclosed on the same basis as other contingent liabilities.

Goodwill recognised represents the excess of the fair value and the directly attributable costs of the purchase consideration over the fair values to the Firm's interest in the identifiable net assets, liabilities and contingent liabilities acquired.

ii. Combination of businesses under common control

Predecessor accounting is applied to transfers of businesses between entities under common control, where all combining entities are controlled by the same entity before and after the business acquisition. Assets and liabilities are recognised at their predecessor carrying amounts (i.e. the carrying amounts of assets and liabilities in the books and records of the transferor prior to the transfer) with no fair value adjustments. Any difference between the cost of acquisition and aggregate book value of the assets and liabilities on the date of transfer of the business is recognised as an adjustment to equity. As a result, no goodwill is recognised from the business combination.

5.20 Cash and cash equivalents

Cash and cash equivalents include cash and balances at banks and loans and advances to banks with maturities of three months or less.

5. Significant accounting policies (continued)

5.21 Current and deferred income tax

Income tax payable on taxable profits (current tax) is recognised as an expense in the period in which the profits arise. Income tax recoverable on tax allowable losses is recognised as a current tax asset only to the extent that it is regarded as recoverable by offset against taxable profits arising in the current or prior period. Current tax is measured using tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising from the differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax is determined using tax rates and legislation enacted or substantively enacted by the balance sheet date, which are expected to apply when the deferred tax asset is realised or the deferred tax liability is settled. Deferred tax assets and liabilities are only offset when there is both a legal right and an intention to settle on a net basis. Current tax and deferred tax are recognised directly in equity if the tax relates to items that are recognised in the same or a different period in equity.

5.22 Provisions and contingent liabilities

Provisions are recognised when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one of more uncertain future events not wholly within the control of the Company, or a present obligation that arises from past events but is not recognised because either an outflow of economic benefits is not probable or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognised in the financial statements; however disclosure is made unless the probability of settlement is remote.

5.23 Pensions and other post-retirement benefits

The Company participates in both a closed defined benefit and on-going defined contribution scheme in the UK The Company also operates defined benefit and defined contribution schemes for employees in the European branches.

i. Defined contribution scheme

A defined contribution plan is a pension plan under which the Company pays a defined level of contributions. Obligations for contributions to defined contribution pension plans are recognised as an expense and charged to the income statement on an accrual basis.

ii. Defined benefit scheme

For defined benefit schemes, the service cost of providing retirement benefits to employees during the year is charged to the income statement in accordance with IAS 19 'Employee benefits'. The pension costs are assessed based on the advice of qualified actuaries so as to recognise the full cost of provision of contracted pension benefits over the period of employees' service lives.

The defined benefit schemes' liabilities are measured on an actuarial basis and scheme assets measured at their fair values separately for each plan. Any surplus or deficit of scheme assets over liabilities is recognised on the balance sheet as an asset (surplus) or liability (deficit). The current service cost and any past service costs together with the expected return on scheme assets less the unwinding of discount on the scheme liabilities is charged to the income statement. Actuarial gains and losses are recognised in full in the period in which they occur in other comprehensive income and presented in equity in the period in which they occur.

5.24 Share-based payment awards

Share-based payment awards may be made to employees of the Company under the Firm's incentive awards schemes. The fair value of any such shares, rights to shares or share options is measured when the conditional award is made. This value is recognised as the compensation expense to the Company over the period to which the performance criteria relate together with employer's social security expenses or other payroll taxes. All of the awards granted are equity settled. The Company estimates the level of forfeitures and applies this forfeiture rate at the grant date.

Additionally, the conditions that must be satisfied before an employee becomes entitled to equity instruments under the Firm's incentive programs is taken into consideration. The Firm's Retirement Eligibility rules for restricted stock awarded as part of incentive programs require the acceleration of the amortisation of the award such that the award is fully expensed at the time the retirement eligibility comes into force.

6. Segment Reporting

Business segments

The Company is not in scope of IFRS 8 'Operating segments', as its debt or equity are not traded on a public market, therefore segmental analysis of the company's revenue and assets by business is not necessary.

Geographical segments

The Company operates in three geographic regions as listed below:

- EMEA
- AMERICAS
- APAC

The following table presents revenues from business activities and total assets by geographic area.

	EMEA		AMERICAS		APAC		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Interest Receivables	3,654,000	3,715,910	2,151,803	1,445,060	439,133	385,239	6,244,936	5,546,209
Fees and commissions receivables	2,529,876	2,798,383	367,881	393,926	230,430	256,582	3,128,187	3,448,891
Trading profit/(loss)	4,408,269	4,196,392	141,669	9,669	1,293,372	907,562	5,843,310	5,113,623
Total assets	381,777,671	435,627,226	211,070,506	191,083,272	65,327,778	41,331,680	658,175,955	668,042,178

7. Interest income and interest expense and similar income and expense

Interest income and interest expense includes the current-period interest accruals, as applicable.

Details of interest income and interest expense were as follows, including similar income and expenses:

	2019	2018
	$'000	$'000
Interest income on financial instruments at amortised cost and FVOCI		
Loans and advances to banks	368,992	265,497
Loans and advances to customers	254,004	114,554
Securities purchased under agreements to resell	251,202	185,540
Other (a)	714,570	1,002,420
Total interest income on financial instruments at amortised cost and FVOCI	1,588,768	1,568,011
Other similar income		
Financial assets at fair value through profit and loss	1,756,685	1,900,806
Securities purchased under agreements to resell measured at fair value through profit or loss	2,375,191	1,817,925
Securities borrowed	524,292	259,467
Total other similar income	4,656,168	3,978,198
Total interest and similar income	**6,244,936**	**5,546,209**
Interest expense on financial instruments at amortised cost		
Amounts owed to JPMorgan Chase undertakings	3,166,644	2,171,561
Other (a)	715,329	528,120
Total interest expense on financial instruments at amortised cost	3,881,973	2,699,681
Other similar expense		
Financial liabilities at fair value through profit and loss	713,250	866,493
Securities sold under agreements to repurchase	1,401,152	977,046
Securities loaned	740,386	545,847
Total other similar expense	2,854,788	2,389,386
Total interest and similar expense	**6,736,761**	**5,089,067**

(a) Other interest income is interest income on collateral and customer receivables. Other interest expenses are interest charges on customer payables.

7. Interest income and interest expense and similar income and expense (continued)

Interest income and expense and similar income and expense with JPMorgan Chase undertakings:

	2019	2018
	$'000	$'000
Interest income on financial instruments at amortised cost and FVOCI		
Loans and advances to banks	210,768	119,481
Securities purchased under agreements to resell	251,202	185,540
Other	511,888	626,610
Total interest income on financial instruments at amortised cost and FVOCI	973,858	931,631
Other similar income		
Securities purchased under agreements to resell measured at fair value through profit or loss	504,744	354,968
Securities borrowed	301,381	230,311
Total other similar income	806,125	585,279
Total Interest and similar income	**1,779,983**	**1,516,910**
Interest expense on financial instruments at amortised cost		
Amounts owed to JPMorgan Chase undertakings	3,166,644	2,171,561
Other	11,072	10,883
Total interest expense on financial instruments at amortised cost	3,177,716	2,182,444
Other similar expense		
Securities sold under resale agreement	967,320	512,110
Securities loaned	163,678	94,040
Total other similar expense	1,130,998	606,150
Total interest and similar expense	**4,308,714**	**2,788,594**

8. Fee and commission income

Fee and commission income consists of the following non-interest revenue streams of investment banking, lending and deposit related fees and commissions and other income.

The following table presents the components of these fees:

	2019	2018
	$'000	$'000
Investment banking fees		
Underwriting		
Equity	306,104	391,516
Debt	700,175	540,315
Total underwriting	**1,006,279**	**931,831**
Advisory	603,761	617,658
Total investment banking fees	**1,610,040**	**1,549,489**
Lending and deposit related fees		
Lending related fees	37,274	27,981
Total lending and deposit related fees	**37,274**	**27,981**
Commissions and other fees		
Commissions and fees with JPMorgan Chase undertakings	1,466,789	1,791,742
Total commissions and other fees	**1,466,789**	**1,791,742**
Other fee and commission income	14,084	79,679
Total fee and commission income	**3,128,187**	**3,448,891**

9. Other income

	2019	2018
	$'000	$'000
Other income	16,572	—
	16,572	—

Other income contains consideration received for employees relocated to J.P. Morgan AG.

10. Expected credit loss on loans and advances to customers, and lending related commitments

	2019	2018
	$'000	$'000
Expected credit loss on loans and advances to customers		
Expected credit loss balance as at 1 January	22,021	129,076
Impairment write off	—	(75,612)
Decrease in expected credit loss during the year	**(17,209)**	**(31,443)**
Closing expected credit loss provision on loans and advances to customers as at 31 December	4,812	22,021
Expected credit loss on lending related commitments		
Expected credit loss balance as at 1 January	6,220	2,033
(Decrease)/Increase in expected credit loss during the year	**(1,343)**	**4,187**
Closing expected credit loss provision on lending related commitments as at 31 December	4,877	6,220
Expected credit loss decrease	**(18,552)**	**(27,256)**

Disclosures in relation to the Credit Risk of the above have been presented in the Strategic report on pages 11 - 17.

11. Directors' emoluments

	2019	2018
	$'000	$'000
Emoluments	3,780	5,425
Total contributions to a defined contribution plan	3	15
Total value of long term incentive plans for all directors	—	58
Compensation to non-executive directors	542	940
Number of directors who exercised share options	3	—
Number of directors with shares received or receivable under LTIPs	8	7
Number of directors to whom defined contribution pension rights accrued	5	4

In accordance with the Companies Act 2006, the directors' emoluments above represent the proportion paid or payable in respect of qualifying services to the Company. Directors also received emoluments for non-qualifying services, which are not required to be disclosed.

Highest paid director

The emoluments (excluding amounts paid or due to directors under long-term incentive plans ("LTIP's") and the value of share options granted or exercised by directors) of the highest paid director were $2,193,471 (2018: $2,167,386).

The contribution to the defined contribution scheme for the highest paid director during 2019 was $514 (2018: $3,952). The highest paid director did not exercise share options during the year (2018: nil). During the year, no shares were received or are receivable by the highest paid director under long-term incentive plans (2018: nil).

