REGISTRATION DOCUMENT **30 June 2017**

J.P. Morgan Structured Products B.V.

(*incorporated with limited liability in The Netherlands*)

and

J.P. Morgan Securities plc

(*incorporated with limited liability in the United Kingdom*)

*This document (the "**Registration Document**") constitutes two registration documents for the purpose of Section 12 paragraph 1 of the German Securities Prospectus Act in conjunction with Article 7 and Annex IV of the Commission Regulation (EC) No. 809/2004 of 29 April 2004, as amended (the "**Prospectus Regulation**"): (i) the registration document in relation to J.P. Morgan Structured Products B.V., Amsterdam, The Netherlands (the "**Issuer**" or "**JPMSP**") and (ii) the registration document in relation to J.P. Morgan Securities plc, London, United Kingdom as guarantor for certain securities issued by JPMSP ("**JPMS plc**" or, the "**Guarantor**"). The competent authority for the approval of the Registration Document pursuant to Section 12 and Section 13 of the German Securities Prospectus Act (the "**WpPG**") that implements Directive 2003/71/EC, as amended from time to time, including by Directive 2010/73/EU (the "**Prospectus Directive**") into German law is the German Federal Supervisory Authority (the "**Competent Authority**").*

JPMSP in its capacity as an issuer, subject to compliance with all relevant laws, regulations and directives, may from time to time issue notes or other similar instruments ("**Notes**"), warrants or other similar instruments ("**Warrants**") and certificates or other similar instruments ("**Certificates**"). Notes, Warrants and Certificates shall be referred to collectively as "**Securities**". Payment obligations of JPMSP in respect of certain Securities will be guaranteed by JPMS plc. Further information on the respective guarantee (in each case a "**Guarantee**") and, in particular, the exact wording, the Securities and the terms and conditions thereof are set forth in the prospectuses for the relevant Securities (the "**Prospectus**").

The distribution of this Registration Document and any information incorporated by reference into this Registration Document and the offer or sale of Securities issued by JPMSP may be restricted by law in certain jurisdictions. Persons into whose possession this Registration Document or any information incorporated by reference into this Registration Document or any securities issued by JPMSP come must inform themselves about, and observe, any such restrictions.

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I. RISK FACTORS

J.P. Morgan Structured Products B.V. ("**JPMSP**") is an indirect, wholly-owned subsidiary of JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. is one of the principal bank subsidiaries of JPMorgan Chase & Co ("**JPMorgan Chase**" being JPMorgan Chase & Co. together with its consolidated subsidiaries). J.P. Morgan Securities plc ("**JPMS plc**") is also a principal bank subsidiary of JPMorgan Chase. Investors in the Securities are exposed to the creditworthiness of JPMSP as an issuer of Securities and to the creditworthiness of JPMS plc as Guarantor of the Securities issued by JPMSP. On account of JPMSP and JPMS plc being subsidiaries of JPMorgan Chase & Co., the risks that affect JPMorgan Chase can also affect JPMSP and JPMS plc (see also 8.6 "*JPMorgan Chase Bank, N.A. is affected by risks affecting its parent company*").

JPMorgan Chase is a major, global financial services group and, as such, faces a variety of risks that are substantial and inherent in its businesses, and which may affect JPMSP's and the Guarantor's ability to fulfil its respective payment, delivery or other obligations under the Securities.

Purchase of Securities issued by JPMSP involves substantial risks: Investors should ensure that they understand the nature of the risks posed by, and the extent of their exposure under, the Securities. Investors should make all pertinent inquiries they deem necessary. Investors should consider the suitability of the Securities as an investment in light of their own circumstances, investment objectives, tax position and financial condition.

Contents of the Risk Factors

1. **Regulatory Risk**

1.1 **JPMorgan Chase operates within a highly regulated industry, and JPMorgan Chase's businesses and results are significantly affected by the laws and regulations to which JPMorgan Chase is subject**

As a global financial services firm, JPMorgan Chase is subject to extensive and comprehensive regulation under federal and state laws in the United States ("**U.S.**") and the laws of the various jurisdictions outside the U.S. in which JPMorgan Chase does business. The financial services industry has in recent years experienced an unprecedented increase in regulations and supervision, both in the U.S. and globally. The cumulative effect of the new and currently proposed legislation and regulations could require JPMorgan Chase to make further changes to its businesses or operations, which could result in a significant loss of revenue for JPMorgan Chase and impose additional compliance and other costs on JPMorgan Chase or otherwise reduce JPMorgan Chase's profitability. These changes could also: limit the products and services that JPMorgan Chase offers; reduce the liquidity that JPMorgan Chase is able to offer its clients or counterparties through its market-making activities; impede JPMorgan Chase's ability to pursue business opportunities in which it might otherwise consider engaging; require JPMorgan Chase to dispose of or curtail certain businesses; affect the value of assets that JPMorgan Chase holds; require JPMorgan Chase to increase its prices and therefore reduce demand for its products; or otherwise adversely affect JPMorgan Chase's businesses. To the extent that these initiatives have been, or continue to be, imposed on a limited subset of financial institutions (based on size, activities, geography or other criteria), the requirements to which JPMorgan Chase may be subject under such laws and regulations could require JPMorgan Chase to restructure further its businesses, or further reprice or curtail the products or services that it offers to customers, which could result in JPMorgan Chase not being able to compete effectively with other institutions that are not impacted in the same way.

Authorities in some non-U.S. jurisdictions in which JPMorgan Chase has operations have enacted legislation or regulations requiring that certain subsidiaries of JPMorgan Chase operating in those countries maintain independent capital and liquidity. In addition, some non-U.S. regulators have proposed that large banks which conduct certain businesses in their jurisdictions operate through separate subsidiaries located in those countries. These requirements, and any future laws or regulations that seek to impose restrictions on the way JPMorgan Chase organises its business units or increase the capital or liquidity requirements on non-U.S. subsidiaries of JPMorgan Chase, could hinder JPMorgan Chase's ability to efficiently manage its operations, increase its funding and liquidity costs and thereby decrease JPMorgan Chase's net income. In addition, there can be significant differences in the ways that similar regulatory initiatives affecting the financial services industry are implemented in the U.S. and in different countries and regions in which JPMorgan Chase does business. For example, recent legislative and regulatory initiatives within the EU, including those relating to the resolution of financial institutions, the establishment by non-EU financial institutions of intermediate holding companies in the EU, the separation of trading activities from core banking services, mandatory on-exchange trading, position limits and reporting rules for derivatives, governance and accountability regimes, conduct of business requirements and restrictions on compensation, could require JPMorgan Chase to make significant modifications to its non-U.S. business, operations and legal entity structure in order to comply with these requirements. These differences in implemented or proposed non-U.S. regulations and initiatives may be inconsistent or may conflict with current or proposed regulations in the U.S., which could subject JPMorgan Chase to increased compliance and legal costs, as well as higher operational, capital and liquidity costs, all of which could have an adverse effect on JPMorgan Chase's business, results of operations and profitability.

Recent political developments in the U.S. and abroad have increased the uncertainty regarding the regulatory environment in which JPMorgan Chase will operate. Although certain of the proposals being mentioned in the U.S. include the possibility of regulatory reform related to the financial services industry, it is too early to determine the full extent to which these measures will ultimately modify or reduce the regulatory requirements currently imposed on JPMorgan Chase, and the resulting possible effect on JPMorgan Chase and its business and operations. In addition, the U.K.'s planned departure from the EU has engendered significant uncertainty concerning the regulatory framework under which global financial services institutions, including JPMorgan Chase, will need to conduct their business and operations in the EU after the U.K.'s departure.

1.2 **Expanded regulatory and governmental oversight of JPMorgan Chase's businesses may continue to increase JPMorgan Chase's costs and risks**

JPMorgan Chase's businesses and operations are subject to heightened governmental and regulatory oversight and scrutiny. JPMorgan Chase has paid significant fines (or has provided significant monetary and other relief) to resolve a number of investigations or enforcement actions by governmental agencies. JPMorgan Chase continues to devote substantial resources to satisfying the requirements of regulatory consent orders and other settlements to which it is subject, which increases JPMorgan Chase's operational and compliance costs.

Certain regulators have taken measures in connection with specific enforcement actions against financial institutions (including JPMorgan Chase) that require admissions of wrongdoing and compliance with other conditions in connection with settling such matters. Such admissions and conditions can lead to, among other things, greater exposure in civil litigation, harm to reputation, disqualification from providing business to certain clients and in certain jurisdictions, and other direct and indirect adverse effects.

In addition, U.S. government officials have indicated and demonstrated a willingness to bring criminal actions against financial institutions, including JPMorgan Chase, and have increasingly sought, and obtained, resolutions that include criminal pleas or other admissions of wrongdoing from those institutions, such as JPMorgan Chase's agreement in May 2015 to plead guilty to a single violation of federal antitrust law in connection with its settlements with certain government authorities relating to its foreign exchange sales and trading activities and controls related to those activities, and the non-prosecution agreement entered into by a subsidiary of JPMorgan Chase with the U.S. Department of Justice in November 2016 in connection with settlements to resolve various governmental investigations relating to a former hiring program for candidates referred by clients, potential clients and government officials in the Asia Pacific region. Such resolutions, whether with U.S. or non-U.S. authorities, could have significant collateral consequences for a subject financial institution, including loss of customers and business, or the inability to offer certain products or services, or losing permission to operate certain businesses, for a period of time (absent the forbearance of, or the granting of waivers by, applicable regulators).

JPMorgan Chase expects that it and the financial services industry as a whole will continue to be subject to regulatory scrutiny and governmental investigations and enforcement actions and that violations of law will more frequently be met with formal and punitive enforcement action, including the imposition of significant monetary and other sanctions, rather than with informal supervisory action. In addition, if JPMorgan Chase fails to meet the requirements of the various governmental settlements to which it is subject, or more generally, to maintain risk and control procedures and processes that meet the heightened standards established by its regulators and other government agencies, it could be required to enter into further orders and settlements, pay additional fines, penalties or judgments, or accept material regulatory restrictions on its businesses. The extent of JPMorgan Chase's exposure to legal and regulatory matters may be unpredictable and could, in some cases, substantially exceed the amount of reserves that JPMorgan Chase has established for such matters.

1.3 **Requirements for the orderly resolution of JPMorgan Chase could require JPMorgan Chase to restructure or reorganise its businesses, and holders of JPMorgan Chase's debt**

and equity securities would be at risk of absorbing losses if JPMorgan Chase were to enter into a resolution

Under Title I of the Dodd-Frank Act ("**Title I**") and Federal Reserve and Federal Deposit Insurance Corporation ("**FDIC**") rules, JPMorgan Chase is required to prepare and submit periodically to the Federal Reserve and the FDIC a detailed plan (the "**Resolution Plan**") for the rapid and orderly resolution, without extraordinary government support, of JPMorgan Chase & Co. and certain of its subsidiaries under the U.S. Bankruptcy Code and other applicable insolvency laws in the event of future material financial distress of JPMorgan Chase.

In April 2016, the Federal Reserve and the FDIC jointly provided JPMorgan Chase-specific feedback on the 2015 Resolution Plans of eight systemically important domestic banking institutions, and determined that five of these 2015 Resolution Plans, including that of JPMorgan Chase, were not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code. In addition to the identified deficiencies, the Federal Reserve and the FDIC also identified certain shortcomings which were required to be satisfactorily addressed in JPMorgan Chase's Resolution Plan due on 1 July, 2017. On 1 October, 2016, JPMorgan Chase filed with the Federal Reserve and the FDIC its submission (the "**2016 Resolution Submission**") describing how JPMorgan Chase remediated the identified deficiencies and providing a status report of its actions to address the identified shortcomings.

On 13 December, 2016, the Federal Reserve and the FDIC advised JPMorgan Chase of their determinations that JPMorgan Chase's 2016 Resolution Submission adequately remediated the deficiencies in JPMorgan Chase's 2015 Resolution Plan identified by the agencies. On 1 July, 2017, JPMorgan Chase will file with the Federal Reserve and the FDIC its 2017 Resolution Plan which will, among other things, describe how JPMorgan Chase has remediated the remaining shortcomings identified by the agencies in April 2016. If the Federal Reserve and the FDIC were to jointly determine that JPMorgan Chase did not remediate the identified shortcomings, or that JPMorgan Chase's 2017 Resolution Plan, or any future update of that plan, is not credible, and JPMorgan Chase is unable to remedy the identified deficiencies in a timely manner, the regulators may jointly impose more stringent capital, leverage or liquidity requirements on JPMorgan Chase or restrictions on growth, activities or operations of JPMorgan Chase, and could, if such deficiencies are not remedied within two years after such a determination, require JPMorgan Chase to restructure, reorganise or divest businesses, legal entities, operational systems and/or intercompany transactions in ways that could materially and adversely affect JPMorgan Chase's operations and strategy. In addition, in order to continue to maintain a Title I Resolution Plan that the Federal Reserve and FDIC determine is credible, JPMorgan Chase may need to make additional changes to its legal entity structure and to certain intercompany and external activities, which could result in increased funding or operational costs.

1.4 **Holders of JPMorgan Chase's debt and equity securities will absorb losses if JPMorgan Chase were to enter into a resolution**

The Federal Reserve has issued final rules (the "**TLAC rules**") regarding the minimum levels of unsecured external long-term debt and other loss-absorbing capacity that bank holding companies are required to have issued and outstanding, as well as guidelines defining the terms of qualifying debt instruments, to ensure that adequate levels of debt are maintained at the holding company level for purposes of recapitalising JPMorgan Chase's operating subsidiaries ("**eligible LTD**"). If JPMorgan Chase & Co. were to enter into a resolution, either in a proceeding under Chapter 11 of the U.S. Bankruptcy Code or in a receivership administered by the FDIC under Title II of the Dodd-Frank Act, holders of eligible LTD and other debt and equity securities of JPMorgan Chase will absorb the losses of JPMorgan Chase & Co. and its affiliates.

Under JPMorgan Chase's Resolution Plan, JPMorgan Chase's preferred resolution strategy contemplates that only JPMorgan Chase & Co. would enter bankruptcy proceedings under Chapter 11 of the U.S. Bankruptcy Code pursuant to a "single point of entry" recapitalisation strategy. JPMorgan Chase & Co.'s subsidiaries would be recapitalised as needed so that they could continue normal operations or subsequently be wound down in an orderly manner. As a result, JPMorgan Chase & Co.'s losses and any losses incurred by its subsidiaries would be imposed first on holders of JPMorgan Chase & Co.'s equity securities and thereafter on unsecured creditors, including holders of JPMorgan Chase & Co.'s eligible LTD and other debt securities. Claims of holders of those debt securities would have a junior position to the claims of creditors of JPMorgan Chase & Co.'s subsidiaries and to the claims of priority (as determined by statute) and secured creditors of JPMorgan Chase & Co. Accordingly, in a resolution of JPMorgan Chase & Co. under Chapter 11 of the U.S. Bankruptcy Code, holders of eligible LTD and other debt securities of JPMorgan Chase & Co. would realise value only to the extent available to JPMorgan Chase & Co. as a shareholder of JPMorgan Chase Bank, N.A. and its other subsidiaries, and only after any claims of priority and secured creditors of JPMorgan Chase & Co. have been fully repaid. If JPMorgan Chase & Co. were to enter into a resolution, none of JPMorgan Chase & Co., the Federal Reserve or the FDIC is obligated to follow JPMorgan Chase's preferred resolution strategy under its Resolution Plan. The FDIC has similarly indicated that a single point of entry recapitalisation model could be a desirable strategy to resolve a systemically important financial institution, such as JPMorgan Chase & Co., under Title II of the Dodd-Frank Act. Pursuant to that strategy, the FDIC would use its power to create a "bridge entity" for JPMorgan Chase & Co.; transfer the systemically important and viable parts of its business, principally the stock of JPMorgan Chase & Co.'s main operating subsidiaries and any intercompany claims against such subsidiaries, to the bridge entity; recapitalise those subsidiaries using assets of JPMorgan Chase & Co. that have been transferred to the bridge entity; and exchange external debt claims against JPMorgan Chase & Co. for equity in the bridge entity. Under this Title II resolution strategy, the value of the stock of the bridge entity that would be redistributed to holders of eligible LTD and other debt securities of JPMorgan Chase & Co. may not be sufficient to repay all or part of the principal amount and interest on such securities. To date, the FDIC has not formally adopted a single point of entry resolution strategy and it is not obligated to follow such a strategy in a Title II resolution of JPMorgan Chase & Co.