12. Audit fees

	2019	2018
	$'000	$'000
Auditors' remuneration for the audit of the Company's annual financial statements	4,938	3,525
Audit-related assurance services (provided by the auditor)	2,318	1,820
	7,256	5,345

Audit-related assurance services include the Company's share of fees related to services provided by a network firm of the Company's auditor to various JPMC undertakings. These fees were apportioned to the various JPMC undertakings, including the Company, by reference to each entity's asset size or participation in the control environment.

13. Profit on ordinary activities before taxation

	2019	2018
	$'000	$'000
Profit on ordinary activities before taxation is stated after charging:		
Depreciation of tangible fixed assets	1,033	1,495
Change in bank levy provision	(60,293)	91,026
Wages and salaries	964,819	1,012,464
Social security costs	216,734	192,261
Other pension and benefits costs	68,678	75,118
Share-based awards	354,510	381,972

The average monthly number of persons employed by the Company was 2,294 (2018: 2,229), of which 24 (2018: 27) are on secondment to another JPMorgan Chase undertaking.

The average monthly number of staff employed by the European branches during the year was 307 (2018: 267), of which 16 are in the Commercial Bank, 289 in the Corporate and Investment Bank and 2 in the Corporate sector. All London based employees are in Corporate and Investment Banking.

There were no material gains or losses from the disposal of amortised cost assets during the year.

14. Tax on profit on ordinary activities

	2019	2018
(a) Analysis of tax charge for the year	$'000	$'000
Current taxation		
UK Corporation tax on profit for the year	721,227	993,411
Overseas taxation	546,168	381,012
Less: Double tax relief	(385,671)	(363,665)
Adjustments in respect of previous years	(17,051)	13,780
Current tax expense for the year	864,673	1,024,538
Deferred tax (note 15):		
Origination and reversal of temporary differences	(44,472)	(51,515)
Adjustment in respect of previous year	(750)	14,612
Effect of rate change on opening balance	(3,967)	5,209
Deferred tax credit for the year	(49,189)	(31,694)
Total tax expense for the year	815,484	992,844

14. Tax on profit on ordinary activities (continued)

(b) Factors affecting the current tax charge for the year

The current tax charge for the year differs from the standard rate of corporation tax in the UK including banking surcharge (27.00%). The differences are explained below:

	2019	2018
	$'000	$'000
Profit on ordinary activities before taxation	2,856,854	4,362,431
Profit on ordinary activities before taxation multiplied by standard rate of corporation tax in UK of 19.00% plus banking surcharge of 8% (2018: 19.00% plus 8% banking surcharge).	771,350	1,177,856
Effects of:		
Non-deductible expenses	279	343,965
Income not taxable	(40,800)	(24,094)
Transfer pricing adjustments	12,632	(12,548)
Dividend income	—	(540,000)
Adjustments in respect of previous years	(17,802)	28,391
Group relief claimed for nil consideration	—	(752)
Foreign taxation suffered	121,187	17,347
Impact of share based payments	(27,395)	—
Impact of change in rate on deferred tax	(3,967)	2,679
Total tax expense for the year	815,484	992,844

15. Deferred tax

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	2019	2018
	$'000	$'000
Deferred tax assets:		
Deferred tax assets to be recovered after more than 12 months	139,273	75,470
Deferred tax asset to be recovered within 12 months	69,637	44,394
	208,910	119,864
Deferred tax liabilities:		
Deferred tax liability to be reversed after more than 12 months	(14,114)	(11,286)
Deferred tax liability to be reversed within 12 months	(3,922)	(10,119)
Deferred tax asset (net)	190,874	98,459

15. Deferred tax (continued)

The gross movement on the deferred income tax account is as follows:

	2019	2018
	$'000	$'000
As at 1 January	98,459	104,634
Depreciation in excess of capital allowances	63	(387)
Deferral of share-based payments	84,718	(11,522)
Other adjustment	7,634	5,734
As at 31 December	190,874	98,459

The movement in deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred tax asset	Accelerated capital allowances	Share-based payments	Other	Total
	$'000	$'000	$'000	$'000
At 1 January 2018	2,900	113,115	(11,381)	104,634
(Charged)/credited to the income statement	(387)	22,399	9,682	31,694
Credited directly to equity	—	(33,921)	—	(33,921)
Credited directly to other comprehensive income	—	—	(3,948)	(3,948)
At 31 December 2018	2,513	101,593	(5,647)	98,459
(Charged)/credited to the income statement	63	44,865	4,261	49,189
Credited directly to equity	—	39,853	—	39,853
Credited directly to other comprehensive income			3,373	3,373
At 31 December 2019	2,576	186,311	1,987	190,874

16. Loans and advances to banks

	2019	2018
	$'000	$'000
Loans and advances to banks		
Amortised cost	4,415,118	9,690,343

Included within loans and advances to banks is $2.6 billion (2018: $6.5 billion) held with JPMorgan Chase undertakings.

The Company maintains certain client money balances with banks and clearing houses which principally arise where it acts on behalf of its clients as a clearing member for derivatives that are cleared through central counterparties. The Company has considered its rights and obligations relating these balances. These balances are held subject to client money protection under the Client Assets Sourcebook rules, and the Company concluded that such amounts should not be recognised on its balance sheet as they are not assets of the Company. Therefore, client money assets amounting to $12.1 billion (2018: $13.5 billion) have not been recognised on the Company's balance sheet, $5.2 billion (2018: $4.3 billion) from loans and advances to banks and $6.9 billion (2018: $9.1 billion) from debtors respectively.

17. Loans and advances to customers

The Company's loan portfolio is within the wholesale loan segment. Wholesale loans include loans made to a variety of customers, such as large corporates and institutional clients. The credit quality and analysis of concentration of loans and advances to customers is managed within the Firm's Credit Risk Management function, refer to the Strategic report.

	2019	2018
	$'000	$'000
Loans and advances to customers		
Amortised cost	579,883	832,751
FVOCI	839,031	1,343,178
	1,418,914	2,175,929
Expected credit loss impairment		
Amortised cost	(289)	(3,994)
FVOCI	(4,523)	(18,027)
	(4,812)	(22,021)
	1,414,102	2,153,908

18. Securities financing activities

JPMS plc enters into resale agreements, repurchase agreements, securities borrowed and securities loaned transactions (collectively, "securities financing agreements") primarily to finance the Company's inventory positions, acquire securities to cover short positions, accommodate customers' financing needs, and settle other securities obligations.

Securities purchased and securities sold under agreements to resell/repurchase and securities borrowed and securities loaned transactions are generally carried at the amount of cash collateral advanced or received.

Secured financing transactions expose the Company to credit and liquidity risk. To manage these risks, the Company monitors the value of the underlying securities (predominantly high-quality securities collateral, including government-issued debt and agency mortgage-backed securities) that it has received from or provided to its counterparties compared to the value of cash proceeds and exchanged collateral, and either requests additional collateral or returns securities or collateral when appropriate. Margin levels are initially established based upon the counterparty, the type of underlying securities, and the permissible collateral, and are monitored on an ongoing basis.

In resale agreements and securities borrowed transactions, the Company is exposed to credit risk to the extent that the value of the securities received is less than initial cash principal advanced and any collateral amounts exchanged. In repurchase agreements and securities loaned transactions, credit risk exposure arises to the extent that the value of underlying securities exceeds the value of the initial cash principal advanced, and any collateral amounts exchanged.

18. Securities financing activities (continued)

Additionally, the Company typically enters into master netting agreements and other similar arrangements with its counterparties, which provide for the right to liquidate the underlying securities and any collateral amounts exchanged in the event of a counterparty default. It is also the Company's policy to take possession, where possible, of the securities underlying resale agreements and securities borrowed transactions.

Refer to note 32 for additional information on netting arrangements.

	2019	2018
	$'000	$'000
Securities purchased under agreements to resell		
Amortised cost	37,173,888	19,132,226
FVTPL	105,433,882	135,952,356
	142,607,770	155,084,582
Securities borrowed		
Amortised cost	—	—
FVTPL	36,948,541	45,507,924
	36,948,541	45,507,924
Securities sold under agreements to repurchase		
Amortised cost	—	—
FVTPL (designated)	65,604,819	91,697,552
	65,604,819	91,697,552
Securities loaned		
Amortised cost	—	—
FVTPL (designated)	12,011,127	20,646,594
	12,011,127	20,646,594

18. Securities financing activities (continued)

Securities financing transaction balances include the following amounts held with other JPMorgan Chase undertakings:

	2019	2018
	$'000	$'000
Securities purchased under agreements to resell		
Amortised cost	37,173,888	19,132,226
FVTPL	25,524,412	19,689,598
	62,698,300	38,821,824
Securities borrowed		
Amortised cost	—	—
FVTPL	13,846,565	22,739,270
	13,846,565	22,739,270
Securities sold under agreements to repurchase		
Amortised cost	—	—
FVTPL (designated)	46,599,865	48,176,138
	46,599,865	48,176,138
Securities loaned		
Amortised cost	—	—
FVTPL (designated)	9,714,152	17,934,535
	9,714,152	17,934,535

19. Financial assets at fair value through profit and loss

Within its client-driven market-making activities, the Company transacts in debt and equity instruments, derivatives and loans.

	2019	2018
	$'000	$'000
Debt and equity instruments	106,444,957	98,428,567
Derivative receivables	274,462,128	241,100,870
Loans	27,836	425,962
	380,934,921	339,955,399

Financial assets at fair value through profit and loss includes $154 billion held with JPMorgan Chase undertakings (2018:$123 billion).

20. Debtors

	2019	2018
	$'000	$'000
Trade debtors	37,915,888	44,339,735
Other debtors	50,174,703	38,460,862
	88,090,591	82,800,597

Trade debtors mainly consists of unsettled trades. Other debtors includes $46.4 billion of cash collateral provided on derivatives (2018: $36.0 billion - A review identified that cash collateral on other debtors was incorrectly disclosed in 2018. Accordingly, the amount of collateral disclosed increased by $20 billion).

Debtors includes the following balances from JPMorgan Chase undertakings:

	2019	2018
	$'000	$'000
Trade debtors	21,386,852	24,129,680
Other debtors	19,100,542	13,942,408
	40,487,394	38,072,088

Trade debtors with JPMorgan Chase undertakings mainly consists of accounts receivable and unsettled trades. Other debtors includes $19 billion of cash collateral provided on derivatives (2018: $14 billion).

21. Other assets

	2019	2018
	$'000	$'000
Deferred taxation	190,874	98,459
Taxation and social security	136,022	-
Prepayments	8,151	5,674
Accrued income	925,356	716,617
	1,260,403	820,750

22. Investments in JPMorgan Chase undertakings

	2019	2018
	$'000	$'000
Investments in JPMorgan Chase undertakings at cost		
At 1 January	2,144,598	3,341,207
Non-cash dividend	(2,126,712)	—
Write down - see below	—	(1,196,609)
At 31 December	17,886	2,144,598

On the 11 November 2019, the Company distributed 100% of its investment in J. P. Morgan Europe Limited to its parent J.P. Morgan Capital Holdings Limited at the book value of $2.1 billion via dividend in specie.

In 2018, the receipt of $2.0 billion dividend from wholly owned subsidiary J.P. Morgan Europe Limited prompted a review of the carrying amount of the Company's investment in that entity. The investment was written down by $1.2 billion.

The holdings of the Company are as follows:

Name	Address of subsidiary	Principal activity	Holding	Shares held %
Greenwood Nominees Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Nominee company	Direct	100
Cazenove Group Limited	JPMorgan House, Grenville Street, St. Helier, JE4 8QH, Jersey	Holding company	Direct	100
J.P. Morgan Prime Nominees Ltd.	25 Bank Street, Canary Wharf, London, E14 5JP, England	Nominee company	Direct	100
J.P. Morgan Services LLP	25 Bank Street, Canary Wharf, London, E14 5JP, England	Dormant company	Direct	57
Cazenove Holdings Limited	JPMorgan House, Grenville Street, St. Helier, JE4 8QH, Jersey	Holding company	Indirect	100
Cazenove IP Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Investment company	Indirect	100
JPMorgan Cazenove Holdings	25 Bank Street, Canary Wharf, London, E14 5JP, England	Holding company	Indirect	51
J.P. Morgan Cazenove Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Investment company	Indirect	51
JPMorgan Cazenove Service Company	25 Bank Street, Canary Wharf, London, E14 5JP, England	Service company	Indirect	51

The above investments are shown at cost less any provision for impairment. In the opinion of the directors, the value of the Company's investment in each subsidiary undertaking is not less than the amount at which it is stated in the balance sheet.

All shares held in the above subsidiaries are ordinary shares.

23. Unconsolidated structured entities

Structured entities

The Company engages in various business activities with structured entities which are designed to achieve a specific business purposes. A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as, when any voting rights relate to administrative tasks only and the relevant activities are directed by means of other contractual arrangements.

Typically, structured entities have one or more of the following characteristics:

- an insufficient amount of at-risk equity to permit the entity to finance its activities without additional subordinated financial support;
- equity at-risk owners that, as a group, are not able to make significant decisions relating to the entity's activities through voting rights or similar rights; or
- equity at-risk owners that do not absorb the entity's losses or receive the entity's residual returns.

The most common type of structured entities is a special purpose entity ("SPE"). SPE's are commonly used in securitisation transactions in order to isolate certain assets and distribute the cash flows from those assets to investors. The party that has power to direct the most significant activities of the entity and an exposure to the risks of the entity (together constituting control of the entity) is required to consolidate the assets and liabilities of the structured entity.

The Company has involvement with various structured entities, established by the Firm or by third parties. These typically include securitisations, credit linked notes ("CLN") and asset swap vehicles.

- Securitisations - Residential and commercial mortgage-backed and other asset-based entities: the Company invests in securities generally issued by third party sponsored structured entities. The Company is not able to make significant decisions relating to the entity's activities through voting rights or similar rights.

- CLN and asset swap vehicles: the Company's involvement with CLN and asset swap vehicles is generally limited to being a derivative counterparty. The Company does not provide any additional contractual financial support to the structured entities over and above its contractual obligations as derivative counterparty, but may also make a market in the notes issued by such structured entities, although it is under no obligation to do so. As a derivative counterparty the assets held by the structured entities serve as collateral for any derivatives receivables.

Interest in unconsolidated structured entities

The Company's interest in an unconsolidated structured entity is considered as the contractual and non-contractual involvement that exposes the Company to variability of returns from the performance of the structured entity but not deemed a subsidiary.

The following table shows, by type of structured entity, the Company's interest in unconsolidated structured entities recognised on the balance sheet. The maximum exposure to loss is determined by considering the nature of the interest in the underlying unconsolidated structured entity. The maximum exposure for loans and securities, off balance sheet commitments such as guarantees, liquidity facilities and loan commitments is reflected by their carrying amounts. The maximum exposure for asset swap vehicles and credit related notes is determined based on the amount of collateral.

The table also provides an indication of the size of the structured entities, measured by the total assets held in the structured entity. The carrying amounts do not necessarily reflect the risks faced by the Company, as factors such as economic hedges and effect of collateral held by the Company are not included.

23. Unconsolidated structured entities (continued)

		Interest in unconsolidated structured entities		
	Fair value of assets held by SPE	Financial assets and liabilities at fair value through profit and loss	Other	Total
31 December 2019	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed vehicles	98,185,683	761,963	—	761,963
Commercial mortgage-backed vehicles	9,336,850	80,459	—	80,459
Other asset-backed vehicles	54,647,989	272,535	—	272,535
Credit-related notes and asset swap vehicles	46,215,765	208,153	—	208,153
Covered Bonds	38,360,801	136,524	—	136,524
Commercial collateralised paper	—	—	—	—
Derivative and Note issuances	45,371,858	1,431,222	—	1,431,222
Other	6,633,018	773,598	—	773,598
Total assets	298,751,964	3,664,454	—	3,664,454
Maximum exposure to loss	298,751,964	3,664,454	—	3,664,454
Total liabilities	—	674,485	—	674,485

		Interest in unconsolidated structured entities		
	Fair value of assets held by SPE	Financial assets and liabilities at fair value through profit and loss	Other	Total
31 December 2018	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed vehicles	91,778,882	800,314	—	800,314
Commercial mortgage-backed vehicles	13,372,402	189,934	—	189,934
Other asset-backed vehicles	20,757,993	303,173	—	303,173
Credit-related notes and asset swap vehicles	34,892,083	150,540	—	150,540
Covered Bonds	53,948,945	125,059	—	125,059
Commercial collateralised paper	3,360,147	—	—	—
Derivative and Note issuances	21,284,755	991,665	—	991,665
Other	6,771,097	646,359	—	646,359
Total assets	246,166,304	3,207,044	—	3,207,044
Maximum exposure to loss	246,166,304	3,207,044	—	3,207,044
Total liabilities	—	266,182	3,349,427	3,615,609

Prior year amounts have been adjusted to conform with current year presentation.

24. Financial liabilities at fair value through profit and loss

	2019	2018
	$'000	**$'000**
Debt and equity instruments	36,464,692	55,228,556
Derivative payables	278,034,218	240,484,339
Other financial liabilities	23,664,640	16,512,205
	338,163,550	312,225,100

Financial liabilities at fair value through profit and loss includes $181 billion held with JPMorgan Chase undertakings (2018: $147 billion).

25. Other liabilities

	2019	2018
	$'000	$'000
Trade creditors [a]	37,924,561	55,301,485
Other liabilities:		
Accruals and deferred income	2,033,318	1,957,488
Taxation and social security [b]	—	101,623
Other [c]	30,091,231	25,668,487
Total other liabilities	32,124,549	27,727,598
Total trade creditors and other liabilities	70,049,110	83,029,083

(a) Trade creditors predominantly consists of unsettled trades, brokerage fees payable and liabilities in respect of assets transferred but not derecognised (note 35) and includes $7.3 billion with other JPMorgan Chase undertakings (2018: $12.5 billion). Amounts owed to JPMorgan Chase undertakings presented on the balance sheet represents financing and collateral arrangements with other JPMorgan Chase undertakings.

(b) Taxation and social security includes provisions for corporate tax, overseas tax and bank levy.

(c) Other includes $29.5 billion (2018: $25.7 billion) of cash collateral received related to OTC derivatives.

26. Subordinated liabilities with JPMorgan Chase undertakings

The following loan is unsecured and is subordinated in right of payment to the ordinary creditors, including depositors, as follows:

Lender	Dated	Interest	2019	2018
			$'000	$'000
J.P. Morgan Capital Holdings Limited	2028	1.55% above 1 month LIBOR	12,000,000	12,000,000

The loan is comprised of tier 2 qualifying subordinated notes issued as part of the Firm's strategy to comply with a 'minimum requirement for own funds and eligible liabilities' ("MREL").

27. Called-up share capital

	2019	2018
	$'000	$'000
Issued and fully paid share capital		
At 1 January		
1,244,343 ordinary shares (2018: 1,244,343) of $10,000 each	12,443,430	12,443,430
50,000 ordinary shares (2018: 50,000) of £1.24 each	100	100
2 ordinary shares (2018: 2) of £1 each	—	—
Movements during the year		
	—	—
At 31 December		
1,244,343 ordinary shares (2018: 1,244,343) of $10,000 each	12,443,430	12,443,430
50,000 ordinary shares (2018: 50,000) of £1.24 each	100	100
2 ordinary shares (2018: 2) of £1 each	—	—
	12,443,530	12,443,530

The ordinary shares (at the three different price points) each provide the right to its owner to share in the profits of the Company and to vote at general meetings of the Company. Any amounts distributed to ordinary shareholders are paid proportionately to the amount which is paid up on the ordinary shares ($10,000USD/ £1.24/ £1). None of the ordinary shares carry rights of redemption.

J.P. MORGAN SECURITIES PLC
Notes to the financial statements (continued)

28. Dividends

No interim dividend (2018: nil) was paid on the ordinary shares of the Company for 2019. No final dividend was paid or proposed for 2019 (2018: nil).