2. Market Risk

2.1 JPMorgan Chase's results of operations have been, and may continue to be, adversely affected by U.S. and global financial market and economic conditions and political developments

JPMorgan Chase's businesses are materially affected by economic and market conditions, including the liquidity of the global financial markets; the level and volatility of debt and equity prices, interest rates, currency and commodities prices (including oil prices) and other market indices; investor, consumer and business sentiment; events that reduce confidence in the financial markets; inflation and unemployment; the availability and cost of capital and credit; the economic effects of natural disasters, health emergencies or pandemics, severe weather conditions, outbreaks of hostilities, terrorism or other geopolitical instabilities; monetary policies and actions taken by the Federal Reserve and other central banks; and the health of the U.S. and global economies.

Recent political developments in the U.S. and abroad have increased the uncertainty regarding the economic environment in which JPMorgan Chase will operate. Although certain of the proposals being considered in the U.S., such as tax reform or increased expenditure on infrastructure projects, could lead to higher levels of U.S. economic activity and more expansive U.S. domestic economic growth, others, such as protectionist trade policies or isolationist foreign policies, could contract economic growth. The uncertainty around the manner and extent to which these economic policies are ultimately enacted could impact market volatility and affect JPMorgan Chase's businesses, both directly and through their impact on the businesses and activities of JPMorgan Chase's clients and customers. In addition, the effects of various referenda in Europe, including the vote by the U.K. electorate to leave the EU, as well as the uncertainties regarding the outcome of Eurozone presidential elections in 2017, have triggered political and economic uncertainty in the Eurozone. There is no assurance that such uncertainty, and any resultant market volatility, will not adversely affect JPMorgan Chase's results of operations.

In JPMorgan Chase's wholesale businesses, market and economic factors can affect the volume of transactions that JPMorgan Chase executes for its clients and, therefore, the revenue that JPMorgan Chase receives, as well as the willingness of other financial institutions and investors to participate in loan syndications or underwritings managed by JPMorgan Chase.

JPMorgan Chase generally maintains market-making positions in the fixed income, currency, commodities, credit and equity markets to facilitate client demand and provide liquidity to clients. The revenue derived from these positions is affected by many factors, including JPMorgan Chase's success in effectively hedging its market and other risks; volatility in interest rates and equity, debt and commodities markets; interest rate and credit spreads; and the availability of liquidity in the capital markets, all of which are affected by global economic and market conditions, political events and regulatory restrictions on market-making activities. In addition, JPMorgan Chase's market-making businesses can expose JPMorgan Chase to unexpected market, credit and operational risks that could cause JPMorgan Chase to suffer unexpected losses. Severe declines in asset values, unanticipated credit events, or unforeseen circumstances that may cause previously uncorrelated factors to become correlated (and vice versa) may create losses resulting from risks not having been appropriately taken into account in the development, structuring or pricing of a financial instrument.

JPMorgan Chase may be adversely affected by declining asset values. This is particularly true for businesses that earn fees for managing third-party assets or receive or post collateral. For example, a higher level of U.S. or non-U.S. interest rates or a downturn in financial markets could affect the valuations of the client assets that JPMorgan Chase manages or holds in custody, which, in turn, could affect JPMorgan Chase's revenue from fees that are based on the amount of assets under management or custody. Macroeconomic or market concerns, as well as legislative and regulatory developments (such as, for example, the recently-adopted SEC rules relating to money-market funds), may also prompt outflows from JPMorgan Chase's funds or accounts or cause clients to invest funds in products that generate lower revenue.

Changes in interest rates will affect the level of assets and liabilities held on JPMorgan Chase's balance sheet and the revenue that JPMorgan Chase earns from net interest income. An increasing or high interest rate environment, while generally increasing the net interest income earned by JPMorgan Chase, may under certain circumstances also result in lower levels of commercial and residential loan originations and diminished returns on the investment securities portfolio (to the extent that JPMorgan Chase is unable to reinvest contemporaneously in higher-yielding assets), thereby adversely affecting JPMorgan Chase's revenues and capital levels. Conversely, a low interest rate environment may compress net interest margins, reducing the amounts that JPMorgan Chase earns on its investment securities portfolio, or reducing the value of its mortgage servicing rights ("**MSRs**") asset, thereby reducing JPMorgan Chase's net interest income and other revenues.

JPMorgan Chase's consumer businesses are particularly affected by U.S. domestic economic conditions, including U.S. interest rates, the rate of unemployment, housing prices, the level of consumer confidence, changes in consumer spending and the number of personal bankruptcies. Sustained low growth in the U.S. economy could diminish demand for the products and services offered by JPMorgan Chase's consumer businesses, or increase the cost to provide such products and services. In addition, adverse economic conditions, such as economic dislocations in certain geographies due to high levels of unemployment resulting from declining industrial or manufacturing activity, or other market or economic factors, could lead to an increase in mortgage, credit card, auto, student and other loan delinquencies and higher net charge-offs, which can reduce JPMorgan Chase's earnings. JPMorgan Chase's earnings from its consumer businesses could also be adversely affected by changes in government policies that affect consumers, including those relating to medical insurance, immigration, employment status and taxation, as well as governmental policies aimed at the economy more broadly, such as infrastructure spending and global trade, which could result in, among other things, higher inflation or reductions in consumer disposable income.

Widening of credit spreads makes it more expensive for JPMorgan Chase to borrow on both a secured and unsecured basis, and may adversely affect the credit markets and JPMorgan Chase's businesses. Credit spreads widen or narrow not only in response to JPMorgan Chase-specific events and circumstances, but also as a result of general economic and geopolitical events and conditions. Changes in JPMorgan Chase's credit spreads will impact, positively or negatively, JPMorgan Chase's earnings on certain liabilities that are recorded at fair value.

Sudden and significant volatility in the prices of securities and other assets (including loans and derivatives) may curtail the trading markets for such securities and assets, make it difficult to sell or hedge such securities and assets, adversely affect JPMorgan Chase's profitability, capital or liquidity, or increase JPMorgan Chase's funding costs. The Federal Reserve has recently observed that market volatility may be exacerbated by regulatory restrictions, as market participants that are subject to the Volcker Rule are likely to decrease their market-making activities, and thereby constrain market liquidity, during periods of market stress. In addition, in a difficult or less liquid market environment, JPMorgan Chase's risk management strategies may not be effective because other market participants may be attempting to use the same or similar strategies to deal with the challenging market conditions. In such circumstances, it may be difficult for JPMorgan Chase to reduce its risk positions due to the activity of such other market participants or widespread market dislocations. Sustained volatility in the financial markets may also negatively affect consumer or investor confidence, which could lead to lower client activity and decreased revenue for JPMorgan Chase.

3. Credit Risk

3.1 The financial condition of JPMorgan Chase's clients and counterparties, particularly other financial institutions, could adversely affect JPMorgan Chase

JPMorgan Chase routinely executes transactions with clients and counterparties in the financial services industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, investment managers and other types of financial institutions. Many of these transactions expose JPMorgan Chase to the credit risk of its counterparties and, in some cases, disputes and litigation in the event of a default by the counterparty or client. Disputes with counterparties may also arise regarding the terms or the settlement procedures of derivative contracts, including with respect to the value of underlying collateral, which could cause JPMorgan Chase to incur unexpected costs, including transaction, operational, legal and litigation costs, or result in credit losses, all of which may impair JPMorgan Chase's ability to manage effectively its credit risk exposure from these products.

The failure of a significant market participant, or concerns about a default by such an institution, could also lead to significant liquidity problems for, or losses or defaults by, other institutions, which in turn could adversely affect JPMorgan Chase. In addition, in recent years the perceived interrelationship among financial institutions has also led to claims by other market participants and regulators that JPMorgan Chase and other financial institutions have allegedly violated anti-trust or anti-competition laws by colluding to manipulate markets, prices or indices, and there is no assurance that such allegations will not arise in the same or similar contexts in the future.

As part of providing clearing services, JPMorgan Chase is a member of a number of central counterparties ("**CCPs**"), and may be required to pay a portion of the losses incurred by such organisations as a result of the default of other members. As a clearing member, JPMorgan Chase is also exposed to the risk of non-performance by its clients, which it seeks to mitigate through the maintenance of adequate collateral. In addition, JPMorgan Chase can be exposed to intra-day credit risk of its clients in connection with providing cash management, clearing, custodial and other transaction services to such clients. If a client for which JPMorgan Chase provides such services becomes bankrupt or insolvent, JPMorgan Chase may suffer losses, become involved in disputes and litigation with various parties, including one or more CCPs, or the client's bankruptcy estate and other creditors, or involved in regulatory investigations. All of such events can increase JPMorgan Chase's operational and litigation costs and may result in losses if any collateral received by JPMorgan Chase is insufficient to cover such losses.

During periods of market stress or illiquidity, JPMorgan Chase's credit risk also may be further increased when JPMorgan Chase cannot realise the fair value of the collateral held by it or when collateral is liquidated at prices that are not sufficient to recover the full amount of the loan, derivative or other exposure due to JPMorgan Chase. Further, disputes with obligors concerning the valuation of collateral could increase in times of significant market stress, volatility or illiquidity, and JPMorgan Chase could suffer losses during such periods if it is unable to realise the fair value of collateral or manage declines in the value of collateral.

3.2 Concentration of credit and market risk could increase the potential for significant losses

JPMorgan Chase has exposure to increased levels of risk when clients or counterparties 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. For example, a significant deterioration in the credit quality of one of JPMorgan Chase's borrowers or counterparties could lead to concerns about the credit quality of other borrowers or counterparties in similar, related or dependent industries and thereby could exacerbate JPMorgan Chase's credit risk exposure and potentially increase its losses, including mark-to-market losses in its trading businesses. Similarly, challenging economic conditions affecting a particular industry or geographic area could lead to concerns about the credit quality of JPMorgan Chase's borrowers or counterparties, not only in that particular industry or geography but in related or dependent industries, wherever located, or about the ability of customers of JPMorgan Chase's consumer businesses living in such areas or working in such affected industries or related or dependent industries to meet their obligations to JPMorgan Chase. Although JPMorgan Chase regularly monitors various segments of its exposures to assess potential concentration or contagion risks, JPMorgan Chase's efforts to diversify or hedge its exposures against concentration risks may not be successful.

In addition, disruptions in the liquidity or transparency of the financial markets may result in JPMorgan Chase's inability to sell, syndicate or realise the value of its positions, thereby leading to increased concentrations. The inability to reduce JPMorgan Chase's positions may not only increase the market and credit risks associated with such positions, but may also increase the level of risk-weighted assets ("**RWA**") on JPMorgan Chase's balance sheet, thereby increasing its capital requirements and funding costs, all of which could adversely affect the operations and profitability of JPMorgan Chase's businesses.

4. Liquidity Risk

4.1 If JPMorgan Chase does not effectively manage its liquidity, its business could suffer

JPMorgan Chase's liquidity is critical to its ability to operate its businesses. Some potential conditions that could impair JPMorgan Chase's liquidity include markets that become illiquid or are otherwise experiencing disruption, unforeseen cash or capital requirements (including, among others, commitments that may be triggered to special purpose entities ("**SPEs**") or other entities), difficulty in selling or inability to sell assets, default by a CCP or other counterparty, unforeseen outflows of cash or collateral, and lack of market or customer confidence in JPMorgan Chase or financial markets in general. These conditions may be caused by events over which JPMorgan Chase has little or no control. The widespread crisis in investor confidence and resulting liquidity crisis experienced in 2008 and into early 2009 increased JPMorgan Chase's cost of funding and limited its access to some of its traditional sources of liquidity (such as securitised debt offerings backed by mortgages, credit card receivables and other assets) during that time, and there is no assurance that these severe conditions could not occur in the future.

If JPMorgan Chase's access to stable and low cost sources of funding, such as bank deposits, is reduced, JPMorgan Chase may need to raise alternative funding which may be more expensive or of limited availability. In addition, JPMorgan Chase's cost of funding could be affected by actions that JPMorgan Chase may take in order to satisfy applicable liquidity coverage ratio and net stable funding ratio requirements, to lower its global systemically important bank ("**GSIB**") systemic risk score, to satisfy the amount of eligible LTD that JPMorgan Chase must have outstanding under the TLAC rules, to address obligations under JPMorgan Chase's Resolution Plan or to satisfy regulatory requirements in non-U.S. jurisdictions relating to the pre-positioning of liquidity in subsidiaries that are material legal entities.

4.2 **JPMorgan Chase is a holding company and depends on the cash flows of its subsidiaries to fund payments of dividends on its equity securities, principal and interest payments on its debt securities and redemptions and repurchases of its outstanding securities**

As a holding company, JPMorgan Chase & Co. is dependent on the earnings of its subsidiaries to meet its payment obligations. Under the arrangements contemplated by JPMorgan Chase's Resolution Plan, JPMorgan Chase & Co. has established a new intermediate holding company, JPMorgan Chase Holdings LLC (the "**IHC**"), and has contributed to the IHC the stock of substantially all of its direct subsidiaries (other than JPMorgan Chase Bank, N.A.) as well as other assets and intercompany indebtedness owing to it. Under these arrangements, JPMorgan Chase & Co. is obligated to contribute to the IHC substantially all the net proceeds received by it from securities issuances (including, without limitation, issuances of senior and subordinated debt securities and of preferred and common stock). As a result of these arrangements, JPMorgan Chase & Co.'s ability to pay interest on its debt securities and dividends on its equity securities, to redeem or repurchase its outstanding securities and to fulfil its other payment obligations is dependent on it receiving dividends from JPMorgan Chase Bank, N.A. and dividends and extensions of credit from the IHC. JPMorgan Chase Bank, N.A. is subject to restrictions on its dividend distributions, capital adequacy and liquidity coverage requirements, and other regulatory restrictions on its ability to make payments to JPMorgan Chase & Co., and the IHC is prohibited from paying dividends or extending credit to JPMorgan Chase & Co. if certain capital or liquidity "thresholds" are breached or if limits are otherwise imposed by JPMorgan Chase's management or Board of Directors. These regulatory restrictions and limitations on the payments that JPMorgan Chase & Co. is permitted to receive from JPMorgan Chase Bank, N.A. and the IHC could reduce or hinder its ability to pay dividends and satisfy its debt and other obligations, or result in JPMorgan Chase & Co. seeking protection under bankruptcy laws at a time earlier than would have been the case absent the existence of such thresholds.

4.3 **Reductions in JPMorgan Chase's credit ratings may adversely affect its liquidity and cost of funding, as well as the value of debt obligations issued by JPMorgan Chase**

JPMorgan Chase & Co. and certain of its principal subsidiaries are currently rated by credit rating agencies. Rating agencies evaluate both general and firm- and industry-specific factors when determining their credit ratings for a particular financial institution, including economic and geopolitical trends, regulatory developments, future profitability, risk management practices, legal expenses, assumptions surrounding government support, and ratings differentials between bank holding companies and their bank and non-bank subsidiaries.

Although JPMorgan Chase closely monitors and manages, to the extent it is able, factors that could influence its credit ratings, there is no assurance that JPMorgan Chase's credit ratings will not be lowered in the future, or that any such downgrade would not occur at times of broader market instability when JPMorgan Chase's options for responding to events may be more limited and general investor confidence is low.

Furthermore, a reduction in JPMorgan Chase's credit ratings could reduce JPMorgan Chase's access to capital markets, materially increase the cost of issuing securities, trigger additional collateral or funding requirements, and decrease the number of investors and counterparties willing or permitted, contractually or otherwise, to do business with or lend to JPMorgan Chase, thereby curtailing JPMorgan Chase's business operations and reducing its profitability. In addition, any such reduction in credit ratings may increase the credit spreads charged by the market for taking credit risk on JPMorgan Chase & Co. and its subsidiaries and, as a result, could adversely affect the value of debt and other obligations that JPMorgan Chase & Co. and its subsidiaries have issued or may issue in the future.

5. **Legal Risk**

JPMorgan Chase faces significant legal risks, both from regulatory investigations and proceedings and from private actions brought against JPMorgan Chase

JPMorgan Chase is named as a defendant or is otherwise involved in various legal proceedings, including class actions and other litigation or disputes with third parties. Actions currently pending against JPMorgan Chase may result in judgments, settlements, fines, penalties or other results adverse to JPMorgan Chase, which could materially and adversely affect JPMorgan Chase's business, financial condition or results of operations, or cause serious harm to JPMorgan Chase's reputation. As a participant in the financial services industry, it is likely that JPMorgan Chase will continue to experience a high level of litigation related to its businesses and operations.

In addition, and as noted above, JPMorgan Chase's businesses and operations are also subject to heightened regulatory oversight and scrutiny, which may lead to additional regulatory investigations or enforcement actions. Regulators and other government agencies examine the operations of JPMorgan Chase and its subsidiaries on both a routine- and targeted-exam basis, and there is no assurance that they will not pursue additional regulatory settlements or other enforcement actions against JPMorgan Chase in the future. A violation of law or regulation by another financial institution is likely to give rise to an investigation by regulators and other governmental agencies of the same or similar practices by JPMorgan Chase. For example, various regulatory and governmental agencies have made inquiries to JPMorgan Chase about its sales practices with retail customers, including, among other matters, JPMorgan Chase's incentive compensation structures related to such practices. In addition, a single event may give rise to numerous and overlapping investigations and proceedings, either by multiple federal and state agencies and officials in the U.S. or, in some instances, regulators and other governmental officials in non-U.S. jurisdictions. These and other initiatives from U.S. and non-U.S. governmental authorities and officials may subject JPMorgan Chase to further judgments, settlements, fines or penalties, or cause JPMorgan Chase to be required to restructure its operations and activities or to cease offering certain products or services, all of which could harm JPMorgan Chase's reputation or lead to higher operational costs, thereby reducing JPMorgan Chase's profitability, or result in collateral consequences as discussed above.

6. **Other Business Risks**

6.1 **Any significant failure by JPMorgan Chase's management to anticipate and respond quickly and appropriately to changes in JPMorgan Chase's operating environment or trends affecting the financial services industry, to make prudent decisions regarding**

JPMorgan Chase's strategy or to execute on that strategy could adversely affect JPMorgan Chase's competitive standing and its earnings and future results of operations

JPMorgan Chase operates in many jurisdictions and offers a wide variety of products and services to its clients and customers. JPMorgan Chase's strategies concerning the products and services that it will offer, the geographies in which it will operate, the types of clients and customers that it will serve and the counterparties with which it will do business, and the methods and distribution channels by which it will offer its products and services, will all affect JPMorgan Chase's competitive standing and its results of operations. If JPMorgan Chase's management makes choices about JPMorgan Chase's business strategies and goals that later prove to have been incorrect, does not accurately assess the competitive landscape and the industry trends affecting JPMorgan Chase or does not formulate effective business plans to address JPMorgan Chase's near- and longer-term strategic priorities, as well as the changing regulatory and market environments in which JPMorgan Chase operates both in the U.S. and abroad, the franchise values and growth prospects of JPMorgan Chase's businesses will suffer and revenues will decline. The prospects of JPMorgan Chase will also depend on management's ability to execute effectively against JPMorgan Chase's strategic plans and to manage JPMorgan Chase's resources to grow revenues, control expenses and return capital to JPMorgan Chase's shareholders. Any significant failure by JPMorgan Chase's Board of Directors to exercise appropriate oversight of management's strategic decisions, or any significant failure by JPMorgan Chase's management to develop and execute on JPMorgan Chase's strategic plans and business initiatives, or the ineffectual implementation of business decisions, the failure of JPMorgan Chase's products or services or dealings with customers to meet customer expectations, inadequate responses to regulatory requirements, the failure to react quickly to changes in market conditions or structure, or the failure to develop the necessary operational, technology, risk, financial, and managerial resources necessary to grow and manage JPMorgan Chase and its various businesses could adversely affect JPMorgan Chase's competitive standing and negatively affect JPMorgan Chase's earnings and future results of operations.

6.2 **JPMorgan Chase's operations are subject to risk of loss from unfavourable economic, monetary and political developments in the U.S. and around the world**

JPMorgan Chase's businesses and earnings are affected by the fiscal and other policies that are adopted by various U.S. and non-U.S. regulatory authorities and agencies. The Federal Reserve regulates the supply of money and credit in the U.S. and its policies determine in large part the cost of funds for lending and investing in the U.S. and the return earned on those loans and investments. Changes in Federal Reserve policies (as well as the fiscal and monetary policies of non-U.S. central banks or regulatory authorities and agencies, such as "pegging" the exchange rate of their currency to the currencies of others) are beyond JPMorgan Chase's control and may be difficult to predict, and consequently, unanticipated changes in these policies could have a negative impact on JPMorgan Chase's activities and results of operations.

JPMorgan Chase's businesses and revenue are also subject to risks inherent in investing and market-making in securities, loans and other obligations of companies worldwide. These risks include, among others, negative effects from slowing growth rates or recessionary economic conditions, or the risk of loss from unfavourable political, legal or other developments, including social or political instability, in the countries or regions in which such companies operate, as well as the other risks and considerations as described further below.

Several of JPMorgan Chase's businesses engage in transactions with, or trade in obligations of, U.S. and non-U.S. governmental entities, including national, state, provincial, municipal and local authorities. These activities can expose JPMorgan Chase to enhanced sovereign, credit-related, operational and reputation risks, including the risks that a governmental entity may default on or restructure its obligations, claim that actions taken by government officials were beyond the legal authority of those officials or repudiate transactions authorised by a previous incumbent government, any or all of which could adversely affect JPMorgan Chase's financial condition and results of operations.

Further, various countries or regions in which JPMorgan Chase operates or invests, or in which JPMorgan Chase may do so in the future, have in the past experienced severe economic disruptions particular to those countries or regions. In some cases, concerns regarding the fiscal condition of one or more countries can cause a contraction of available credit and reduced activity among trading partners or create market volatility that could lead to "market contagion" affecting other countries in the same region or beyond the region. In addition, governments in particular countries or regions in which JPMorgan Chase or its client do business may choose to adopt protectionist economic or trade policies in response to concerns about domestic economic conditions which could lead to diminished cross-border trade and financing activity within that country or region, all of which could negatively affect JPMorgan Chase's business and earnings in those jurisdictions.

Political and economic uncertainty can also undermine consumer, business and investor confidence, and thereby contribute to market volatility. For example, uncertainties concerning the timing and terms of the U.K.'s planned departure from the EU could have an adverse effect on global financial markets and may adversely impact global economic conditions more generally. Furthermore, depending on the nature of the arrangements agreed between the U.K. and the EU, including with respect to the ability of financial services companies to engage in business in the EU from legal entities organised in or operating from the U.K., it is possible that under some scenarios, JPMorgan Chase may need to make changes to its legal entity structure and operations and the locations in which it operates, which might result in a less efficient operating model across JPMorgan Chase's European legal entities. Accordingly, it is possible that political or economic developments in certain countries, even in countries in which JPMorgan Chase does not conduct business or have operations or engages in only limited activities, may adversely affect JPMorgan Chase.

JPMorgan Chase must comply with economic sanctions and embargo programs administered by OFAC and similar multi-national bodies and governmental agencies outside U.S., including, most recently, sanctions targeted at individuals and companies in Russia. A violation of a sanction or embargo program could subject JPMorgan Chase, and individual employees, to regulatory enforcement actions as well as significant civil and criminal penalties.

6.3 JPMorgan Chase's operations in emerging markets may be hindered by local political, social and economic factors, and may be subject to additional compliance costs and risks

Some of the countries in which JPMorgan Chase conducts its businesses have economies or markets that are less developed and more volatile, and may have legal and regulatory regimes that are less established or predictable, than the U.S. and other developed markets in which JPMorgan Chase currently operates. Some of these countries have in the past experienced severe economic disruptions, including extreme currency fluctuations, high inflation, low or negative growth, or defaults or potential defaults on sovereign debt, among other negative conditions, or have imposed restrictive monetary policies such as currency exchange controls and other laws and restrictions that adversely affect the local and regional business environment. In addition, these countries, as well as certain more developed countries, have recently been more susceptible to unfavourable political, social or economic developments; these developments have in the past resulted in, and may in the future lead to, social unrest, general strikes and demonstrations, crime and corruption, security and personal safety issues, outbreaks of hostilities, overthrow of incumbent governments, terrorist attacks or other forms of internal discord, all of which can adversely affect JPMorgan Chase's operations or investments in such countries. Political, social or economic disruption or dislocation in certain countries or regions in which JPMorgan Chase conducts its businesses can hinder the growth and profitability of those operations.

Less developed legal and regulatory systems in certain countries can also have adverse consequences on JPMorgan Chase's operations in those countries, including, among others, the absence of a statutory or regulatory basis or guidance for engaging in specific types of business or transactions; the promulgation of conflicting or ambiguous laws and regulations or the inconsistent application or interpretation of existing laws and regulations; uncertainty as to the enforceability of contractual obligations; difficulty in competing in economies in which the government controls or protects all or a portion of the local economy or specific businesses, or where graft or corruption may be pervasive; and the threat of arbitrary regulatory investigations, civil litigations or criminal prosecutions, the termination of licences required to operate in the local market or the suspension of business relationships with governmental bodies.

Revenue from international operations and trading in non-U.S. securities and other obligations may be subject to negative fluctuations as a result of the above considerations, as well as due to governmental actions including monetary policies, expropriation, nationalisation, confiscation of assets, price controls, capital controls, exchange controls, and changes in laws and regulations. The impact of these fluctuations could be accentuated as some trading markets are smaller, less liquid and more volatile than larger markets. Also, any of the above-mentioned events or circumstances in one country can affect, and in the past conditions of these types have affected, JPMorgan Chase's operations and investments in another country or countries, including JPMorgan Chase's operations in the U.S. As a result, any such unfavourable conditions or developments could have an adverse impact on JPMorgan Chase's business and results of operations.

Conducting business in countries with less developed legal and regulatory regimes often requires JPMorgan Chase to devote significant additional resources to understanding, and monitoring changes in, local laws and regulations, as well as structuring its operations to comply with local laws and regulations and implementing and administering related internal policies and procedures. There can be no assurance that JPMorgan Chase will always be successful in its efforts to conduct its business in compliance with laws and regulations in countries with less predictable legal and regulatory systems or that JPMorgan Chase will be able to develop effective working relationships with local regulators. In addition, JPMorgan Chase can also incur higher costs, and face greater compliance risks, in structuring and operating its businesses outside the U.S. to comply with U.S. anti-corruption and anti-money laundering laws and regulations.

6.4 JPMorgan Chase relies on the effectiveness and integrity of its processes, operational systems and employees, and those of third parties, and certain failures of such processes or systems, or errors or misconduct by such employees, could materially and adversely affect JPMorgan Chase's operations

JPMorgan Chase's businesses are dependent on JPMorgan Chase's ability to process, record and monitor an increasingly large number of complex transactions and to do so on a faster and more frequent basis. JPMorgan Chase's front- and back-office trading systems similarly rely on their access to, and on the functionality of, the operational systems maintained by third parties such as clearing and payment systems, central counterparties, securities exchanges and data processing and technology companies. If JPMorgan Chase's financial, accounting, trading or other data processing systems, or the operational systems of third parties on which JPMorgan Chase's businesses are dependent, are unable to meet these increasingly demanding standards, or if they fail or have other significant shortcomings, JPMorgan Chase could be materially and adversely affected. Moreover, as the speed, frequency, volume and complexity of transactions (and the requirements to report such transactions on a real-time basis to clients, regulators and financial intermediaries) increases, the risk of human and/or systems error in connection with such transactions increases, and it becomes more challenging to maintain JPMorgan Chase's operational systems and infrastructure. The effective functioning of JPMorgan Chase's operational systems is also dependent on the competence and reliability of its employees, as well as the employees of third parties on whom JPMorgan Chase relies for technological support, and JPMorgan Chase could be materially and adversely affected by a significant operational breakdown or failure caused by human error or misconduct by an employee of JPMorgan Chase or a third party. In addition, when JPMorgan Chase changes processes or introduces new products and services or new connectivity solutions, JPMorgan Chase may not fully appreciate or identify new operational risks that may arise from such changes. Any of these occurrences could diminish JPMorgan Chase's ability to operate one or more of its businesses, or result in potential liability to clients and customers, increased operating expenses, higher litigation costs (including fines and sanctions), damage to reputation, impairment of liquidity, regulatory intervention or weaker competitive standing, any of which could materially and adversely affect JPMorgan Chase.

Third parties with which JPMorgan Chase does business, including retailers, data aggregators and other third parties with which JPMorgan Chase's customers do business, can also be sources of operational risk to JPMorgan Chase, particularly where activities of customers or such third parties are beyond JPMorgan Chase's security and control systems, such as through the use of the internet, personal smart phones and other mobile devices or services. As JPMorgan Chase's interconnectivity with customers and other third parties increases, JPMorgan Chase increasingly faces the risk of operational failure with respect to their systems. Security breaches affecting JPMorgan Chase's customers, or systems breakdowns or failures, security breaches or human error or misconduct affecting such other third parties, may require JPMorgan Chase to take steps to protect the integrity of its own operational systems or to safeguard confidential information of JPMorgan Chase or its customers, thereby increasing JPMorgan Chase's operational costs and potentially diminishing customer satisfaction. Furthermore, the interconnectivity of multiple financial institutions with central agents, exchanges and clearing houses, and the increased importance of these entities, increases the risk that an operational failure at one institution or entity may cause an industry-wide operational failure that could materially impact JPMorgan Chase's ability to conduct business.

JPMorgan Chase's businesses are subject to complex and evolving U.S. and non-U.S. laws and regulations governing the privacy and protection of personal information of individuals (including clients, client's clients, employees of JPMorgan Chase and its suppliers and other third parties). Ensuring that JPMorgan Chase's collection, use, transfer and storage of personal information complies with all applicable laws and regulations, including where the laws of different jurisdictions are in conflict, can increase JPMorgan Chase's operating costs, impact the development of new products or services and require significant oversight by management, and may require JPMorgan Chase to structure its businesses, operations and systems in less efficient ways. Furthermore, JPMorgan Chase may not be able to ensure that all of its clients, suppliers, counterparties and other third parties have appropriate controls in place to protect the confidentiality of the information exchanged between them and JPMorgan Chase, particularly where such information is transmitted by electronic means. If personal, confidential or proprietary information of clients, customers, employees or others were to be mishandled or misused (in situations where, for example, such information was erroneously provided to parties who are not permitted to have the information, or where such information was intercepted or otherwise compromised by third parties), JPMorgan Chase could be exposed to litigation or regulatory sanctions. Concerns regarding the effectiveness of JPMorgan Chase's measures to safeguard personal information, or even the perception that such measures are inadequate, could cause JPMorgan Chase to lose customers or potential customers for its products and services and thereby reduce JPMorgan Chase's revenues. Accordingly, any failure or perceived failure by JPMorgan Chase to comply with applicable privacy or data protection laws and regulations may subject it to inquiries, examinations and investigations that could result in requirements to modify or cease certain operations or practices or significant liabilities, fines or penalties, and could damage JPMorgan Chase's reputation and otherwise adversely affect its businesses.