On the 11 November 2019, the Company distributed 100% of its investment in J. P. Morgan Europe Limited to J.P. Morgan Capital Holdings Limited at the book value of $2.1 billion via dividend in specie.

29. Notes to the statement of cash flows

	2019	2018
	$'000	$'000
Profit before income taxation	2,856,854	4,362,431
Adjustments for:		
Depreciation of tangible fixed assets	1,033	1,495
Impairment of investments in JPMorgan Chase undertakings	—	1,196,609
Other non-cash movements	138,450	(75,352)
Operating cash flows before changes in operating assets and liabilities	**2,996,337**	**5,485,183**
Changes in operating assets		
Decrease in loans and advances to customers	739,805	458,414
Decrease/(increase) in securities purchased under resale agreements	12,476,812	(19,698,971)
Decrease/(increase) in securities borrowed	8,559,383	(18,435,325)
(Increase)/decrease in financial assets at fair value through profit and loss	(40,979,522)	644,816
Decrease/(increase) in debtors and other assets	(5,382,410)	(3,147,798)
Increase in prepayments and accrued income	(211,215)	(64,837)
	(24,797,147)	**(40,243,701)**
Changes in operating liabilities		
(Decrease)/increase in securities sold under repurchase agreements	(26,092,734)	16,760,394
(Decrease)/increase in securities loaned	(8,635,467)	8,096,554
Increase in financial liabilities at fair value through profit and loss	25,938,450	3,937,032
Decrease in financial liabilities designated at fair value through profit or loss	(619,591)	(228,771)
(Decrease)/increase in trade creditors	(17,376,923)	24,822,451
Increase in other liabilities	4,321,121	186,584
(Decrease)/increase in accruals and deferred income	75,830	190,820
	(22,389,314)	**53,765,064**
Cash (used in)/generated from operating activities	**(44,190,124)**	**19,006,546**

The Company maintains certain client money balances which principally arise where it acts on behalf of its clients as a clearing member for derivatives that are cleared through central counterparties. Loans and advances to banks contain an amount of $258 million (2018: $379 million) placed in a segregated account to allow the Company to make good a shortfall in client money.

In the table above, cash generated from operations included interest paid of $6.9 billion (2018: $4.9 billion) and interest received of $6.1 billion (2018: $5.5 billion).

30. Commitments

Lending-related commitments and guarantees

The Company provides lending-related financial instruments (e.g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the maximum possible credit risk to the Company should the counterparty draw upon the commitment or the Company be required to fulfill its obligation under the guarantee, and should the counterparty subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Company's view, representative of its actual future credit exposure or funding requirements.

	2019	2018
	$'000	$'000
Contractual amount		
Unused commitments on loans	10,587,947	19,298,797
Standby letters of credit and guarantees	40,638	816,742
Total unused lending related commitments	10,628,585	20,115,539
Other unused commitments	1,865,717	1,595,468
Total unused contractual commitments	**12,494,302**	**21,711,007**
Expected credit loss on unused lending related commitments (note 10)	4,877	6,220

There are no lending related commitments to other JPMorgan Chase undertakings (2018: nil). Other unused commitments consist of certain guarantees and commitments associated with the Company's membership in clearing houses. Prior year amounts have been adjusted to conform with current year presentation.

31. Assets and liabilities measured at fair value

Fair value

Valuation process

The Company carries a portion of its assets and liabilities at fair value on a recurring basis.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on quoted market prices or inputs, where available. If listed prices or quotes are not available, fair value is based on valuation models and other valuation techniques that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters, including yield curves, interest rates, volatilities, prices (such as commodity, equity or debt prices), correlations, foreign exchange rates and credit curves.

The level of precision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. Furthermore, while the Company believes its valuation methods are appropriate and consistent with those of other market participants, the methods and assumptions used reflect management judgement and may vary across the Company's businesses and portfolios. The use of different methodologies or assumptions to those used by the Company could result in a different estimate of fair value at the reporting date.

Risk-taking functions are responsible for providing fair value estimates for assets and liabilities carried on the balance sheet at fair value. The Firm's valuation control function, which is part of the Firm's Finance function and independent of the risk-taking functions, is responsible for verifying these estimates and determining any fair value adjustments that may be required to ensure that the Company's positions are recorded at fair value. The valuation control function verifies fair value estimates provided by the risk-taking functions by leveraging independently derived prices, valuation inputs and other market data, where available.

In determining the fair value of a derivative portfolio, valuation adjustments may be appropriate to reflect the credit quality of the counterparty, the credit quality of the Company, and the funding risk inherent in certain derivatives. The credit and funding risks of the derivative portfolio are generally mitigated by arrangements provided to the Company by JPMorgan Chase Bank, N.A. and therefore the Company takes account of these arrangements in estimating the fair value of its derivative portfolio.

Valuation model review and approval

If prices or quotes are not available for an instrument or a similar instrument, fair value is generally determined using valuation models that consider relevant transaction terms such as maturity and use as inputs market-based or independently sourced parameters. The Model Risk function is independent of the model owners and reviews and approves valuation models used by the Company.

Fair value hierarchy

The Company classifies its assets and liabilities according to a valuation hierarchy that reflects the observability of significant market inputs. The three levels are defined as follows:

Level 1 - inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 - one or more inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorisation within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

31. Assets and liabilities measured at fair value (continued)

Valuation methodologies

The following table describes the valuation methodologies used by the Company to measure its more significant products/ instruments at fair value, including the general classification of such instruments pursuant to the valuation hierarchy

Product/instrument	Valuation methodology, inputs and assumptions	Classifications in the valuation hierarchy
Equity, debt, and other securities	Quoted market prices	Level 1
	In the absence of quoted market prices, securities are valued based on: • Observable market prices for similar securities • Relevant broker quotes • Discounted cash flows In addition, the following inputs to discounted cash flows are used for the following products: *Mortgage and asset-backed securities specific inputs*: • Collateral characteristics • Deal-specific payment and loss allocations • Current market assumptions related to yield, prepayment speed, conditional default rates and loss severity	Level 2 or 3
Derivatives and fully funded OTC instruments	Exchange-traded derivatives that are actively traded and valued using the exchange price.	Level 1
	Derivatives that are valued using models such as the Black-Scholes option pricing model, simulation models, or a combination of models, that use observable or unobservable valuation inputs as well as considering the contractual terms. The key valuation inputs used will depend on the type of derivative and the nature of the underlying instruments and may include equity prices, commodity prices, interest rate yield curves, foreign exchange rates, volatilities, correlations, credit default swaps ("CDS") spreads and recovery rates. Additionally, the credit quality of the counterparty and of the Company as well as market funding levels may also be considered. In addition, the following specific inputs are used for the following derivatives that are valued based on models with significant unobservable inputs are as follows: *Structured credit derivatives specific inputs include:* • CDS spreads and recovery rates • Credit correlation between the underlying debt instruments *Equity option specific inputs include:* • Forward equity price • Equity volatility • Equity correlation • Equity - FX correlation • Equity - IR correlation *Interest rate and FX exotic options specific inputs include:* • Interest rate volatility • Interest rate spread volatility • Interest rate correlation • Foreign exchange correlation • Interest rate - FX correlation *Commodity derivatives specific inputs include:* • Commodity volatility • Forward commodity price	Level 2 or 3
Financial instruments at fair value through profit and loss - loans	Where observable market data is available, valuations are based on: • Observed market prices (circumstances are infrequent) • Relevant broker quotes • Observed market prices for similar instruments Where observable market data is unavailable or limited, valuations are based on discounted cash flows, which consider the following: • Credit spreads derived from the cost of CDS; or benchmark credit curves developed by the Company, by industry and credit rating • Prepayment speed • Collateral characteristics	Level 2 or 3

31. Assets and liabilities measured at fair value (continued)

Valuation methodologies (continued)

Product/instrument	Valuation methodology, inputs and assumptions	Classifications in the valuation hierarchy
Loans and advances to customers and lending-related commitments	Valuations are based on discounted cash flows, which consider: • Credit spreads, derived from the cost of CDS; or benchmark credit curves developed by the Company, by industry and credit rating • Prepayment speed Lending-related commitments are valued similar to loans and reflect the portion of an unused commitment expected, based on the Company's average portfolio historical experience, to become funded prior to an obligor default	Predominantly level 3
Loans and advances to customers - at FVOCI	Valuations are based on discounted cash flows, which consider: • Credit spreads • Future interest payments • Repayment of principal Prepayments and defaults are modelled deterministically and discounted to today	Level 3
Securities financing agreements	Valuations are based on discounted cash flows, which consider: • Derivative features. For further information refer to the discussion of derivatives above • Market rates for the respective maturity • Collateral characteristics	Level 2

31. Assets and liabilities measured at fair value (continued)

Assets and liabilities measured at fair value on a recurring basis

The following table presents the asset and liabilities reported at fair value as of 31 December 2019 and 2018, by major product category and fair value hierarchy.