JPMorgan Chase may be subject to disruptions of its operational systems arising from events that are wholly or partially beyond JPMorgan Chase's control, which may include, for example, security breaches (as discussed further below); electrical or telecommunications outages; failures of computer servers or other damage to JPMorgan Chase's property or assets; natural disasters or severe weather conditions; health emergencies or pandemics; or events arising from local or larger-scale political events, including outbreaks of hostilities or terrorist acts. JPMorgan Chase maintains a global resiliency and crisis management program that is intended to ensure that JPMorgan Chase has the ability to recover its critical business functions and supporting assets, including staff, technology and facilities, in the event of a business interruption. While JPMorgan Chase believes that its current resiliency plans are both sufficient and adequate, there can be no assurance that such plans will fully mitigate all potential business continuity risks to JPMorgan Chase or its customers and clients. Any failures or disruptions of JPMorgan Chase's systems or operations could give rise to losses in service to customers and clients, adversely affect JPMorgan Chase's business and results of operations by subjecting JPMorgan Chase to losses or liability, or require JPMorgan Chase to expend significant resources to correct the failure or disruption, as well as by exposing JPMorgan Chase to litigation, regulatory fines or penalties or losses not covered by insurance.

7. Risk Management

7.1 JPMorgan Chase's framework for managing risks and its risk management procedures and practices may not be effective in identifying and mitigating every risk to JPMorgan Chase, thereby resulting in losses

JPMorgan Chase's risk management framework seeks to mitigate risk and loss to JPMorgan Chase. JPMorgan Chase has established processes and procedures intended to identify, measure, monitor, report and analyse the types of risk to which JPMorgan Chase is subject. However, as with any risk management framework, there are inherent limitations to JPMorgan Chase's risk management strategies because there may exist, or develop in the future, risks that JPMorgan Chase has not appropriately anticipated or identified. In addition, JPMorgan Chase relies on data to aggregate and assess its various risk exposures, and any deficiencies in the quality or effectiveness of JPMorgan Chase's data aggregation and validation procedures could result in ineffective risk management practices or inaccurate risk reporting. Any lapse in JPMorgan Chase's risk management framework and governance structure or other inadequacies in the design or implementation of JPMorgan Chase's risk management framework, governance, procedures, practices, models or risk reporting systems could, individually or in the aggregate, cause unexpected losses for JPMorgan Chase, materially and adversely affect JPMorgan Chase's financial condition and results of operations, require significant resources to remediate any risk management deficiency, attract heightened regulatory scrutiny, expose JPMorgan Chase to regulatory investigations or legal proceedings, subject JPMorgan Chase to fines, penalties or judgments, harm JPMorgan Chase's reputation, or otherwise cause a decline in investor confidence.

JPMorgan Chase establishes allowances for probable credit losses inherent in its credit exposures, and also employs stress testing and other techniques to determine the capital and liquidity necessary to protect JPMorgan Chase in the event of adverse economic or market events. These processes are critical to JPMorgan Chase's financial results and condition, and require difficult, subjective and complex judgments, including forecasts of how economic conditions might impair the ability of JPMorgan Chase's borrowers and counterparties to repay their loans or other obligations. As is the case with any such assessments, there is always the possibility that JPMorgan Chase will fail to identify the proper factors or that JPMorgan Chase will fail to accurately estimate the impact of factors that it identifies.

Certain of JPMorgan Chase's trading transactions require the physical settlement by delivery of securities or other obligations that JPMorgan Chase does not own; if JPMorgan Chase is unable to obtain such securities or obligations within the required timeframe for delivery, this could cause JPMorgan Chase to forfeit payments otherwise due to it and could result in settlement delays, which could damage JPMorgan Chase's reputation and ability to transact future business. In addition, in situations where trades are not settled or confirmed on a timely basis, JPMorgan Chase may be subject to heightened credit and operational risk, and in the event of a default, JPMorgan Chase may be exposed to market and operational losses.

Many of JPMorgan Chase's risk management strategies or techniques have a basis in historical market behaviour, and all such strategies and techniques are based to some degree on management's subjective judgment. For example, many models used by JPMorgan Chase are based on assumptions regarding correlations among prices of various asset classes or other market indicators. In times of market stress, including difficult or less liquid market environments, or in the event of other unforeseen circumstances, previously uncorrelated indicators may become correlated, or conversely, previously correlated indicators may make unrelated movements. These sudden market movements or unanticipated or unidentified market or economic movements have in some circumstances limited and could again limit the effectiveness of JPMorgan Chase's risk management strategies, causing JPMorgan Chase to incur losses.

Many of the models used by JPMorgan Chase are subject to review not only by JPMorgan Chase's Model Risk function but also by JPMorgan Chase's regulators in order that JPMorgan Chase may utilise such models in connection with JPMorgan Chase's calculations of market risk RWA, credit risk RWA and operational risk RWA under Basel III. JPMorgan Chase may be subject to higher capital charges, which could adversely affect its financial results or limit its ability to expand its businesses, if such models do not receive approval by its regulators.

In addition, JPMorgan Chase must comply with enhanced standards for the assessment and management of risks associated with vendors and other third parties that provide services to JPMorgan Chase. These requirements apply to JPMorgan Chase both under general guidance issued by its banking regulators and, more specifically, under certain of the consent orders to which JPMorgan Chase has been subject. JPMorgan Chase has incurred and expects to incur additional costs and expenses in connection with its initiatives to address the risks associated with oversight of its third party relationships. Failure by JPMorgan Chase to appropriately assess and manage third party relationships, especially those involving significant banking functions, shared services or other critical activities, could result in potential liability to clients and customers, fines, penalties or judgments imposed by JPMorgan Chase's regulators, increased operating expenses and harm to JPMorgan Chase's reputation, any of which could materially and adversely affect JPMorgan Chase.

8. Other Risks

8.1 Actions or inaction by employees of JPMorgan Chase may cause harm to JPMorgan Chase's clients and customers, damage JPMorgan Chase's reputation, negatively impact JPMorgan Chase's culture and lead to liability and regulatory and other governmental actions against JPMorgan Chase

JPMorgan Chase's employees interact with clients, customers and counterparties every day, and they are expected through their conduct to demonstrate JPMorgan Chase's values and exhibit the culture and behaviours that are an integral part of JPMorgan Chase's How We Do Business Principles, including JPMorgan Chase's commitment to "do first class business in a first class way". If an employee takes an action (including a failure to act) that does not comply with JPMorgan Chase's Code of Conduct, is inconsistent with JPMorgan Chase's How We Do Business Principles or that otherwise harms clients, consumers or the market, such as improperly selling and marketing JPMorgan Chase's product or services, acting illegally with others to establish market prices, improperly hiring individuals related to "politically exposed persons" or misappropriating property or confidential or proprietary information or technology belonging to JPMorgan Chase, its customers or third parties, such activities could give rise to litigation, regulatory or other governmental investigations or enforcement actions, and judgments, settlements, fines or penalties, and lead to requirements that JPMorgan Chase restructure certain of its operations and activities, all of which could harm JPMorgan Chase's reputation or result in collateral consequences. Although JPMorgan Chase endeavours to embed culture and conduct risk management throughout an employee's life cycle, including recruiting, onboarding, training and development, and performance management, as well as through JPMorgan Chase's promotion and compensation processes, employees of JPMorgan Chase have, from time to time in the past, engaged in improper or illegal conduct resulting in litigation as well as settlements involving consent orders, deferred prosecution agreements and non-prosecution agreements, as well as other civil and criminal settlements with regulators and other governmental entities, and there is no assurance that further inappropriate actions by employees will not occur or that any such actions will always be deterred or quickly prevented.

8.2 **The financial services industry is highly competitive, and JPMorgan Chase's inability to compete successfully may adversely affect its results of operations**

JPMorgan Chase operates in a highly competitive environment, and JPMorgan Chase expects that competition in the U.S. and global financial services industry will continue to be intense. Competitors of JPMorgan Chase include other banks and financial institutions, trading, advisory and investment management firms, finance companies and technology companies and other firms that are engaged in providing similar products and services. Technological advances and the growth of e-commerce have made it possible for non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities trading, payment processing and online automated algorithmic-based investment advice. New technologies have required and could require JPMorgan Chase to spend more to modify or adapt its products to attract and retain customers or to match products and services offered by its competitors, including technology companies.

Ongoing or increased competition, on the basis of the quality and variety of products and services offered, transaction execution, innovation, reputation, price or other factors, may put downward pressure on prices and fees for JPMorgan Chase's products and services or may cause JPMorgan Chase to lose market share. In addition, the failure of any of JPMorgan Chase's businesses to meet the expectations of clients and customers, whether due to general market conditions or underperformance (relative to competitors or to benchmarks), could impact JPMorgan Chase's ability to retain clients and customers or attract new clients and customers, thereby reducing JPMorgan Chase's revenues. Increased competition also may require JPMorgan Chase to make additional capital investments in its businesses, or to extend more of its capital on behalf of its clients in order to remain competitive. JPMorgan Chase cannot provide assurance that the significant competition in the financial services industry will not materially and adversely affect its future results of operations.

Non-U.S. competitors of JPMorgan Chase's wholesale businesses outside the U.S. are typically subject to different, and in some cases, less stringent, legislative and regulatory regimes. The more restrictive laws and regulations applicable to U.S. financial services institutions, such as JPMorgan Chase, can put JPMorgan Chase at a competitive disadvantage to its non-U.S. competitors, including prohibiting JPMorgan Chase from engaging in certain transactions, imposing higher capital and liquidity requirements on JPMorgan Chase, making JPMorgan Chase's pricing of certain transactions more expensive for clients or adversely affecting JPMorgan Chase's cost structure for providing certain products, all of which can reduce the revenue and profitability of JPMorgan Chase's wholesale businesses.

8.3 **JPMorgan Chase's financial statements are based in part on estimates and judgments which, if incorrect, could result in unexpected losses in the future**

Under accounting principles generally accepted in the U.S. ("**U.S. GAAP**"), JPMorgan Chase is required to use estimates and apply judgments in preparing its financial statements, including in determining allowances for credit losses and reserves related to litigation, among other items. Certain of JPMorgan Chase's financial instruments, including trading assets and liabilities, instruments in the investment securities portfolio, certain loans, MSRs, structured notes and certain repurchase and resale agreements, among other items, require a determination of their fair value in order to prepare JPMorgan Chase's financial statements. Where quoted market prices are not available, JPMorgan Chase may make fair value determinations based on internally developed models or other means which ultimately rely to some degree on management estimates and judgment. In addition, sudden illiquidity in markets or declines in prices of certain loans and securities may make it more difficult to value certain balance sheet items, which may lead to the possibility that such valuations will be subject to further change or adjustment. If estimates or judgments underlying JPMorgan Chase's financial statements are incorrect, JPMorgan Chase may experience material losses.

8.4 **Lapses in disclosure controls and procedures or internal control over financial reporting could materially and adversely affect JPMorgan Chase's operations, profitability or reputation**

There can be no assurance that JPMorgan Chase's disclosure controls and procedures will be effective in every circumstance or that a material weakness or significant deficiency in internal control over financial reporting will not occur. Any such lapses or deficiencies may materially and adversely affect JPMorgan Chase's business and results of operations or financial condition, restrict its ability to access the capital markets, require JPMorgan Chase to expend significant resources to correct the lapses or deficiencies, expose JPMorgan Chase to regulatory or legal proceedings, subject it to fines, penalties or judgments, harm JPMorgan Chase's reputation, or otherwise cause a decline in investor confidence.

8.5 **Damage to JPMorgan Chase's reputation could damage its businesses**

Maintaining trust in JPMorgan Chase is critical to JPMorgan Chase's ability to attract and maintain customers, investors and employees. Damage to JPMorgan Chase's reputation can therefore cause significant harm to JPMorgan Chase's business and prospects. Harm to JPMorgan Chase's reputation can arise from numerous sources, including, among others, employee misconduct, security breaches, compliance failures, litigation or regulatory outcomes or governmental investigations. JPMorgan Chase's reputation could also be harmed by the failure or perceived failure of an affiliate, joint-venturer or merchant banking portfolio company, or a vendor or other third party with which JPMorgan Chase does business, to comply with laws or regulations. In addition, JPMorgan Chase's reputation or prospects may be significantly damaged by adverse publicity or negative information regarding JPMorgan Chase, whether or not true, that may be posted on social media, non-mainstream news services or other parts of the internet, and this risk can be magnified by the speed and pervasiveness with which information is disseminated through those channels.

Management of potential conflicts of interest has become increasingly complex as JPMorgan Chase continues to expand its business activities through more numerous transactions, obligations and interests with and among JPMorgan Chase's clients. The failure or perceived failure to adequately address or appropriately disclose conflicts of interest has given rise to litigation and enforcement actions. Likewise, the failure or perceived failure to deliver appropriate standards of service and quality, to treat customers and clients fairly, to provide fiduciary products or services in accordance with the applicable legal and regulatory standards, or to handle or use confidential information of customers or clients appropriately or in compliance with applicable data protection and privacy laws and regulations has given rise to litigation and enforcement actions. In the future, a failure or perceived failure to appropriately address conflicts or fiduciary obligations could result in customer dissatisfaction, litigation and heightened regulatory scrutiny and enforcement actions, all of which can lead to lost revenue and higher operating costs and cause serious harm to JPMorgan Chase's reputation.

Actions by the financial services industry generally or by certain members of or individuals in the industry can also affect JPMorgan Chase's reputation. For example, the role played by financial services firms during and after the financial crisis, including concerns that consumers have been treated unfairly by financial institutions or that a financial institution had acted inappropriately with respect to the methods employed in offering products to customers, have damaged the reputation of the industry as a whole. Should any of these or other events or factors that can undermine JPMorgan Chase's reputation occur, there is no assurance that the additional costs and expenses that JPMorgan Chase may need to incur to address the issues giving rise to the damage to its reputation could not adversely affect JPMorgan Chase's earnings and results of operations, or that damage to JPMorgan Chase's reputation will not impair JPMorgan Chase's ability to retain its existing or attract new customers, investors and employees.

8.6 **JPMorgan Chase Bank, N.A. is affected by risks affecting its parent company**

JPMorgan Chase Bank, N.A. and its subsidiaries are also subject to each of the risks above, in addition to further risks. Risks that affect JPMorgan Chase & Co. can also affect JPMorgan Chase Bank, N.A. and its subsidiaries as there is substantial overlap in the businesses of JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. Further, JPMorgan Chase Bank, N.A. and its subsidiaries can be negatively affected by risks and other events affecting JPMorgan Chase & Co. even where JPMorgan Chase Bank, N.A. or its subsidiaries is not directly affected. For example, where JPMorgan Chase & Co.'s reputation is damaged, JPMorgan Chase Bank, N.A.'s reputation and that of its subsidiaries would likely also be damaged which could negatively affect JPMorgan Chase Bank, N.A and its subsidiaries.

8.7 **JPMSP is partly dependent on other J.P. Morgan affiliates**

JPMSP is an indirect wholly owned subsidiary of JPMorgan Chase & Co. It is anticipated that JPMSP will, for each issuance, enter into hedging arrangements with other J.P. Morgan affiliates, and that such arrangements will be sufficient to hedge its respective market risk for each such issuance. Accordingly, the ability of JPMSP to perform its respective obligations under the Securities may be affected by any inability or failure to perform, pursuant to its respective hedging arrangements, by such other J.P. Morgan affiliate.

8.8 **JPMS plc is subject to particular risks in relation to European and UK regulation of the financial service industry**

As a credit institution, regulated by the Financial Conduct Authority ("**FCA**") and the Prudential Regulation Authority ("**PRA**") in the United Kingdom and as a subsidiary of a systemically important financial institution, JPMS plc is subject to extensive regulation principally in the United Kingdom and the EU. JPMS plc faces the risk of significant intervention by regulatory and tax authorities in all jurisdictions in which it conducts its businesses. In many cases, JPMS plc's activities may be subject to overlapping and divergent regulation in different jurisdictions.

Among other things, as a result of regulators or private parties challenging JPMS plc's compliance with laws and regulations, it could be fined, prohibited from engaging in certain business activities, subject to limitations or conditions on its business activities or subjected to new or substantially higher taxes or other governmental charges in connection with the conduct of its businesses or with respect to its employees. Such limitations or conditions may negatively impact JPMS plc's profitability.

Separate and apart from the impact on the scope and profitability of JPMS plc's business activities, day-to-day compliance with laws and regulations, in particular those laws and regulations adopted since 2008, has involved and will continue to involve significant amounts of time, including that of JPMS plc's senior leaders and that of an increasing number of dedicated compliance and other reporting and operational personnel, all of which may negatively impact JPMS plc's profitability.

If there are new laws or regulations or changes in the enforcement of existing laws or regulations applicable to JPMS plc's businesses or those of JPMS plc's clients, including capital, liquidity, leverage, loss absorbing capacity, position limits, registration and margin requirements, restrictions on other business practices, reporting requirements, requirements relating to the implementation of the EU Bank Recovery and Resolution Directive ("**BRRD**"), tax burdens and compensation restrictions, that are imposed on a limited subset of financial institutions (either based on size, activities, geography or other criteria) which may include JPMS plc, compliance with these new laws and regulations, or changes in the enforcement of existing laws or regulations, could adversely affect JPMS plc's ability to compete effectively with other institutions that are not affected in the same way. In addition, regulation imposed on financial institutions or market participants generally, such as taxes on financial transactions, could adversely impact levels of market activity more broadly, and thus impact JPMS plc's businesses.

There is an extensive and complex program of final and proposed regulatory enhancements which reflects, in part, the EU's commitment to the G20 policy framework. These proposed or adopted numerous market reforms that have impacted and may continue to impact JPMS plc's businesses. These include stricter capital and liquidity requirements, including legislation (in the form of Capital Requirements Directive and Capital Requirements Regulation, collectively known as "**CRD IV**") to implement the Basel Committee's December 2010 final capital framework for strengthening international capital standards (the "Basel III" capital requirements) for JPMS plc. In addition, bank and investment firm recovery and resolution; bank structure; securities settlement; transparency and disclosure of securities financing transactions; benchmarks; restrictions on short selling and credit default swaps; additional obligations and restrictions on the management and marketing of funds in the EU; revisions to the laws on corporate governance; anti money-laundering controls; data security and privacy as well as significant reviews to law on corporate governance in financial firms, sanctions and market conduct rules. Fuerthermore, the Markets in Financial Instruments Regulation and a revision of the Markets in Financial Instruments Directive (collectively, "**MiFID II**") is scheduled to become effective in January 2018.

These developments could impact JPMS plc's profitability and competitive position in the affected jurisdictions, particularly if these requirements do not apply, or do not apply equally, to JPMS plc's competitors or are not implemented uniformly across jurisdictions. They could even make it uneconomic to continue to conduct all or certain businesses in such jurisdictions, or could result in JPMS plc incurring significant costs associated with changing business practices, restructuring businesses, moving certain businesses and employees to other locations or complying with applicable capital requirements, including liquidating assets or raising capital in a manner that adversely increases JPMS plc's funding costs or otherwise adversely affects its shareholder and creditors.

Increasingly, regulators and courts have sought to hold financial institutions liable for the misconduct of their clients where such regulators and courts have determined that the financial institution should have detected that the client was engaged in wrongdoing, even though the financial institution had no direct knowledge of the activities engaged in by its client. Regulators and courts have also increasingly found liability as a "control person" for activities of entities in which financial institutions or funds controlled by financial institutions have an investment, but which they do not actively manage. In addition, regulators and courts continue to seek to establish "fiduciary" obligations to counterparties to which no such duty had been assumed to exist. To the extent that such efforts are successful, the cost of, and liabilities associated with, engaging in brokerage, clearing, market-making, prime brokerage, investing and other similar activities could increase significantly. To the extent that JPMS plc has fiduciary obligations in connection with acting as a financial adviser, investment adviser or in other roles for individual, institutional, sovereign or investment fund clients, any breach, or even an alleged breach, of such obligations could have materially negative legal, regulatory and reputational consequences.

Capital, Liquidity, Leverage Ratio Requirements

In October 2012, the Basel Committee published final guidelines for calculating incremental capital requirements for domestic systemically important banking institutions ("**D-SIBs**"). These guidelines are complementary to the framework for global systemically important banks

("**G-SIBs**"), but are more principles-based to allow for national discretion in their implementation.

The D-SIB guidelines have been implemented in the EU by the European Banking Authority ("**EBA**") through the systemic risk buffer ("**SRB**") and the other systemically important institution ("**O-SII**") buffer in CRD IV. The O-SIIs identification process started in 2015 and takes place on a yearly basis. The EU's implementation of the D-SIB guidelines grants EU member states' relevant authorities significant discretion to identify O-SIIs. JP Morgan Chase's legal entities in the EU do not fall within the scope of the SRB regulations and therefore JPMS plc will not be subject to a SRB capital buffer. The UK has chosen not to apply a capital buffer to 0-SIIs and therefore JPMS plcis not required to maintain an O-SII buffer.

The CRD IV package, as amended by the European Commission Delegated Act ("**the Delegated Act**"), is the EU's implementation of the Basel III capital framework. Notably, the package introduced a new leverage ratio, which compares CRD IV's definition of Tier 1 capital to a measure of leverage exposure, defined as the sum of assets less Tier 1 capital deductions plus certain offbalance-sheet exposures, including a measure of derivatives exposures, securities financing transactions and commitments. On 23 November 2016, the European Commission ("**EC**") released its proposal for Capital Requirements Directive V ("**CRD V**")/ Capital Requirements Regulation 2 ("**CRR 2**"), which amends CRD IV legislation to accommodate several recently finalised Basel standards, including: Fundamental Review of the Trading Book ("FRTB"), Standardised Approach to Counterparty Credit Risk ("**SA-CCR**") and Leverage Ratio ("**LR**") plus a number of other amendments to the prudential framework in the EU (e.g., Large Exposure framework). The amendments to the LR now mandate a binding ratio, set at 3%, with discretion afforded to national authorities to increase this requirement if they deem necessary.

The CRD V package also includes the introduction of an intermediate holding company requirement for foreign banks and the implementation of the standard for Total Loss Absorbing Capacity ("**TLAC**").

The Basel Committee is considering further changes to the Basel III framework, which includes revisions to the standardised approach to credit risk and operational risk calculation methods. The changes will affect JPMS plc and other of the JP Morgan Chase's EU legal entities once finalised and implemented in the EU through changes to the CRD. Note that no firm plans for implementation of these changes have been set out by the EU legislative bodies and their finalisation also remains incomplete following a delay in January 2017, so the approach and timing remains uncertain.

The Basel Committee's international framework for liquidity risk measurement, standards and monitoring requires banking organisations to measure their liquidity against two specific liquidity tests.

Total Loss Absorbing Capacity

In November 2015, the Financial Stability Board ("**FSB**") issued a set of final principles, and a corresponding term sheet, on a new minimum standard for TLAC of G-SIBs. TLAC is intended to facilitate the resolution of a financial institution without causing financial instability and without recourse to public funds. The FSB's final standard also requires certain material subsidiaries of a G-SIB organised outside of the G-SIB's home country, such as JPMS plc, to maintain amounts of TLAC to facilitate the transfer of losses from operating subsidiaries to the parent company.

As of January 2016, the BRRD subjects institutions to a minimum requirement for own funds and eligible liabilities ("**MREL**"). On 8 November 2016, the Bank of England ("**BOE**") and PRA published respectively their policy statement and accompanying supervisory statement on MREL thresholds and buffers. The BOE statement of policy sets out the end-state MREL levels that will apply to UK institutions by 1 January 2022. Intermediate target levels are set depending on whether the firm is a G-SIB, a D-SIB, or neither. The releases confirm that the BOE will apply a level of MREL and implementation timetable in line with the global TLAC standard. The releases do not cover specifically the levels of MREL JP Morgan Chase can expect for its UK entities such as JPMS plc. BOE is expected to consult again on internal MREL in 2017 (following an FSB publication on internal TLAC issued in December 2016).

Further, on 23 November 2016, the EC released proposals for amending the BRRD, including a proposal to amend MREL requirements to implement the global TLAC standard in the EU. Under the proposal, TLAC will be implemented as a Pillar 1 MREL requirement in line with the FSB's minimum TLAC standard. The scope is in line with the FSB Term Sheet (i.e. Global Systematically Important Insurers ("G-SIls") only). Additionally, material subsidiaries of non-EU G-SIls that are not themselves resolution entities will be subject to an internal TLAC requirement, set at 90% of their individual external TLAC requirement were it required.

The potential impacts of these requirements on JPMS plc are currently being considered. Once communication of the end state requirement has been provided, JPMS plc will establish plans to ensure compliance with the requirements by the conformance date. In the interim period however, JPMS plc considers compliance with current minimum capital requirements to represent compliance with its transitional MREL.

EU Market Reform

The EU has finalised MIFID II, which includes extensive market structure reforms, such as the establishment of a new trading venue category (organised trading facilities), creation of a derivatives trading obligation and enhanced pre- and post-trade transparency covering a wider range of financial instruments. Firms trading commodity derivatives will be required to calculate and report their positions and adhere to specific limits. Other reforms introduce enhanced transaction reporting, rules governing algorithmic and high-frequency trading, the publication of best execution data by investment firms and trading venues, investor protection-related and organisational requirements. Other requirements will affect the way investment managers can pay for the receipt of investment research. On 30 June 2016, legislation was passed to delay MiFID II for one year until January 2018. JP Morgan Chase has a dedicated MiFID II programme which is focused on business specific requirements, ensuring operational readiness and consistency in implementation across the industry.

The EU and national financial legislators and regulators have proposed or adopted numerous further market reforms that may impact JPMS plc's businesses, including heightened corporate governance standards for financial institutions and rules to govern the way that indices are generated that are used as benchmarks for financial instruments or funds.

The EU has established regulatory requirements for OTC derivatives activities under the European Market Infrastructure Regulation ("**EMIR**"), including requirements relating to margining, mandatory clearing and reporting, which in general have already started taking effect. A global compliance timetable for margin requirements was established by the BCBS-IOSCO Working Group on Margin Requirements ("**WGMR**"). The EU finalised its rules for non-centrally cleared OTC derivatives in December 2016 which deviated from this schedule in implementing the first phase imposing initial and variation margin requirements for the largest global dealers. Phase 1 of the initial and variation margin rules began to apply in the EU from 4 February 2017. Implementation of industry wide variation margin rules in the EU aligned with the global schedule was due to start on 1 March 2017. However, due to readiness issues across the broader industry, global regulatory bodies which have adopted the WGMR schedule have acted to provide varying degrees of enforcement relief. On 23 February 2017, the European Supervisory Authorities ("**ESAs**") released a statement that all in-scope transactions entered into from 1 March 2017 remain subject to the rules and would need to be made compliant, but they expect National Competent Authorities to apply a risk-based approach to day-to-day enforcement of the rules as the market works towards full compliance. JP Morgan Chase and JPMS plc is coordinating with its regulators and continues to work diligently with its clients to reach a state of industry readiness.

In addition, the EU also introduced the Securities Financing Transaction Regulation ("**SFTR**"), parts of which have begun to apply from 2016. The new measures include rules concerning the re-use of collateral, disclosure and record keeping as well as reporting requirements. Given the broad scope of the regulation, it is expected to affect multiple business areas, in particular the repos business, principal stock borrowed loan, agency lending and prime brokerage.

Of note, the EU Parliament is considering the Bank Structure Regulation, a draft regulation to implement a proprietary trading ban and impose mandatory separation of other trading activities from core banking activity. The proposed regulation is applicable only to certain banks above materiality thresholds. If the EU Parliament can agree a position on this regulation, it will proceed to a 'trialogue' process to agree a common text between the European Commission, European Council of Ministers and the EU Parliament. Various EU Member States have enacted similar structural measures, including the UK (via the Independent Commission on Banking), France and Germany.

8.9 **JPMS plc could become subject to a potential exercise by a UK resolution authority of its resolution powers**

The BRRD entered into force on 2 July 2014. EU Member states were required to adopt and publish the laws, regulations and administrative provisions necessary to comply with the BRRD by 31 December 2014 and to apply those with effect from 1 January 2015, except in relation to the bail-in provisions, which were to apply from 1 January 2016 at the latest. Its stated aim is to provide national "resolution authorities" with powers and tools to address banking crises pre-emptively in order to safeguard financial stability and minimise taxpayers' exposure to losses.

The requirements of the BRRD have been fully implemented in the UK mainly through the UK Banking Act 2009, as amended and related statutory instruments (together, the "**UK Banking Act**"). The UK Banking Act provides for a "resolution regime" granting substantial powers to the Bank of England (or, in certain circumstances, HM Treasury), to implement resolution measures (in consultation with other UK authorities) with respect to a UK financial institution (for example, such as JPMS plc) where the UK resolution authority considers that the relevant institution is failing or is likely to fail, there is no reasonable prospect of other measures preventing the failure of the institution and resolution action is necessary in the public interest.

The resolution powers available to the UK resolution authority include powers to:

- write down the amount owing under the financial institution’s liabilities, including contingent liabilities such as a Guarantee , including to zero, or convert the relevant securities into other securities, including ordinary shares of the relevant institution (or a subsidiary) – the so-called "bail-in" tool;
- transfer all or part of the business of the relevant institution to a "bridge bank";
- transfer impaired or problem assets to an asset management vehicle; and
- sell the relevant institution to a commercial purchaser.

In addition, the UK resolution authority is empowered to modify contractual arrangements, suspend enforcement or termination rights that might otherwise be triggered and disapply or modify laws in the UK (with possible retrospective effect) to enable the recovery and resolution powers under the UK Banking Act to be used effectively.

You should assume that, in a resolution situation, financial public support will only be available to JPMS plc (or any member of its group) as a last resort after the relevant UK resolution authorities have assessed and used, to the maximum extent practicable, the resolution tools, including the bail-in tool.

You should be aware that the exercise of any such resolution power or even the suggestion of any such potential exercise in respect of JPMS plc (or any member of its group) could have a material adverse effect on the rights of holders of Securities, and could lead to a loss of some or all of the investment. The resolution regime is designed to be triggered prior to insolvency of the relevant institution, and holders of securities issued or guaranteed by such institution may not be able to anticipate the exercise of any resolution power (including exercise of the "bail-in" tool) by the UK resolution authority. Further, holders of securities issued or guaranteed by an institution which has been taken into a resolution regime will have very limited rights to challenge the exercise of powers by the UK resolution authority, even where such powers have resulted in the write down of the securities or conversion of the securities to equity.

II. CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Registration Document, including the documents incorporated by reference herein, are forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate", "target", "expect", "intend", "plan" or "goal". Forward-looking statements provide JPMorgan Chase's (JPMorgan Chase being JPMorgan Chase & Co. together with its consolidated subsidiaries, including JPMSP and JPMS plc) current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase also may make forward-looking statements in its other documents filed or furnished with the SEC. In addition, JPMorgan Chase's senior management may make forward-looking statements orally to analysts, investors, representatives of the media and others.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond JPMorgan Chase's control. JPMorgan Chase's actual future results may differ materially from those set forth in its forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

- local, regional and global business, economic and political conditions and geopolitical events;
- changes in laws and regulatory requirements, including capital and liquidity requirements affecting the businesses of JPMorgan Chase, and the ability of JPMorgan Chase to address those requirements;
- heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase's business practices, including dealings with retail customers
- changes in trade, monetary and fiscal policies and laws;
- changes in income tax laws and regulations;
- securities and capital markets behaviour, including changes in market liquidity and volatility;
- changes in investor sentiment or consumer spending or savings behaviour;
- ability of JPMorgan Chase to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;
- changes in credit ratings assigned to JPMorgan Chase & Co. or its subsidiaries;
- damage to JPMorgan Chase's reputation;
- ability of JPMorgan Chase to deal effectively with an economic slowdown or other economic or market disruption;
- technology changes instituted by JPMorgan Chase, its counterparties or competitors;
- the success of JPMorgan Chase's business simplification initiatives and the effectiveness of its control agenda;
- ability of JPMorgan Chase to develop new products and services, and the extent to which products or services previously sold by JPMorgan Chase (including but not limited to mortgages and asset-backed securities) require JPMorgan Chase to incur liabilities or absorb losses not contemplated at their initiation or origination;
- acceptance of JPMorgan Chase's new and existing products and services by the marketplace and the ability of JPMorgan Chase to innovate and to increase market share;
- ability of JPMorgan Chase to attract and retain qualified employees;
- ability of JPMorgan Chase to control expense;

- competitive pressures;
- changes in the credit quality of JPMorgan Chase's customers and counterparties;
- adequacy of JPMorgan Chase's risk management framework, disclosure controls and procedures and internal control over financial reporting;
- adverse judicial or regulatory proceedings;
- changes in applicable accounting policies, including the introduction of new accounting standards;
- ability of JPMorgan Chase to determine accurate values of certain assets and liabilities;
- occurrence of natural or man-made disasters or calamities or conflicts and JPMorgan Chase's ability to deal effectively with disruptions caused by the foregoing;
- ability of JPMorgan Chase to maintain the security of its financial, accounting, technology, data processing and other operational systems and facilities;
- ability of JPMorgan Chase to effectively defend itself against cyberattacks and other attempts by unauthorised parties to access information of JPMorgan Chase or its customers or to disrupt JPMorgan Chase's systems; and
- the other risks and uncertainties detailed in the section entitled "Risk Factors" of this Registration Document.

Any forward-looking statements made by or on behalf of JPMorgan Chase & Co. speak only as of the date they are made and JPMorgan Chase & Co. does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made. Investors should, however, consult any further disclosures of a forward-looking nature which JPMorgan Chase & Co. may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, or Current Reports on Form 8-K filed with the SEC.

III. RESPONSIBILITY STATEMENT

JPMSP and JPMS plc accept responsibility for the information given in this Registration Document and confirm that, having taken all reasonable care to ensure that such is the case, the information contained in this Registration Document is, to the best of its knowledge, correct, and that no material facts or circumstances have been omitted from this Registration Document.

IV. INFORMATION INCORPORATED BY REFERENCE

This document should be read and construed in conjunction with each supplement to this Registration Document and the information incorporated by reference into this Registration Document. The information contained in the following documents, each filed by JPMSP with the CSSF, are hereby incorporated by reference into this Registration Document and deemed to be part of this Registration Document:

(i) the audited JPMSP Annual Report for the year ended 31 December 2016 (the "**JPMSP 2016 Annual Report**"); and

(ii) the audited JPMSP Annual Report for the year ended 31 December 2015 (the "**JPMSP 2015 Annual Report**").

Any information incorporated by reference that is not included in the cross-reference list is considered to be additional information and is not required by the relevant schedules of the Prospectus Regulation.

The table below sets out the relevant page references for the information incorporated into this Registration Document by reference.

Information incorporated by reference	**Page reference**
From the JPMSP 2016 Annual Report*	
Directors' Report	Pages 3 to 5
Financial Statements:	
Balance Sheet	Page 6
Income statement	Page 7
Statement of changes in equity	Page 8
Statement of cash flows	Page 9
Notes to the financial statements	Pages 10 to 26
Proposed appropriation of net results	Page 26
Other information:	
Profit appropriation according to the Articles of Association	Page 27
Independent auditors' report	Pages 28 to 36
From the JPMSP 2015 Annual Report	
Directors' Report	Pages 1 to 3
Financial Statements:	
Balance sheet	Page 4
Income statement and Statement of comprehensive income	Page 5
Statement of changes in equity	Page 6
Statement of cash flows	Page 7
Notes to the financial statements	Pages 8 to 24
Other Information:	
Profit appropriation according to the Articles of Association	Page 25
Proposed appropriation of net results	Page 25
Auditor's report	Pages 26 to 32

*The page numbers referenced above in relation to the JPMSP 2015 Annual Report and JPMSP 2016 Annual Report relate to the PDF version of such document, a copy of which is available on the website of the Luxembourg Stock Exchange (https://www.bourse.lu/issuer/JPMorgStrucProd/59875) under section "CSSF approvals" in the sub-section "See all".

Investors who have not previously reviewed the information contained in the above documents should do so in connection with their evaluation of any Securities. Any statement contained in a document, all or the relevant portion of which is incorporated by reference into this Registration Document, shall be deemed to be modified or superseded for the purpose of this Registration Document to the extent that a statement contained in this Registration Document or in any supplement to this Registration Document, including any information incorporated therein by reference, modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). The documents from which information is incorporated by reference will be available on the Luxembourg Stock Exchange's website (https://www.bourse.lu/issuer/JPMorgStrucProd/59875) under section "CSSF approvals" in the sub-section "See all".

V. J.P. MORGAN STRUCTURED PRODUCTS B.V.

1. History and Development

JPMSP was incorporated as a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) in Amsterdam, The Netherlands, on 6 November 2006 to exist for an unlimited duration. JPMSP mainly operates under the Dutch Civil Code (*Burgerlijk Wetboek*) and the Dutch Financial Supervision Act (*Wet op het financieel toezicht*). JPMSP was and remains registered at the Chamber of Commerce of Amsterdam under registered number 34259454 and has its registered offices at Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands (telephone number +31 20 575 5600).

JPMSP is an indirect, wholly-owned subsidiary of JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. is one of the principal bank subsidiaries of JPMorgan Chase & Co., a company incorporated in the State of Delaware in the United States of America.

2. Investment Policy

JPMSP may undertake independent investments in its sole discretion with the proceeds (net of third party costs) of an issuance of notes, warrants or certificates, subject to compliance with certain legal, tax and regulatory restrictions.

3. Principal Activities

JPMSP's business principally consists of the issuance of securitised derivatives comprising notes, warrants and certificates, including equity-linked, reverse convertible and market participation notes (together, and for the purposes of this section only, the "**Securities**") and the subsequent hedging of those risk positions. All issuances which have been closed to date are subject to hedging arrangements. The proceeds of the sale of the Securities are used for general corporate purposes, including the entry into hedging arrangements with other J.P. Morgan affiliates. JPMSP anticipates that the hedging arrangements will be sufficient to hedge itself against the market risk of its securities issuance activities. JPMSP also has receipts from and makes payments to other J.P. Morgan affiliates.

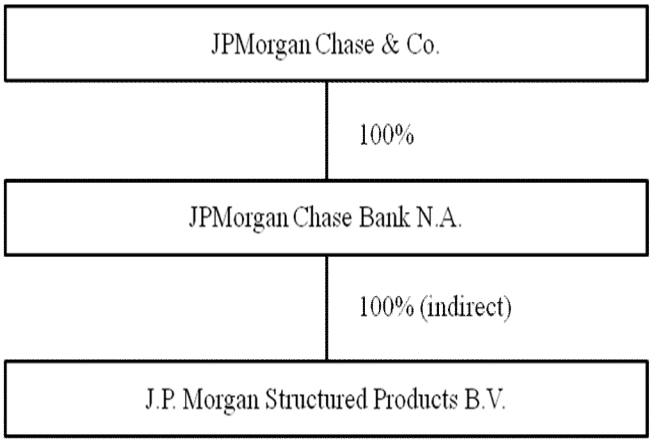
It is anticipated that JPMSP will, for each issuance, enter into hedging arrangements with other J.P. Morgan affiliates, and that such arrangements will be sufficient to hedge its market risk for each such issuance. Accordingly, the ability of JPMSP to perform its obligations under the Securities may be affected by any inability or failure to perform, pursuant to its hedging arrangements, by such other J.P. Morgan affiliate.

4. Principal Markets

During the financial year ended 31 December 2016, JPMSP issued Securities in the Asia Pacific region, Europe, the Middle East, Africa, Latin America and the United States of America.

5. **Organisational Structure**

JPMSP is an indirect, wholly-owned subsidiary of JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. is one of the principal bank subsidiaries of JPMorgan Chase & Co. JPMorgan Chase & Co. (together with its consolidated subsidiaries, "**JPMorgan Chase**") is a leading global financial services firm and one of the largest banking institutions in the United States, with operations worldwide.



JPMSP is dependent on its sole shareholder JPMorgan International Finance Limited and its ultimate parent company JPMorgan Chase & Co. and thus on the business strategy for JPMorgan Chase. It is anticipated that JPMSP will, for each issuance, enter into hedging arrangements with other J.P. Morgan affiliates, and that such arrangements will be sufficient to hedge its respective market risk for each such issuance. Accordingly, the ability of JPMSP to perform its obligations under the Securities may be affected by any inability or failure to perform, pursuant to its hedging arrangements, by such other J.P. Morgan affiliate.

6. **Trend Information**

There have been no material adverse change in the prospects of JPMSP since 31 December 2016.

JPMSP's primary objective in 2017 will be the continued development of securitised products for their placement to retail, 'high net worth' and institutional investors principally outside of the United States of America, linked to a range of underlying reference assets including equity, credit, interest rates, commodities and so called "alternatives" such as funds and hedge funds.

7. **Directors and Officers**

The administrative, management and supervisory bodies of JPMSP comprise its Board of Directors. Set forth below are the names and positions of JPMSP's Directors:

Name	**Function**	**Business address**
Wolbert Hinrik Kamphuijs	Managing Director	Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands
David Roland Hansson	Managing Director	25/F Chater House, 8 Connaught Road, Central, Hong Kong
Ryoya Terasawa	Managing Director	25/F Chater House, 8 Connaught Road,

		Central, Hong Kong
Hubert Philippus de Kanter	Managing Director	Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands
Jozef Cornelis Petrus van Uffelen	Managing Director	Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands

The principal outside activities of Mr. Kamphuijs, Mr. de Kanter and Mr. van Uffelen are as employees of TMF Netherlands B.V., a trust company which was established in The Netherlands in 1970. Mr. Hansson is a Managing Director of the Investment Bank division at JPMorgan Chase and there are no principal outside activities performed by Mr. Hansson which are significant to JPMSP as Issuer. Mr. Terasawa is a Managing Director of the Investment Bank division at JPMorgan Chase and there are no principal outside activities performed by Mr. Terasawa which are significant to JPMSP as Issuer. All Directors hold office until removed.

Subject in the case of Mr. Kamphuijs, Mr. de Kanter and Mr. van Uffelen to their duties to TMF Netherlands B.V., there are no material potential conflicts of interest between any duties owed to JPMSP by the Directors of JPMSP identified above and their private interests and/or outside duties.

8. **Corporate Governance**

JPMSP complies with established and accepted principles of corporate governance in The Netherlands. The Board of Directors of JPMSP conducts itself in accordance with general principles of Dutch corporate law.

The Board of Directors has appointed a committee to authorise and transact issuances of Securities. No other committees made up for specific purposes or to perform specific functions have been appointed.

9. **Financial information**

Historical financial information

The JPMSP 2016 Annual Report and the JPMSP 2015 Annual Report are prepared and filed in accordance with the laws of The Netherlands.

Audited historical financial information for the fiscal years ended 31 December 2016, which forms part of JPMSP's 2016 Annual Report, and for the fiscal year ended 31 December 2015, which forms part of JPMSP's 2015 Annual Report, are incorporated by reference into this Registration Document.

Auditing of historical financial information

PricewaterhouseCoopers Accountants N.V., who are members of the Royal Dutch Institute of Chartered Accountants (*Koninklijk Nederlands Instituut voor Registeraccountants*), have audited without qualification JPMSP's audited financial statements. A copy of the auditor's report appears at page 26 (pages 28 to 36 of the pdf) of the JPMSP 2016 Annual Report, and at page 26 (pages 28 to 36 of the pdf) of the JPMSP 2015 Annual Report and are incorporated by reference into this Registration Document. PricewaterhouseCoopers Accountants N.V. has no material interest in JPMSP.

The address of PricewaterhouseCoopers Accountants N.V. is: Thomas R. Malthusstraat 5, P.O. Box 90357, 1006 BJ Amsterdam, The Netherlands.

Interim financial information

JPMSP produces unaudited interim financial statements in respect of the period ended 30 June in each year.

10. **Selected Financial Information**

The following table shows selected financial information in relation to the Issuer which is derived from the audited financial statements as at and for the financial years ended 31 December 2016 (JPMSP 2016 Annual Report) and 31 December 2015 (JPMSP 2015 Annual Report), each prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU:

Selected income statement data		
(in USD)	**Year ended 31 December**	
	2016	**2015**
Profit/(Loss) before income tax:	2,177,000	(3,033,000)
Profit/(Loss) for the year attributable to equity shareholders of the Company:	1,703,000	(2,367,000)
Selected balance sheet data		
(in USD)	**As at 31 December**	
	2016	**2015**
Total assets:	19,961,720,000	20,368,880,000
Total liabilities:	19,431,086,000	19,839,949,000
Total equity:	530,634,000	528,931,000

11. **Capital Structure**

The authorised share capital of JPMSP is euro 90,000, divided into 90,000 ordinary shares of euro 1.00 each. At incorporation 18,000 ordinary shares were issued. By a notarial deed of share issuance dated 30 March 2007 an additional 2,000 ordinary shares were issued in consideration of U.S. $500,000,000. The total issued and fully paid up share capital therefore amounts to 20,000 ordinary shares. JPMSP does not hold any of its own shares. All shares are held by JPMorgan International Finance Limited.

12. **Memorandum and Articles of Association**

JPMSP's objects as set out in Article 3 of its Articles of Association are:

(a) to incorporate, to participate in any way whatsoever, to manage, to supervise, to operate and to promote enterprises, businesses and companies;

(b) to finance businesses and companies;

(c) to borrow, to lend and to raise funds, including the issue of bonds, promissory notes or other securities or evidence of indebtedness as well as to enter into agreements in connection with the aforementioned;

(d) to enter into swaps and any other derivative transactions whatsoever to hedge the company's exposure under any agreements, securities or other instruments whatsoever to which it is a party;

(e) to supply advice and to render services to enterprises and companies with which the company forms a group and to third parties;

(f) to render guarantees, to bind the company and to pledge its assets for obligations of the companies and enterprises with which it forms a group and on behalf of third parties;

(g) to obtain, alienate, manage and exploit registered property and items of property in general;

(h) to trade in currencies, securities and items of property in general;

(i) to develop and trade in patent, trademarks, licences, knowhow and other intellectual and industrial property-rights;

(j) to perform any and all activity of industrial, financial or commercial nature, as well as everything pertaining to the foregoing, relating thereto or conducive thereto, all in the widest sense of the word.