	Level 1	Level 2	Level 3	Total
	$'000	$'000	$'000	$'000
At 31 December 2019				
Securities financing agreements:				
Securities purchased under agreements to resell	—	105,433,882	—	105,433,882
Securities borrowed	—	36,948,541	—	36,948,541
Financial assets at fair value through profit and loss:				
Debt and equity instruments	57,133,746	47,332,539	1,978,672	106,444,957
Derivative receivables	15,194	269,886,150	4,560,784	274,462,128
Loans	—	—	27,836	27,836
Financial assets held at FVOCI:				
Loans	—	—	834,508	834,508
Total financial assets	57,148,940	459,601,112	7,401,800	524,151,852
Securities financing agreements:				
Securities sold under agreements to repurchase	—	65,604,819	—	65,604,819
Securities loaned	—	12,011,127	—	12,011,127
Financial liabilities at fair value through profit and loss:				
Debt and equity instruments	24,852,716	11,601,933	10,043	36,464,692
Derivative payables	17,702	269,350,989	8,665,527	278,034,218
Other financial liabilities	—	13,640,666	10,023,974	23,664,640
Financial liabilities designated at fair value through profit or loss:				
Debt and equity instruments	—	616,886	—	616,886
Other liabilities:				
Deposits	—	—	—	—
Total financial liabilities	24,870,418	372,826,420	18,699,544	416,396,382

J.P. MORGAN SECURITIES PLC
Notes to the financial statements (continued)

31. Assets and liabilities measured at fair value (continued)

Assets and liabilities measured at fair value on a recurring basis (continued)

	Level 1	Level 2	Level 3	Total
	$'000	$'000	$'000	$'000
At 31 December 2018				
Securities financing agreements:				
Securities purchased under agreements to resell	—	135,952,356	—	135,952,356
Securities borrowed	—	45,507,924	—	45,507,924
Financial assets at fair value through profit and loss:				
Debt and equity instruments	49,954,944	46,786,919	1,686,704	98,428,567
Derivative receivables	182,811	235,481,636	5,436,423	241,100,870
Loans	—	102,092	323,870	425,962
Financial assets held at FVOCI:				
Loans	—	—	1,325,151	1,325,151
Total financial assets	50,137,755	463,830,927	8,772,148	522,740,830
Securities financing agreements:				
Securities sold under agreements to repurchase	—	91,697,552	—	91,697,552
Securities loaned	—	20,646,594	—	20,646,594
Financial liabilities at fair value through profit and loss:				
Debt and equity instruments	38,760,396	16,452,579	15,581	55,228,556
Derivative payables	237,239	228,896,761	11,350,339	240,484,339
Other financial liabilities	—	9,135,324	7,358,136	16,493,460
Financial liabilities designated at fair value through profit or loss:				
Debt and equity instruments	—	1,236,476	—	1,236,476
Other liabilities:				
Deposits	—	18,745	—	18,745
Total financial liabilities	38,997,635	368,084,031	18,724,056	425,805,722

31. Assets and liabilities measured at fair value (continued)

Assets and liabilities measured at fair value on a recurring basis (continued)

Level 3 valuations

The Firm has established well structured processes for determining fair value, including for instruments where fair value is estimated using significant unobservable inputs (level 3).

Estimating fair value requires the application of judgement. The type and level of judgement required is largely dependent on the amount of observable market information available to the Company. For instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs and are therefore classified within level 3 of the fair value hierarchy, judgements used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation model or other valuation technique to use. Second, due to the lack of observability of significant inputs, management must assess relevant empirical data in deriving valuation inputs including, transaction details, yield curves, interest rates, prepayment speed, default rates, volatilities, correlations, prices (such as commodity, equity or debt prices), valuations of comparable instruments, foreign exchange rates and credit curves.

The following table presents the Company's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and, for certain instruments, the weighted averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components.

The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Company's view, the input range and the weighted average value do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Company's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Company and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlying's, tenors, or strike prices.

The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Company at each balance sheet date.

31. Assets and liabilities measured at fair value (continued)

Level 3 valuations (continued)

Product/instrument	Asset	Liability	Net fair value	Principal valuation technique	Unobservable input	Range of input values	Weighted average
31 December 2019	$'000	$'000	$'000				
Debt and equity instruments and loans	**2,841,016**	**(10,043)**	**2,830,973**				
Corporate debt securities and other				Market comparables	Price	$4 - $112	$72
Residential mortgage-backed securities and loans				Discounted cash flows	Yield Prepayment speed Conditional default rate Loss severity	2% - 18% 0% - 26% 0% - 5% 0% - 100%	6% 13% 0% 5%
Commercial mortgage-backed securities and loans				Market comparables	Price	$0 - $100	$79
Loans at FVOCI				Discounted cash flows	Credit spreads Utilisation given default CDS recovery rate Loan recovery rate	4bps - 1597bps 0% - 100% 0% - 75% 0% - 95%	51bps 39% 36% 52%
Loans at fair value				Discounted cash flows	Yield	5% - 28%	8%
Derivatives	**4,560,784**	**(8,665,527)**	**(4,104,743)**				
Interest rate derivatives				Option pricing	Interest rate volatility Interest rate spread volatility Interest rate correlation IR - FX correlation	6% - 44% 20bps – 30bps (65)% – 94% (58)% - 40%	
				Discounted cash flows	Prepayment speed	4% - 30%	
Credit derivatives				Discounted cash flows	Credit correlation Credit spread Recovery rate Conditional default rate Loss severity	31% – 59% 3bps - 1,308bps 15% - 70% 2% - 18% 100%	
				Market comparables	Price	$1 - $115	
Foreign exchange derivatives				Option pricing	IR - FX correlation	(58)% – 65%	
				Discounted cash flows	Prepayment speed	9%	
Equity derivatives				Option pricing	Forward equity price Equity volatility Equity correlation Equity - FX correlation Equity - IR correlation	92% - 105% 9% – 93% 10% - 97% (81)% - 60% 25% - 35%	
Commodity derivatives				Option pricing	Forward commodity price Commodity volatility Commodity correlation	$39 – $76 per barrel 5% - 105% (48)% - 95%	
Other financial liabilities	**—**	**(10,023,974)**	**(10,023,974)**	Option pricing	Interest rate volatility Interest rate correlation IR - FX correlation Equity correlation Equity - FX correlation Equity - IR correlation	6% – 44% (65)% – 94% (58)% – 40% 10% - 97% (81)% - 60% 25% - 35%	
Total	**7,401,800**	**(18,699,544)**	**(11,297,744)**				

The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the balance sheet and fair values are shown net.

Given significant hedging between derivatives and other financial liabilities, the inputs considered are consistent across both.

31. Assets and liabilities measured at fair value (continued)

Level 3 valuations (continued)

Product/instrument	Asset	Liability	Net fair value	Principal valuation technique	Unobservable input	Range of input values	Weighted average
At 31 December 2018	**$'000**	**$'000**	**$'000**				
Debt and equity instruments	**3,335,725**	**(15,581)**	**3,320,144**				
Corporate debt securities and other				Market comparables	Price	$0 - $107	$57
Residential mortgage-backed securities and loans				Discounted cash flows	Yield	0% - 19%	6%
					Prepayment speed	0% - 24%	9%
					Conditional default rate	0% - 9%	1%
					Loss severity	0% - 100%	6%
Commercial mortgage-backed securities and loans				Market comparables	Price	$0 - $103	$90
Loans at FVOCI				Discounted cash flows	Credit spreads	5bps - 817bps	77bps
					Utilisation given default	0% - 100%	33%
					CDS recovery rate	20% - 80%	37%
					Loan recovery rate	25% - 90%	52%
Loans at fair value				Discounted cash flows	Yield	8%	8%
Derivatives	**5,436,423**	**(11,350,339)**	**(5,913,916)**				
Interest rate derivatives				Option pricing	Interest rate spread volatility	16bps – 38bps	
					Interest rate correlation	(45)% – 97%	
					Interest rate - FX correlation	45% - 60%	
				Discounted cash flows	Prepayment speed	4% - 30%	
Credit derivatives				Discounted cash flows	Credit correlation	25% – 55%	
					Credit spread	10bps - 1,487bps	
					Recovery rate	20% - 70%	
					Conditional default rate	3% - 72%	
					Loss severity	100%	
				Market comparables	Price	$1 - $115	
Foreign exchange derivatives				Option pricing	Interest rate - FX correlation	(45)% – 60%	
				Discounted cash flows	Prepayment speed	8%-9%	
Equity derivatives				Option pricing	Equity volatility	14% – 57%	
					Equity correlation	20% - 98%	
					Equity - FX correlation	(75)% - 61%	
					Equity - interest rate correlation	20% - 60%	
Commodity derivatives				Option pricing	Forward commodity price	$39 – $56 per barrel	
					Commodity volatility	5% - 68%	
					Commodity correlation	(51%) - 95%	
Other financial liabilities	**—**	**(7,358,136)**	**(7,358,136)**	Option pricing	Interest rate spread volatility	16bps – 38bps	
					Interest rate correlation	(45)% – 97%	
					Interest rate - FX correlation	(45)% – 60%	
					Equity correlation	20% – 98%	
					Equity - FX correlation	(75)% - 61%	
					Equity - interest rate correlation	20% - 60%	
Total	**8,772,148**	**(18,724,056)**	**(9,951,908)**				

The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the balance sheet and fair values are shown net.

Given significant hedging between derivatives and other financial liabilities, the inputs considered are consistent across both.

31. Assets and liabilities measured at fair value (continued)

Changes in and ranges of unobservable inputs

The following discussion provides a description of the impact on a fair value measurement of a change in each unobservable input in isolation, and the interrelationship between unobservable inputs, where relevant and significant. The impact of changes in inputs may not be independent as a change in one unobservable input may give rise to a change in another unobservable input; where relationships exist between two unobservable inputs, those relationships are discussed below. Relationships may also exist between observable and unobservable inputs (for example, as observable interest rates rise, unobservable prepayment rates decline); such relationships have not been included in the discussion below. In addition, for each of the individual relationships described below, the inverse relationship would also generally apply.

Yield - The yield of an asset is the interest rate used to discount future cash flows in a discounted cash flow calculation. An increase in the yield, in isolation, would result in a decrease in a fair value measurement.

Credit spread - The credit spread is the amount of additional annualised return over the market interest rate that a market participant would demand for taking exposure to the credit risk of an instrument. The credit spread for an instrument forms part of the discount rate used in a discounted cash flow calculation. Generally, an increase in the credit spread would result in a decrease in a fair value measurement.

Prepayment speed - The prepayment speed is a measure of the voluntary unscheduled principal repayments of a prepayable obligation in a collateralised pool. Prepayment speeds generally decline as borrower delinquencies rise. An increase in prepayment speeds, in isolation, would result in a decrease in a fair value measurement of assets valued at a premium to par and an increase in a fair value measurement of assets valued at a discount to par.

Conditional default rate - The conditional default rate is a measure of the reduction in the outstanding collateral balance underlying a collateralised obligation as a result of defaults. An increase in conditional default rates would generally be accompanied by an increase in loss severity and an increase in credit spreads. An increase in the conditional default rate, in isolation, would result in a decrease in a fair value measurement.

Loss severity - The loss severity (the inverse concept is the recovery rate) is the expected amount of future realised losses resulting from the ultimate liquidation of a particular loan, expressed as the net amount of loss relative to the outstanding loan balance. An increase in loss severity is generally accompanied by an increase in conditional default rates. An increase in the loss severity, in isolation, would result in a decrease in a fair value measurement.

Utilisation given default ("UGD") - . A number between 0% and 100% that is the estimated fraction of the current undrawn balance on a revolving credit facility that will be drawn at the time of the default of the borrower. A higher UGD generally results in a decrease in the fair value of the loan.

Correlation - Correlation is a measure of the relationship between the movements of two variables . Correlation is a pricing input for a derivative product where the payoff is driven by one or more underlying risks.

Correlation inputs are related to the type of derivative (e.g., interest rate, credit, equity and foreign exchange) due to the nature of the underlying risks. When parameters are positively correlated, an increase in one parameter will result in an increase in the other parameter. When parameters are negatively correlated, an increase in one parameter will result in a decrease in the other parameter. An increase in correlation can result in an increase or a decrease in a fair value measurement. Given a short correlation position, an increase in correlation, in isolation, would generally result in a decrease in a fair value measurement.

Volatility - Volatility is a measure of the variability in possible returns for an instrument, parameter or market index given how much the particular instrument, parameter or index changes in value over time. Volatility is a pricing input for options, including equity options, commodity options, and interest rate options. Generally, the higher the volatility of the underlying, the riskier the instrument. Given a long position in an option, an increase in volatility, in isolation, would generally result in an increase in a fair value measurement.

31. Assets and liabilities measured at fair value (continued)

Fair value financial instruments valued using techniques that incorporate significant unobservable inputs

The potential impact as at 31 December of using reasonable possible alternative assumptions for the valuations including significant unobservable inputs have been quantified in the following table:

Sensitivity analysis of valuations using unobservable inputs	**Fair Value**			**Favourable change**	**Unfavourable change**
	Asset	**Liability**	**Net**	**Statement of comprehensive income**	
At 31 December 2019	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Corporate debt securities and other	1,969,651	(10,043)	1,959,608	60,422	(60,422)
Residential mortgage-backed securities	7,776	—	7,776	715	(715)
Commercial mortgage-backed securities	1,245	—	1,245	67	(67)
Loans	27,836	—	27,836	729	(729)
Total debt and equity instruments and loans	**2,006,508**	**(10,043)**	**1,996,465**	**61,933**	**(61,933)**
Derivatives*	**4,560,784**	**(8,665,527)**	**(4,104,743)**	**71,702**	**(71,702)**
Other financial liabilities*	**—**	**(10,023,974)**	**(10,023,974)**	**175,101**	**(175,101)**
Loans at FVOCI	**834,508**	**—**	**834,508**	**3,221**	**(3,221)**
Total	**7,401,800**	**(18,699,544)**	**(11,297,744)**	**311,957**	**(311,957)**

Sensitivity analysis of valuations using unobservable inputs	**Fair Value**			**Favourable change**	**Unfavourable change**
	Asset	**Liability**	**Net**	**Income statement**	
At 31 December 2018	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Debt and equity instruments					
Corporate debt securities and other	1,667,433	(15,581)	1,651,852	53,943	(53,943)
Residential mortgage-backed securities	17,596	—	17,596	1,625	(1,625)
Commercial mortgage-backed securities	1,675	—	1,675	91	(91)
Loans	323,870	—	323,870	11,901	(11,901)
Total debt and equity instruments	**2,010,574**	**(15,581)**	**1,994,993**	**67,560**	**(67,560)**
Derivatives*	**5,436,423**	**(11,350,339)**	**(5,913,916)**	**83,828**	**(83,828)**
Other financial liabilities*	**—**	**(7,358,136)**	**(7,358,136)**	**104,300**	**(104,300)**
Loans at FVOCI	**1,325,151**	**—**	**1,325,151**	**16,252**	**(16,252)**
Total	**8,772,148**	**(18,724,056)**	**(9,951,908)**	**271,940**	**(271,940)**

* Given significant hedging between derivatives and other financial liabilities the net risk is considered to calculate the favourable/ unfavourable changes with the result then allocated to the two lines individually.

31. Assets and liabilities measured at fair value (continued)

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the balance sheets amounts (including changes in fair value) for financial instruments classified by the Company within level 3 of the fair value hierarchy.

Movement in assets and liabilities in Level 3 during year ended 31 December 2019

Financial assets	Loans at FVOCI	Debt and equity instruments and loans	Derivative receivables	Total financial assets
	$'000	$'000	$'000	$'000
At 31 December 2018	1,325,151	2,010,574	5,436,423	8,772,148
At 1 January 2019	1,325,151	2,010,574	5,436,423	8,772,148
Total gains/(losses) recognised in profit or loss	13,504	(117,800)	3,672,219	3,567,923
Total gains/(losses) recognised in other comprehensive income	(10,852)	—	—	(10,852)
Purchases	—	1,894,592	2,398,734	4,293,326
Sales	(799,716)	(1,497,303)	(1,234,760)	(3,531,779)
Issuances	306,421	30,535	—	336,956
Settlements	—	(247,615)	(4,001,928)	(4,249,543)
Transfers in to Level 3	—	356,765	805,198	1,161,963
Transfers out of Level 3	—	(423,240)	(2,515,102)	(2,938,342)
At 31 December 2019	834,508	2,006,508	4,560,784	7,401,800
Change in unrealised gains related to financial instruments held at 31 December 2019	—	(16,454)	709,025	692,571

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
At 31 December 2018	15,581	11,350,339	7,358,136	18,724,056
At 1 January 2019	15,581	11,350,339	7,358,136	18,724,056
Total (gains)/loss recognised in profit or loss	(2,584)	2,381,672	3,795,913	6,175,001
Purchases	(3,158)	(6,368)	(151)	(9,677)
Sales	27,556	4,470,635	—	4,498,191
Issuances	(111)	—	7,069,692	7,069,581
Settlements	1,087	(7,478,618)	(6,415,137)	(13,892,668)
Transfers in to Level 3	6,484	1,242,079	235,538	1,484,101
Transfers out of Level 3	(34,812)	(3,294,212)	(2,020,017)	(5,349,041)
At 31 December 2019	10,043	8,665,527	10,023,974	18,699,544
Change in unrealised losses related to financial instruments held at 31 December 2019	681	481,934	66,776	549,391

31. Assets and liabilities measured at fair value (continued)

Movement in assets and liabilities in Level 3 during year ended 31 December 2018

Financial assets	Loans at FVOCI	Debt and equity instruments and loans	Derivative receivables	Total financial assets
	$'000	$'000	$'000	$'000
31 December 2017	—	1,678,345	4,043,726	5,722,071
Adoption of IFRS 9 - reclassification	1,459,106			1,459,106
Adoption of IFRS 9 - remeasurement	(13,663)	—	—	(13,663)
1 January 2018	**1,445,443**	**1,678,345**	**4,043,726**	**7,167,514**
Total gains/(losses) recognised in profit or loss	(16,775)	(153,170)	969,006	799,061
Total gains/(losses) recognised in other comprehensive income	12	—	—	12
Purchases		1,869,459	2,581,194	4,450,653
Sales	(894,977)	(790,957)	(1,607,475)	(3,293,409)
Issuances	791,448	206,619	—	998,067
Settlements	—	(314,170)	(379,311)	(693,481)
Transfers in to Level 3	—	332,207	391,962	724,169
Transfers out of Level 3	—	(817,759)	(562,679)	(1,380,438)
31 December 2018	**1,325,151**	**2,010,574**	**5,436,423**	**8,772,148**
Change in unrealised gains related to financial instruments held at 31 December 2018	—	1,928	360,693	362,621

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
31 December 2017	712	6,638,758	6,992,969	13,632,439
Adoption of IFRS 9	—	—	—	—
1 January 2018	712	6,638,758	6,992,969	13,632,439
Total (gains)/loss recognised in profit or loss	8,799	1,640,313	(200,531)	1,448,581
Purchases	(89,565)	503,933	—	414,368
Sales	81,210	5,074,333	—	5,155,543
Issuances	—	—	4,536,930	4,536,930
Settlements	16,581	(2,488,809)	(3,753,852)	(6,226,080)
Transfers in to Level 3	3,336	408,904	323,979	736,219
Transfers out of Level 3	(5,492)	(427,093)	(541,359)	(973,944)
31 December 2018	15,581	11,350,339	7,358,136	18,724,056
Change in unrealised losses related to financial instruments held at 31 December 2018	13,282	224,922	(5,855)	232,349

Realised and unrealised gains/(losses) are reported in trading profits in the income statement.

31. Assets and liabilities measured at fair value (continued)

Transfers between levels for instruments carried at fair value on a recurring basis

For the years ended 31 December 2019 and 2018, there were no significant transfers between levels 1 and 2.

During the year ended 31 December 2019, transfers in to and out of level 3 included the following:

- $1.4 billion of assets and $3.7 billion of liabilities transferred out of level 3 driven by an increase in observability of swaps and commodities;
- $1.1bn of assets and $1.5bn of liabilities transferred out of level 3 driven by an increase in observability of equity options;
- $0.7bn of assets and $1.1bn of liabilities transferred in to level 3 driven by a decrease in observability of equity options; and
- $0.3bn of assets and $0.4bn of liabilities transferred in to level 3 driven by a decrease in observability of inputs on swaps.

All transfers are assumed to occur at the beginning of the period in which they occur.

During the year ended 31 December 2018, transfers in to and out of level 3 included the following:

- $0.3 billion of assets and $0.2 billion of liabilities transferred out of level 3 driven by an increase in observability of swaps and commodities;
- $0.2bn of assets and $0.1bn of liabilities transferred out of level 3 driven by an increase in observability of equity options;
- $0.8bn of assets transferred out of level 3 driven by an increase in observability of trading loans and corporate debt;
- $0.2bn of assets and $0.09bn of liabilities transferred in to level 3 driven by a decrease in observability of equity options;
- $0.4bn of assets transferred in to level 3 driven by a decrease in observability of trading loans; and
- $0.2bn of assets and $0.2bn of liabilities transferred in to level 3 driven by a decrease in observability of inputs on swaps.

All transfers are assumed to occur at the beginning of the period in which they occur.

Recognition of day one profit and loss

The Company enters into transactions where fair value is determined using valuation models that use significant unobservable inputs. The difference between the transaction price and model price is not recognised immediately in the income statement when based on significant unobservable limits. The difference between the transaction price and model price on assets amounted to $373.4 million (2018: $50.4 million), and for liabilities amounted to $185.3 million (2018: $(59.3) million).