13. **Legal and arbitration proceedings**

JPMSP is not and has not been involved in any governmental, legal or arbitration proceedings relating to claims or amounts that are material during the 12-month period ending on the date of this Registration Document which may have, or have had in the recent past, significant effects on the financial position or profitability of JPMSP nor, so far as JPMSP is aware, are any such governmental, legal or arbitration proceedings pending or threatened.

14. **No significant change in the Issuer’s financial or trading position**

There have been no significant changes in the financial or trading position of JPMSP since 31 December 2016.

15. **Operating Profit and Loss**

The operating profit of JPMSP for the year ended 31 December 2016 was U.S.$ 245,000.

The operating loss of JPMSP for the year ended 31 December 2015 was U.S.$ 3,871,000.

16. **Principal Establishments and Real Estate owned**

JPMSP does not own any principal establishments, which account for more than 10 per cent. of its revenues, nor does JPMSP own any real estate directly.

17. **Dividends**

JPMSP has not paid any dividends since its incorporation on 6 November 2006.

VI. J.P. MORGAN SECURITIES PLC

1. History and Development

JPMS plc was incorporated as a public limited liability company domiciled in England and Wales on 30 April 1992. JPMS plc was and remains registered at the Companies House in England under registered number 02711006 and has its registered offices at 25 Bank Street, Canary Wharf, London, E14 5JP, United Kingdom (telephone number +44 20 7777 2000). JPMS plc is authorised by the Prudential Regulation Authority (PRA) and regulated by the Financial Conduct Authority (FCA) and the PRA in the United Kingdom.

2. Principal Activities and Principal Markets

JPMS plc is an indirect principal subsidiary of the JPMorgan Chase & Co. in the United Kingdom ("**UK**") and the European Economic Area ("**EEA**"). 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.

JPMS plc engages in international investment banking activity, including activity across markets, investor services 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. JPMS plc is a member of over twenty exchanges and various clearing houses, including, among others, LCH Clearnet Limited, LME Clear, Eurex Clearing AG and ICE Clear Europe.

JPMS plc is a UK bank and a credit institution within the meaning of the EU Directive 2013/13/EU ("**CRD IV**"), 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.

3. Organisational Structure

JPMS plc is a subsidiary undertaking of J.P. Morgan Capital Holdings Limited, a company incorporated in England and Wales, and of its ultimate parent company JPMorgan Chase & Co., a company incorporated in the United States of America. JPMS plc is a principal subsidiary of JPMorgan Chase & Co. JPMorgan Chase ("**JPMorgan Chase**" being JPMorgan Chase & Co. together with its consolidated subsidiaries) 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 is dependent on its sole shareholder J.P. Morgan Capital Holdings Limited and its ultimate parent company JPMorgan Chase & Co. and thus on the business strategy for JPMorgan Chase.

4. Trend Information

There have been no material adverse change in the prospects of JPMS plc since 31 December 2016.

The following statements are based on the current beliefs and expectations of JPMS plc''s management and are subject to significant risks and uncertainties. These risks and uncertainties could cause JPMS plc's actual results to differ materially from those set forth in such forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors" in this Registration Document.

Future outlook

The outlook of JPMS plc for the full 2017 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 JPMS plc does business. Each of these inter-related factors will affect the performance of JPMS plc and its lines of business ("**LOB**'s").

On 23 June 2016, the UK voted by referendum to leave the European Union ("**Brexit**"). On 29 March 2017, the UK government formally invoked Article 50 of the Lisbon Treaty, giving an expected exit date of the end of March 2019. The British Prime Minister has laid out twelve "negotiation objectives" for Brexit, which confirmed the UK will not remain a member of the Single Market, but will pursue a Free Trade Agreement that provides the greatest possible access to the Single Market. Further, the UK government will seek a phased arrangement to ensure the orderly transition of the legal and regulatory framework for financial services and promote stability and market confidence.

Many international banks, including JPMorgan Chase, operate substantial parts of their European Union ("**EU**") businesses from entities based in the UK. Upon the UK leaving the EU, the regulatory and legal environment that would then exist, and to which JPMorgan Chase's UK operations would then be subject, will depend on, in certain respects, the nature of the arrangements agreed to with the EU and other trading partners.

These arrangements cannot be predicted, but currently JPMorgan Chase does not believe any of the likely identified scenarios would threaten the viability of JPMorgan Chase's business units or JPMorgan Chase's ability to serve clients across the EU and in the UK. However, it is possible that under some scenarios changes to the JPMorgan Chase's legal entity structure and operations would be required, which might result in a less efficient operating model across JPMorgan Chase's European legal entities and JPMS plc's European branches. JPMorgan Chase is in the process of evaluating plans to ensure its continued ability to operate in the UK and the EU beyond the expected exit date.

The impact of Brexit on JPMS plc's business model and risks will continue to be assessed as part of the firmwide analysis and planning phase in considering a strategic post-Brexit legal entity structure.

Further, JPMorgan Chase is expected to simplify JPMS plc's ownership structure.

Regulatory Developments

The regulatory reform agenda has led to significant changes in the way that major financial services institutions are regulated worldwide. This collection of reforms, most notably the Basel III framework, has led to a broad restructuring of the financial services industry to both increase resiliency of financial firms and infrastructure as well as reduce the impact of a failure on the financial system. Recently implemented and new requirements are leading to stricter regulations of financial institutions generally and heightened prudential requirements for systemically important firms in particular. Included in these are reforms of the capital and liquidity framework as well as new rules covering over-the-counter ("**OTC**") derivatives markets, such as mandated exchange trading, position limits, margin, capital and registration requirements. Many of these reforms have and will continue to influence JPMorgan Chase and JPMS plc.

In the EU specifically, the European Systemic Risk Board ("**ESRB**") has been established to monitor financial stability, together with European Supervisory Agencies which set detailed regulatory rules and encourage supervisory convergence across the 28 Member States. The EU has also created a Single Supervisory Mechanism ("**SSM**") for the eurozone, under which the European Central Bank ("**ECB**") has supervisory responsibility, together with a Single Resolution Mechanism ("**SRM**") and Single Resolution Board ("**SRB**"), having jurisdiction over bank resolution in the zone.

There is an extensive and complex program of final and proposed regulatory enhancements which reflects, in part, the EU's commitment to the G20 policy framework. As such, the EU is currently considering or executing upon significant revisions to laws covering: bank and investment firm recovery and resolution; bank structure; securities settlement; transparency and disclosure of securities financing transactions; benchmarks; resolution of market infrastructures (Central clearing counterparties ("**CCP's**")); anti money-laundering controls;

data security and privacy; and corporate governance in financial firms, together with new amendments to capital and liquidity standards.

5. Directors and Officers

The administrative, management and supervisory bodies of JPMS plc comprise its Board of Directors. Set forth below are the names and positions of JPMS plc's Directors at the date of this Registration Document. The business address of each Director is 25 Bank Street, Canary Wharf, London, E14 5JP, England.

Name	**Function**	**Principal Outside Activities**
Sir Winfried Bischoff	Independent Non-Executive Chairman of J.P. Morgan Securities plc, of its Nomination Committee and member of its Directors' Risk Policy Committee.	Chairman of the UK Financial Reporting Council
Laban Jackson	Independent Non-Executive Director and Chairman of the UK Audit and Compliance Committee.	Director of JPMorgan Chase & Co. and member of the JPMorgan Chase & Co. Audit Committee Chairman of Clear Creek Properties Inc.
Scott Moeller	Independent Non-Executive Director and Chairman of the Directors' Risk Policy Committee. Member of the Nomination Committee	Director, M&A Research Centre, Cass Business School
Jane Moran	Independent Non-Executive Director and member of the Nomination Committee and UK Audit and Compliance Committee	Chief Information Officer, Unilever plc
Monique Shivanandan	Independent Non-Executive Director and member of the Directors' Risk Policy Committee and UK Audit and Compliance Committee	Group Chief Information Officer, Aviva plc
Daniel Pinto	Director and Chief Executive Officer. Chief Executive Officer, EMEA and Chief Executive Officer of Corporate and Investment Bank	
Andrew Cox	Director, Chief Risk Officer and Head of Credit Risk, EMEA	
Mark Garvin	Director and Vice Chairman for Corporate and Investment Bank, EMEA	

Elena Korablina	Director and Chief Financial Officer, EMEA	
Julia Meazzo	Director and Head of Human Resources, EMEA	
Viswas Raghavan	Director and Deputy Chief Executive Officer, EMEA and Head of EMEA Banking	
Jason Edwin Sippel	Director and Co-Head of Global Equities, Corporate and Investment Bank	

There are no material potential conflicts of interest between any duties owed to JPMS plc by the Directors of JPMS plc identified above and their private interests and/or outside duties.

6. **Financial information**

Historical financial information

Financial information of JPMS plc for the financial year 2016 ("**JPMS plc 2016 Annual Report**") prepared in accordance with United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law (United Kingdom Generally Accepted Accounting Practice) can be found in Appendix I of the Registration Document (pages F-1 to F-46).

Financial information of JPMS plc for the financial year 2015 ("**JPMS plc 2015 Annual Report**") prepared in accordance with United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law (United Kingdom Generally Accepted Accounting Practice) can be found in Appendix II of the Registration Document (pages G-1 to G-56).

Auditing of historical financial information

PricewaterhouseCoopers LLP, Chartered Accountants and Statutory Auditors, have audited without qualification JPMS plc's audited financial statements. A copy of the auditor's report from the JPMS plc 2016 Annual Report appears on pages F-3 to F-4 of Appendix I and from the JPMS plc 2015 Annual Report at pages G-3 to G-4 of Appendix II to this Registration Document. PricewaterhouseCoopers LLP has no material interest in JPMS plc.

The address of PricewaterhouseCoopers LLP is: 7 More London Riverside, London, SE1 2RT, United Kingdom.

7. **Major Shareholders**

JPMS plc is a wholly-owned subsidiary of J.P. Morgan Capital Holdings Limited, a company incorporated in England and Wales.

8. **Legal and arbitration proceedings**

Legal disputes in which JPMS plc or its subsidiaries have been involved during the last twelve month include the following:

JPMS plc, together with certain other JPMorgan Chase undertakings and third party entities, has been named in a claim brought by the Ente Nazionale di Previdenza ed Assistenza Medici E Degli Odontoiatri ("**ENPAM**") in the Milan courts in relation to certain alleged breaches of Italian conduct rules. The claim seeks damages against named parties of between EUR 111 and 222 million. The court has set a hearing for 17 May 2017 for the next round of submissions. Management believe that no provision is required in line with the requirements of IAS 37 'Provisions, contingent liabilities and contingent assets', as the relevant criteria are not met.

9. **No significant change in the Issuer's financial position**

There have been no significant changes in the financial position of JPMS plc since 31 December 2016.

VII. DOCUMENTS ON DISPLAY

Throughout the life of this Registration Document and from the date hereof, the following documents, or copies thereof, will be available, during normal business hours on any weekday (Saturdays, Sundays and public holidays excepted), for inspection at the office of the Programme Agent (BNP Paribas Securities Services S.C.A., Frankfurt Branch, Europa-Allee 12, 60327 Frankfurt am Main, Germany) and in another form as may be required by law.

(i) JPMSP 2016 Annual Report and the JPMSP 2015 Annual Report;

(ii) JPMS plc 2016 Annual Report and the JPMS plc 2015 Annual Report;

(iii) the Articles of Association of the JPMSP as amended from time to time;

(iv) the Articles of Association of the JPMS plc as amended from time to time;

(v) a copy of this Registration Document; and

(vi) a copy of any supplement to this Registration Document, including any document(s) incorporated by reference therein.

Furthermore, the documents mentioned under (v) and (vi) above are published in electronic form on the website https://www.jpmorgan-zertifikate.de/globalassets/library/base-prospectus/JPMRD1.pdf.

APPENDIX I

Audited financial information of J.P. Morgan Securities plc for the financial year 2016

J.P. MORGAN SECURITIES PLC

(Registered Number: 02711006)

Annual report for the year ended 31 December 2016

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

Report on the financial statements

Our opinion

In our opinion J.P. Morgan Securities plc's financial statements (the "financial statements"):

- give a true and fair view of the state of the company's affairs as at 31 December 2016 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

What we have audited

The financial statements, included within the Annual report (the "Annual Report"), comprise:

- the Balance sheet as at 31 December 2016;
- the Income statement and Statement of comprehensive income for the year then ended;
- the Statement of cash flows for the year then ended;
- the Statement of changes in equity for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report, rather than in the notes to the financial statements. These are cross-referenced from the financial statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the financial statements is United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law (United Kingdom Generally Accepted Accounting Practice).

In applying the financial reporting framework, the directors have made a number of subjective judgements, for example in respect of significant accounting estimates. In making such estimates, they have made assumptions and considered future events.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic report and the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and the Directors' report have been prepared in accordance with applicable legal requirements.

In addition, in light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we are required to report if we have identified any material misstatements in the Strategic report and the Directors' report. We have nothing to report in this respect.

Other matters on which we are required to report by exception

Adequacy of accounting records and information and explanations received

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, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Directors' remuneration

Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

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

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the Statement of directors' responsibilities set out on page 25, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland) ("ISAs (UK & Ireland)"). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

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.

What an audit of financial statements involves

We conducted our audit in accordance with ISAs (UK & Ireland). An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report. With respect to the Strategic report and Directors' report, we consider whether those reports include the disclosures required by applicable legal requirements.

Paolo Taurae (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors

London

24 April 2017

J.P. MORGAN SECURITIES PLC
Income statement

Year ended 31 December	Notes	2016 $'000	2015 $'000
Interest and similar income	7	1,930,673	1,927,039
Interest expense and similar charges	7	(1,339,091)	(1,372,400)
Net interest income	7	**591,582**	**554,639**
Fee and commission income		2,516,922	2,593,499
Fee and commission expense	8	(848,261)	(736,165)
Trading profit		4,142,970	3,387,897
Dividend income		600,000	500,000
Total operating income		**7,003,213**	**6,299,870**
Administrative expenses		(2,897,111)	(3,160,833)
Impairment charge	20	(117,359)	—
Depreciation		(1,290)	(803)
Profit on ordinary activities before taxation	10	**3,987,453**	**3,138,234**
Tax on profit on ordinary activities	11	(841,809)	(463,288)
Profit for the financial year		**3,145,644**	**2,674,946**

The profit for the year resulted from continuing operations.