Fair value of financial instruments not carried on balance sheet at fair value

Certain financial instruments that are not carried at fair value on balance sheet are carried at amounts that approximate fair value, due to their short-term nature and generally negligible credit risk. These instruments include certain securities purchased under agreements to resell, cash and balances at central banks, debtors, other assets, trade creditors and other liabilities.

The Company has $133.7 billion (2018: $143.1 billion) of current financial assets and $196.9 billion (2018: $197.1 billion) of current financial liabilities that are not measured at fair value, including loans and advances to customers of $0.6 billion (2018: $0.8 billion).

In estimating the fair value of these loans and advances to customers, typically a discounted cash flow model is applied with significant unobservable inputs and therefore would be classified as level 3 instruments. The fair value of these loans is not materially different from the carrying amount. All other instruments are of a short-term nature and the carrying amounts in the balance sheet approximate fair value.

32. Offsetting financial assets and financial liabilities

The table below presents the balance sheet assets and liabilities offset, where the offsetting criteria under IAS 32 'Financial Instruments: Presentation' ("IAS 32") have been met, and the related amounts not offset in the balance sheet in respect of cash and security collateral received and master netting agreements, where such criteria have not been met:

	Effects of offsetting on balance sheet			Related amounts not offset		
	Gross amounts	Amounts offset	Net amounts reported on balance sheet	Master netting agreements and other	Cash & security collateral	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2019						
Financial assets:						
Securities purchased under agreements to resell [(a)]	288,207,919	(145,600,149)	142,607,770	(18,725,000)	(121,581,496)	2,301,274
Securities borrowed [(a)]	36,948,541	—	36,948,541	(10,045,547)	(22,111,553)	4,791,441
Financial assets at fair value through profit and loss [(b)]	408,063,674	(27,128,753)	380,934,921	(238,396,108)	(26,689,865)	115,848,948
Total	733,220,134	(172,728,902)	560,491,232	(267,166,655)	(170,382,914)	122,941,663
Financial liabilities:						
Securities sold under agreements to repurchase [(a)]	211,204,968	(145,600,149)	65,604,819	(18,725,000)	(45,705,000)	1,174,819
Securities loaned [(a)]	12,011,127	—	12,011,127	(10,045,547)	(1,903,209)	62,371
Financial liabilities at fair value through profit and loss[(b)]	364,466,486	(26,302,936)	338,163,550	(231,816,797)	(25,818,638)	80,528,115
Total	587,682,581	(171,903,085)	415,779,496	(260,587,344)	(73,426,847)	81,765,305

32. Offsetting financial assets and financial liabilities (continued)

	Effects of offsetting on balance sheet			Related amounts not offset		
	Gross amounts	Amounts offset	Net amounts reported on balance sheet	Master netting agreements and other	Cash & security collateral	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2018						
Financial assets:						
Securities purchased under agreements to resell [a]	432,536,815	(277,452,233)	155,084,582	(22,035,763)	(127,778,723)	5,270,096
Securities borrowed [a]	45,507,924	—	45,507,924	(16,692,007)	(24,236,047)	4,579,870
Financial assets at fair value through profit and loss [b]	363,932,680	(23,977,281)	339,955,399	(202,101,306)	(24,629,365)	113,224,728
Total	841,977,419	(301,429,514)	540,547,905	(240,829,076)	(176,644,135)	123,074,694
Financial liabilities:						
Securities sold under agreements to repurchase [a]	369,149,785	(277,452,233)	91,697,552	(22,035,763)	(68,048,958)	1,612,831
Securities loaned [a]	20,646,594	—	20,646,594	(16,692,007)	(3,430,071)	524,516
Financial liabilities at fair value through profit and loss [b]	336,827,177	(24,602,077)	312,225,100	(194,432,535)	(25,154,787)	92,637,778
Total	726,623,556	(302,054,310)	424,569,246	(233,160,305)	(96,633,816)	94,775,125

(a) The fair value of securities purchased under agreements to resell and securities borrowed accepted as collateral that the Company is permitted to sell or re-pledge in the absence of default, prior to netting adjustments, is $295,969 million (2018: $484,560 million). The fair value of securities sold under agreements to repurchase and securities loaned pledged to secure liabilities, prior to netting adjustments, is $205,402 million (2018: $364,579 million).

(b) Included within 'amounts offset' are the respective collateral payable and receivables with certain clearing counterparties.

33. Pensions

During the year, the Company was a participating employer in the following pension schemes in the UK:

- JPMorgan UK Pension Plan ("UKP") - a defined contribution scheme (as a participating employer); and
- JPMorgan Cazenove (1987) Pension Scheme ("UKS") - a defined benefit scheme (as a participating employer).

In addition to the above, whilst not being a participating employer, the Company has certain obligations for the following pension scheme in the UK:

- JPMC UK Retirement Plan - a defined benefit scheme

In Europe, the Company also operates defined benefit and defined contribution schemes for its employers in the overseas branches in Switzerland, Germany, France, Italy and Spain. Based on full actuarial valuations carried out during the year, the net liability in respect of these European schemes as at 31 December 2019 amounted to $6,097,000 (2018: $7,031,000). The charge for the year through the income statement was $1,440,000 (2018: $1,137,000), and total loss recognised through statement of comprehensive income was $432,000 (2018: loss of $3,920,000).

JPMorgan UK Pension Plan

The Company participates in the JPMorgan UK Pension Plan, a defined contribution scheme operated by the Firm, which is open to current and future contributions.

33. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme

The JPMorgan Cazenove (1987) Pension Scheme ("UKS") is a defined benefit plan. The Company has been the principal employer to the UKS plan since August 2012. In May 2016, the Company agreed to and became responsible for 97.24% of the liabilities in respect of the UKS, taking over the obligation from its indirect subsidiary, JPMorgan Cazenove Service Company. Furthermore, in May 2019 the Company became responsible for the remaining 2.76% of the liabilities of the UKS, taking over the obligation from a related JPMC undertaking. This plan then ceased to be regarded as a multi-employer scheme. As the Company is the principal employer, 100% of the assets and liabilities are recognised on balance sheet and disclosed below. For the purposes of these disclosures, the duration of the scheme is considered to be 21 years as at 31 December 2019.

On 31 May 2016, the UKS was closed to future benefits at which point the members, who had been contributing members prior to cessation of accrual, joined the UKP. Depending on when members left the UKS, benefits are revalued in the period up to their retirement in line with either the retail price index or consumer price index, subject to certain caps and collars. In addition pensions in payment are increased, depending on when the benefit was accrued, at either fixed annual rates or rates linked to changes in the retail price index, with different caps.

The UKS liability is sensitive to changes to factors such as; bond yields, life expectancy and inflation risk. The UKS's investment strategy seeks to balance achieving a level of return while reducing asset volatility and matching expected movements in the liability. Through the UKS activities of balancing growth assets versus matching assets to liability movements, the UKS exposes the Company to investment risk.

Responsibility for the governance of the UKS - including investment decisions is borne by the Trustee.

The 5 April 2018 triennial actuarial valuation revealed a funding deficit in the Scheme of $52.3 million. A Recovery Plan (dated 29 May 2019), was agreed between the Company and the Trustee to eliminate the funding shortfall over a 7 year period, which is by 5 April 2025. It was agreed annual contributions of $7.5 million would be paid by the company by 5 April each year, until 5 April 2025.

The principal assumptions adopted for the valuation of the UKS at 31 December were as follows:

	2019	**2018**
	% per annum	**% per annum**
Discount rate	1.9	2.7
Rate of salary increase	N/A*	N/A*
Rate of price inflation	2.9	3.5
Rate of pension increases	2.9	3.0

* The salary increase assumption no longer applies for the UKS as this plan was closed to future accruals on 31 May 2016.

Assumed life expectancy on retirement at age 65 were as follows:

	2019	**2018**
	years	**years**
Longevity at age 65 for current pensioners		
- Male	23.3	23.2
- Female	25.4	25.3
Longevity at age 65 for future pensioners		
- Male	25.4	25.2
- Female	27.6	27.5

33. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

The movements in the UKS' liability for the year ended 31 December was as follows:

	2019	2018
	$'000	$'000
Benefit obligation at beginning of the year	490,729	557,343
Current service costs		—
Prior service costs	—	495
Interest costs	13,084	12,939
Actuarial loss/(gain)	64,506	(27,600)
Benefits paid from plan/Company	(14,657)	(21,368)
Exchange rate changes	21,820	(31,080)
Benefit obligation at end of the year	575,482	490,729

The movements in the UKS' assets for the year ended 31 December was as follows:

	2019	2018
	$'000	$'000
Fair value of plan assets at beginning of year	429,722	477,698
Interest income on plan assets	11,555	11,128
Actuarial gain/(loss) on plan assets	48,652	(14,789)
Employer contributions (including employer direct benefit payments)	7,277	4,391
Administrative expenses paid from plan assets	(240)	(263)
Benefits paid from plan/Company	(14,657)	(21,368)
Exchange rate changes	19,014	(27,075)
Fair value of plan assets at end of the year	501,323	429,722

The fair value of fixed interest, index linked gilts and cash is determined using quoted prices. The fair value of investment funds is determined using un-quoted prices.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumption is as follows:

	2019			2018		
	Change in assumption	Increase in liability	Decrease in liability	Change in assumption	Increase in liability	Decrease in liability
At 31 December	%	% per annum	% per annum	%	% per annum	% per annum
Discount rate	0.25%	(4.97)%	5.56 %	0.25%	(5.10)%	5.33 %
Rate of salary increase	0.25%	N/A*	N/A*	0.25%	N/A*	N/A*
Rate of pension increase	0.25%	2.12 %	(1.89)%	0.25%	2.02 %	(1.99)%
Rate of price inflation	0.25%	3.06 %	(2.71)%	0.25%	3.07 %	(2.97)%
Post-retirement mortality assumption	Increase by one year	4.2 %		Increase by one year	3.83 %	

* The salary increase assumption no longer applies for the UKS as this plan was closed to future accruals on 31 May 2016.

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant.

The expected return on scheme assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected yields on fixed interest investments are based on gross redemption yields as at the balance sheet date. Expected returns on equity investments reflect long-term real rates of return experienced in the respective markets.

33. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

Amounts recognised in the balance sheet arising from schemes that are wholly unfunded and those wholly or partly funded as at 31 December were as follows:

	2019	2018
	$'000	$'000
Present value of wholly or partly funded obligations	575,482	490,729
Fair value of plan assets	501,323	429,722
Deficit for funded plans - net liability	74,159	61,007
Effects of changes in demographic assumptions	—	(9,719)
Effects of changes in financial assumptions	64,458	(26,309)
Experience adjustments on plan assets	(48,652)	14,789
Experience adjustments on plan liabilities	48	8,427
Total remeasurements included in OCI	15,854	(12,812)

Movements in the UKS income statement for the year ended 31 December are as follows:

	2019	2018
	$'000	$'000
Current service cost	—	—
Prior services costs	—	495
Interest cost	13,084	12,939
Expected return on plan assets	(11,555)	(11,128)
Administrative expenses paid from plan assets	240	263
Total pension cost recognised in the income statement	1,769	2,569
Exchange rate changes	2,807	(4,005)
Net amount recognised in the income statement	4,576	(1,436)

Movements in the UKS statement of other comprehensive income for the year ended 31 December are as follows:

	2019	2018
	$'000	$'000
Actuarial gain immediately recognised	(15,854)	12,812

33. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

The asset allocation of the UKS defined benefit schemes was as follows:

	2019	2018
	Percentage of plan assets	Percentage of plan assets
	(%)	(%)
Equity securities	36.2	36.3
Bond securities	48.5	50.2
Investment funds	15.0	12.3
Cash	0.5	1.2
Other	(0.2)	—
	100	100

JPMC UK Retirement Plan

The Firm maintains the JPMC UK Retirement Plan, a defined benefit plan that is closed to additional benefit accruals. Whilst the Company is not a participating employer in this plan, it does have certain obligations calculated in accordance with paragraph 5 (2) of Schedule 1A to the Occupational Pension Schemes (Employer Debt) Regulations 2005 (as amended), as follows:

- Under a Withdrawal Agreement, dated 24 May 2011, that was entered into in relation to J.P. Morgan Services LLP ("LLP"), a JPMorgan Chase undertaking which had previously been a participating employer in the plan. Under the terms of this agreement, the Company became responsible for LLP's portion of the pension obligations.
- Under a Withdrawal Agreement, dated 21 December 2018, that was entered into in relation to J.P. Morgan Europe Limited ("EL"), a JPMorgan Chase undertaking which had previously been a participating employer of the plan. Under the terms of this agreement, the Company became responsible for EL's portion of the pension obligations.

The Company was not required to make any payments immediately or in relation to the ongoing funding of the plan under either of these Withdrawal Agreements.

However, payments may become due from the Company on the occurrence of the earliest of the following events:

- The commencement of the winding up of the plan;
- The insolvency of the plan's last remaining participating employer;
- The insolvency of the Company; or
- Any other date agreed between the Company and the Trustee of the Plan.

34. Share based payments

The Firm has granted long-term stock-based awards to certain key employees under its Long Term Incentive Plan ("LTIP"), as amended and restated effective 19 May 2015 and further amended and restated effective 15 May 2018. Under the terms of the LTIP, as of 31 December 2019, 75 million shares of common stock were available for issuance through May 2019 (2018: 86 million shares). The LTIP is the only active plan under which the Firm is currently granting stock-based incentive awards. In the following discussion, the LTIP, plus prior Firm plans and plans assumed as the result of acquisitions, are referred to collectively as the "LTI Plans" and such plans constitute the Firm's stock-based incentive plans.

34. Share based payments (continued)

The Firm separately recognises compensation expense for each tranche of each award as if it were a separate award with its own vesting date. For each tranche granted, compensation expense is recognised in line with how awards vest from the grant date until the vesting date of the respective tranche, provided that the employees will not become full-career eligible during the vesting period. For awards with full-career eligibility provisions and awards granted with no future substantive service requirement, the Firm accrues the estimated value of awards expected to be awarded to employees as of the grant date without giving consideration to the impact of post-employment restrictions. For each tranche granted to employees of the Company who will become full-career eligible during the vesting period, compensation expense is recognised in line with how awards vest from the grant date until the earlier of the employee's full-career eligibility date or the vesting date of the respective tranche.

Restricted stock units

Restricted stock units ("RSUs") are awarded at no cost to the recipient upon their grant. RSUs are generally granted annually and generally vest at a rate of 50% after two years, 50% after three years, and convert into shares of common stock at the vesting date. In addition, RSUs typically include full-career eligibility provisions, which allow employees to continue to vest upon voluntary termination, subject to post-employment and other restrictions based on age or service-related requirements. All of these awards are subject to forfeiture until vested and contain clawback provisions that may result in cancellation prior to vesting under certain specified circumstances. RSUs entitle the recipient to receive cash payments equivalent to any dividends paid on the underlying common stock during the period the RSUs are outstanding.

Compensation expense for RSUs is measured based upon the number of shares granted multiplied by the stock price at the grant date, and for employee stock options and stock appreciation rights ("SARs") is measured at the grant date using the Black-Scholes valuation model. Compensation expense for these awards is recognised as described above.

Key employee stock options and SARs

Under the LTI Plans, stock options and SARs have generally been granted with an exercise price equal to the fair value of JPMorgan Chase & Co.'s common stock on the grant date. SARs and stock options generally expire ten years after the grant date. There were no material grants of employee SARs or stock options in 2019, 2018 and 2017. The following table summarises additional information about options and SARs outstanding as at 31 December:

The following table summarises additional information about options and SARs outstanding as at 31 December:

	31 December 2019			31 December 2018		
	Outstanding '000	**Weighted average exercise price $**	**Weighted average remaining contractual life (in years)**	Outstanding '000	Weighted average exercise price $	Weighted average remaining contractual life (in years)
Range of exercise prices						
$min - $20.00	—	—	—	95	19.49	0.05
$20.01 - $35.00	—	—	—	—	—	—
$35.01 - $50.00	351	43.55	1.46	533	43.34	2.01
$50.01 and above	—	—	—	—	—	—
Total	351	43.55	1.46	628	39.73	1.72

The weighted average share price during the year ended 31 December 2019 was $113.70 (2018: $110.72).

The total expense for the year relating to share based payments was $355 million (2018: $382 million), all of which relates to equity settled share based payments.

35. Transfers of financial assets

In the course of its normal business activities, the Company makes transfers of financial assets. Depending on the nature of the transaction, this may result in derecognition of the assets in their entirety, partial derecognition or no derecognition of the assets subject to the transfer. A summary of the main transactions, and the assets and liabilities and the financial risks arising from these transactions, is set out below:

Transfers of financial assets that do not result in derecognition

Assets are transferred under repurchase and securities lending agreements with other banks and financial institutions. In substance, these transactions constitute secured borrowings and therefore the assets are not derecognised from the balance sheet. The recipient is generally able to use, sell or pledge the transferred assets for the duration of the transaction. The Company remains exposed to interest and credit risk on these instruments which they are contractually required to repurchase at a later date. The fair value of the collateral and the carrying amounts of the liabilities is disclosed in note 32, and for other similar secured borrowings within this note.

In the prior year, the Company transferred bonds to a third party, and subsequently entered into a forward sale agreement to repurchase the bond at an agreed price and future date. The Company was contractually required to repurchase the assets, therefore the derecognition criteria were not met as the Company retained the risks and rewards associated with the financial assets. The assets continued to be recognised on balance sheet together with the related liability.

The Company has also transferred both bonds and equity securities to third parties in consideration for cash, while simultaneously entering into derivative transactions, with the same counterparty, which are linked to the transferred assets. The derecognition criteria have not been met because the Company retains the risk and rewards associated with the transferred financial assets, therefore the assets continue to be recognised on balance sheet together with the related liability.

The counterparty's recourse is generally not limited to the transferred assets. The following is a summary of the fair value of the assets and carrying amount of related liabilities:

Fair value of the assets not derecognised

	Fair value of the assets		**Carrying amount of the related liability**	
	2019	2018	**2019**	2018
	$'000	$'000	**$'000**	$'000
Financial assets at fair value through profit and loss	1,416,441	2,144,400	1,252,407	1,990,396

Continuing involvement in financial assets that have been derecognised

In some cases, the Company transfers financial assets that it derecognises entirely even though it may have continuing involvement in them. This typically happens when the Company has sold a financial asset to an SPE with limited other assets and enters into a derivative with the SPE to provide investors with a specified exposure (examples include credit-linked note vehicles and asset swap vehicles that are established on behalf of investors). The Company is unlikely to repurchase derecognised financial assets.

The total notional and the market value of all derivatives executed by the Company with such SPEs amounted to $1.7 billion and $581.0 million as of 2019 ($1.4 billion and $516 million as of 2018). Due to the nature of the derivatives, the maximum exposure to loss is deemed to be the the mark to market on those derivatives.

The assets transferred are recorded at fair value, and as such there are immaterial gains and losses upon the transfer of assets. The year to date gains on the derivatives executed by the Company are $93.9 million as of 2019 ($4.6 million gains as of 2018). The cumulative gains and losses on these derivatives is immaterial.

36. Financial risk management

Disclosures in relation to the Company's risk management and capital management have been presented in the Strategic report on pages 2 - 40 which forms part of these financial statements.

37. Post balance sheet events

Dividends

The Company paid a dividend of $250 million to J.P. Morgan Capital Holdings Limited ($193 dividend per share) on 9 April 2020.

Other

Following the outbreak of the COVID-19 pandemic in early 2020, the Company and the Firm are monitoring the development of the pandemic and evaluating its impact on the financial position and operating results of the Company. As at the date on which this set of financial statements were authorised for issue as the situation is ongoing and eventual outcome unknown, the Company cannot quantify the impact on the financial position, operations or capital position as a result of the COVID-19 pandemic. The Company does not currently anticipate a significant reduction in their capital and liquidity positions over the coming year. For more detail on Firmwide measures refer to operational risk (pages 31 - 33).