Statement of comprehensive income

Year ended 31 December	Notes	2016 $'000	2015 $'000
Profit for the financial year		**3,145,644**	**2,674,946**
Other comprehensive income: items that will not be reclassified to profit or loss			
Actuarial (loss)/gain on pension schemes	30	(74,362)	20,166
Tax effect of movement in pension reserve	12	18,908	(270)
Total comprehensive income for the year		**3,090,190**	**2,694,842**

The notes on pages 35 - 72 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Balance sheet

31 December	Notes	2016 $'000	2015 $'000
Assets			
Cash and balances at central banks		20,597,168	65,809
Loans and advances to banks	13	6,123,936	4,673,268
Loans and advances to customers	14	3,100,053	3,292,824
Securities purchased under agreements to resell	15	130,416,852	136,836,484
Securities borrowed	15	25,831,106	15,038,887
Financial assets held for trading	16	323,045,808	299,607,822
Financial assets designated at fair value through profit or loss	17	315,659	125,285
Debtors	18	56,473,025	38,162,891
Other assets	19	584,231	582,074
Investments in JPMorgan Chase undertakings	20	3,341,207	3,458,789
Tangible fixed assets		3,582	2,137
Total assets		**569,832,627**	**501,846,270**
Liabilities			
Securities sold under agreements to repurchase	15	61,657,271	65,522,171
Securities loaned	15	20,133,325	11,315,697
Financial liabilities held for trading	22	293,525,746	263,358,470
Trade creditors	23	29,755,510	25,486,331
Amounts owed to JPMorgan Chase undertakings		99,493,803	78,640,308
Other liabilities	23	25,819,149	20,137,485
Total liabilities		**530,384,804**	**464,460,462**
Equity			
Called-up share capital	24	17,546,050	17,546,050
Share premium account		9,950,724	9,950,724
Other reserves		1,797,872	1,831,501
Retained earnings		10,153,177	8,057,533
Total equity		**39,447,823**	**37,385,808**
Total liabilities and equity funds		**569,832,627**	**501,846,270**

Approved and authorised for issue by the Board of Directors on 19 April 2017 and signed on its behalf by:

Sir Winfried Bischoff
Chairman & Non-Executive Director

Daniel Pinto
Chief Executive Officer & Director

24 April 2017

The notes on pages 35 - 72 form an integral part of these financial statements.

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

	Note	Called-up share capital	Share premium account	Capital contribution reserve	Pension reserve	Other reserves	Retained earnings	Total equity
		$'000	$'000	$'000	$'000	$'000	$'000	$'000
Balance as at 1 January 2015		**16,884,410**	**8,117,257**	**1,583,800**	**(10,021)**	**221,404**	**6,262,587**	**33,059,437**
Profit for the financial year		—	—	—	—	—	2,674,946	**2,674,946**
Other comprehensive income for the year:								
Actuarial gain on pension schemes	30	—	—	—	20,166	—	—	**20,166**
Tax effect on movement in pension reserve		—	—	—	(270)	—	—	**(270)**
Total comprehensive income for the year		**—**	**—**	**—**	**19,896**	**—**	**2,674,946**	**2,694,842**
Issuance of shares [a]	24	661,640	1,833,467	—	—	—	—	**2,495,107**
Capital contribution	20	—	—	4,815	—	—	—	**4,815**
Dividends paid	25	—	—	—	—	—	(880,000)	**(880,000)**
Movement in other reserves [a][b]		—	—	—	—	11,607	—	**11,607**
Balance as at 31 December 2015		**17,546,050**	**9,950,724**	**1,588,615**	**9,875**	**233,011**	**8,057,533**	**37,385,808**
Profit for the financial year		—	—	—	—	—	3,145,644	**3,145,644**
Other comprehensive income for the year:								
Actuarial loss on pension schemes	30	—	—	—	(74,362)	—	—	**(74,362)**
Tax effect on movement in pension reserve		—	—	—	18,908	—	—	**18,908**
Total comprehensive income for the year		**—**	**—**	**—**	**(55,454)**	**—**	**3,145,644**	**3,090,190**
Dividends paid	25	—	—	—	—	—	(1,050,000)	**(1,050,000)**
Tax effect on share based payment awards		—	—	—	—	17,677	—	**17,677**
Movement in other reserves		—	—	—	—	4,148	—	**4,148**
Balance as at 31 December 2016		**17,546,050**	**9,950,724**	**1,588,615**	**(45,579)**	**254,836**	**10,153,177**	**39,447,823**

(a) Amount includes $4 million reclassification from share premium account to other reserves to better reflect the substance of the balance.

(b) An amount of $3 million of current and deferred tax was credited to other reserves in 2015.

The notes on pages 35 - 72 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Statement of cash flows

Year ended 31 December	Notes	2016 $'000	2015 $'000
Cash flows from operating activities			
Cash generated from/(used in) operations	26	**3,464,344**	**(5,479,384)**
Income taxes paid		(339,504)	(128,673)
Net cash generated from/(used in) operating activities		**3,124,840**	**(5,608,057)**
Cash flow used in investing activities			
Purchase and disposals of tangible fixed assets		(2,735)	(715)
Disposal/(acquisition) of investments in JPMorgan Chase undertakings		517	(223)
Net cash used in investing activities		**(2,218)**	**(938)**
Cash flow from financing activities			
Capital contribution	20	—	4,815
Issuance of share capital	24	—	2,495,107
Amounts owed to JPMorgan Chase undertakings		20,853,495	3,255,692
Dividends paid	25	(1,050,000)	(880,000)
Net cash generated from financing activities		**19,803,495**	**4,875,614**
Net increase/(decrease) in cash and cash equivalents		**22,926,117**	**(733,381)**
Cash and cash equivalents at the beginning of the year		4,739,077	5,459,050
Exchange (losses)/gains on cash and cash equivalents		(944,090)	13,408
Cash and cash equivalents at the end of the year		**26,721,104**	**4,739,077**
Cash and cash equivalents consist of:			
Cash and balances at central banks		20,597,168	65,809
Loans and advances to banks, due within three months or less		6,123,936	4,673,268
Cash and cash equivalents		**26,721,104**	**4,739,077**

The notes on pages 35 - 72 form an integral part of these financial statements.

1. General information

The Company is a public limited company and is incorporated and domiciled in England and Wales. The address of its registered office is 25 Bank Street, Canary Wharf, London, E14 5JP, England. The Company's immediate parent undertaking is J.P. Morgan Chase International Holdings, incorporated in England and Wales. The parent undertaking of the smallest group in which the Company's results are consolidated is J.P. Morgan Chase (UK) Holdings Limited. 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.

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 recognition and measurement 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, and in accordance with the Companies Act 2006. 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

New standards, amendments and interpretations not yet adopted

IFRS 9 'Financial instruments' ("IFRS 9") was issued by the International Accounting Standards Board ("IASB") in July 2014. The standard includes a new model for classification and measurement of financial assets and a single, forward-looking 'expected loss' impairment model. The standard replaces the existing guidance in IAS 39 'Financial Instruments: Recognition and Measurement' ("IAS 39") and carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. IFRS 9 is applicable retrospectively, except where otherwise prescribed by transitional provisions of the standard, and is effective for annual periods beginning on or after 1 January 2018. The Company is currently assessing and quantifying the impact of IFRS 9 on the financial statements.

IFRS 15 'Revenue from Contracts with Customers' ("IFRS 15") was issued by the IASB in May 2014 for retrospective application in annual periods beginning on or after 1 January 2018. IFRS 15 establishes a framework for determining whether, how much and when revenue from contracts with customers is recognised. It replaces existing revenue recognition guidance, including IAS 18 'Revenue'. The Company is currently assessing and quantifying the impact of IFRS 15 on the financial statements.

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 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 28.

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 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 28.

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 28.

Defined benefit plans

The present value of the defined benefit obligation depends on various factors that are determined on an actuarial basis using a number of assumptions. This involves making assumptions about discount rates, future salary increases, price inflation and future pension increases. Substantial changes in these assumptions affect the amount of the recognised defined benefit obligation. For further details, see note 30.

5. Significant accounting policies

The following are principal accounting policies applied in the preparation of these financial statements. These policies have been applied consistently to all 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, JPMorgan Chase & Co. a company incorporated in the United States of America. It is included in the consolidated financial statements of JPMorgan Chase & Co. which are publicly available. Therefore, the Company has elected not to prepare group financial statements in accordance with the dispensation set out in Section 401 of the Companies Act 2006.

5.2 Foreign currency translation

Monetary assets and liabilities in foreign currencies are translated into United States ("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.

Non-monetary items denominated in foreign currencies that are stated at fair value are translated into U.S. dollars at foreign exchange rates ruling at the dates when the fair values were determined. Translation differences arising on non-monetary items measured at fair value are recognised in the income statement except for differences arising on available-for-sale non-monetary financial assets, which are included in the financial assets available-for-sale reserve.

5.3 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 U.S. dollar equity and inter-entity financing arrangements with JPMorgan Chase Bank N.A., U.S. dollar is considered as the functional and presentation currency of the Company.

5.4 Income and expense recognition

Interest income and expense are recognised on an effective interest rate basis. Effective interest rate is the rate that exactly discounts estimated future cash flows to the instrument's initial carrying amount. Calculation of the effective interest rate takes into account fees receivable, that are an integral part of the instrument's yield, premiums or discounts on acquisition or issue, early redemption fees and transaction costs. All contractual terms of a financial instrument are considered when estimating future cash flows.

Fees and commissions are recognised when the underlying contract becomes legally binding or at the agreed due date if later. Investment banking fees (including advisory and underwriting fees) are recognised on an accrual basis and recorded in the income statement in the period earned provided they are receivable under the terms of the contract and collectability is reasonably assured.

Profits and losses resulting from the purchase and sale of securities and the revaluation of financial instruments are recognised as trading gains or losses on a trade-date basis, excluding the associated interest.

5.5 Dividend recognition

Dividend income is recognised when the right to receive payment is established. Dividends of assets or shares in subsidiaries are recognised at the fair value of the consideration received by the transferee and at book value by the transferor. Where the consideration received is an investment in share capital of an entity, the fair value is determined by the market value of the underlying net assets and businesses of the investee.

Dividends in kind undertaken to put the transferring entity into liquidation will be recognised at book value by both the transferee and transferor. Such dividends are recognised in other comprehensive income.

Where shares received are illiquid or unlisted and are not readily convertible to cash, the dividends are recognised in other comprehensive income.

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

5. Significant accounting policies (continued)

5.6 Financial assets and financial liabilities

The Company classifies its financial assets and financial liabilities in the following categories on initial recognition: financial assets and financial liabilities held for trading, financial assets and financial liabilities designated at fair value through profit or loss, and loans and receivables and financial liabilities held at amortised cost. The Company recognises derivatives on its balance sheet when it becomes a party to the contractual provisions of the instruments. Loans and receivables and financial liabilities at amortised cost are recognised when the Company becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are also recognised on the trade-date, the date on which the Company commits to purchase or sell the asset.

i. Financial assets and financial liabilities held for trading

The Company considers a financial asset or financial liability 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.

Financial assets and financial liabilities held for trading comprise both debt and equity securities, loans and derivatives. These instruments are either held for trading purposes or used for hedging certain assets, liabilities, positions, cash flows or anticipated transactions. Included in financial assets held for trading are unrealised trading gains and in financial liabilities held for trading are unrealised trading losses related to derivatives. The instruments are initially recognised at fair value in the balance sheet with transaction costs being recorded in profit or loss and any gains or losses are taken directly to the income statement. Subsequently, they are measured at fair value with movement included in trading profit and loss.

Since both the debt and equity securities and the derivatives are managed on a unified basis as part of the trading strategy, which includes hedging relationships between cash securities and derivatives, it is not meaningful to show the gains and losses on the cash instruments separately from the gains and losses on the derivatives; the net gain or loss is reported as trading profits.

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

Financial assets and financial liabilities that the Company designates on initial recognition as being at fair value through profit or loss are recognised at fair value, with transaction costs being recognised in profit or loss and subsequently measured at fair value. Gains and losses on financial assets and financial liabilities that are designated at fair value through profit or loss are recognised in profit or loss as they arise. A financial instrument may only be designated at inception as held at fair value through profit or loss and cannot subsequently be reclassified.

Financial assets or financial liabilities are designated 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.

The Company has designated certain equity securities and wholesale loans at fair value through profit or loss on the basis that they are managed and their performance evaluated on a fair value basis.

iii. Loans and receivables and financial liabilities at amortised cost

Loans and receivables includes loans and advances to banks, loans and advances to customers and debtors and are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market except those that are classified as held for trading or designated at fair value through profit or loss.

Loans and receivables are initially recognised at fair value including directly related incremental transaction costs. They are subsequently measured at amortised cost, less any provision for impairment losses. Interest is recognised in the income statement as 'Interest and similar income' using the effective interest rate method.

Financial liabilities include trade creditors and borrowings and are recognised initially at fair value including directly related incremental transaction costs and subsequently measured at amortised cost using the effective interest method (see below).

The effective interest rate is a method of calculating the amortised cost of a financial asset or financial liability (or a group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability or, when appropriate, a shorter period 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, issue or disposal of a financial asset or financial liability.

5. Significant accounting policies (continued)

5.7 Fair value

Financial instruments are recognised at fair value on the date of initial recognition and subsequently remeasured at 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 when input values do not directly correspond to the most actively traded market trade parameters.

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 28 to the financial statements.

5.8 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.

5.9 Impairment of financial assets

The Company assesses at each balance sheet date whether there is any objective evidence that a financial asset or group of financial assets is impaired. A financial asset or portfolio of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset and that loss event has an adverse impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

Impairment losses on loans and receivables are measured as the difference between the financial asset's carrying amount and the present value of the estimated future cash flows discounted at the financial asset's effective interest rate. The loss is recognised in the income statement against the carrying amount of the impaired asset on the balance sheet. Interest continues to be accrued on the reduced carrying amount based on the original effective interest rate of the financial asset.

Specific provisions are raised against loans and advances to customers when the Company considers that the credit worthiness of the borrower has deteriorated such that the recovery of the whole or part of an outstanding advance is in serious doubt.

5. Significant accounting policies (continued)

5.9 Impairment of financial assets (continued)

Impairment provisions are also raised to cover losses which, although not specifically identified, are known from experience to have occurred in the portfolio of loans and advances to customers at the balance sheet date. These provisions are adjusted on a monthly basis by an appropriate charge or reversal of the provision following an assessment of the loan portfolio.

Impairment provisions are determined by modelling the current exposure, taking into account such factors as duration and probabilities of default.

If, in a subsequent period, the amount of the impairment loss for debt instruments decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the reversal of the previously recognised impairment loss is recognised in the income statement.

5.10 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.

5.11 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 collateral can be in the form of cash or securities. If the collateral is given in cash the transaction is recorded on the balance sheet within securities purchased/ sold under agreement to resell/repurchase. If the collateral is received or given in the form of securities the transaction is recorded off balance sheet. The difference between sales and repurchase price is treated as interest and accrued over the life of the agreements using the effective interest rate method.

5.12 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 collateral 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.

5.13 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.

5.14 Recognition of deferred day one profit and loss

The Company enters into transactions where fair value is determined using valuation models for which not all inputs are market observable prices or rates. 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 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. Significant accounting policies (continued)

5.15 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 and subsequently at cost less provision for any impairment.

5.16 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 acquired entity is recognised as an adjustment to equity. As a result, no goodwill is recognised by the business combination.

5.17 Cash and cash equivalents

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

5.18 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.

5.19 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 resources embodying 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. Significant accounting policies (continued)

5.20 Pensions and other post-retirement benefits

The Company operates both defined benefit and defined contribution schemes for its employees. 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 fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. 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.

5.21 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. Segmental analysis

The Company is not in scope of IFRS 8 'Operating segments' and therefore has not provided any segmental analysis. The Company has one class of business, the provision of international Corporate and Investment Banking services within Europe, the Middle East and Africa ("EMEA"). The Company operates six branches outside of the UK, but these do not generate material revenues.

7. Interest income and interest expense

Interest income and interest expense are recorded in the Income statement and classified based on the nature of the underlying asset or liability. Interest income and interest expense includes the current-period interest accruals within interest income or interest expense, as applicable.

Details of interest income and interest expense were as follows:

	2016	2015
	$'000	$'000
Net interest income/(expense)		
Financial assets and liabilities held for trading	472,739	514,909
Securities purchased under agreements to resell and securities sold under agreements to repurchase	400,577	279,492
Securities borrowed and securities loaned	(275,811)	(168,486)
Other interest income and expense *	(5,923)	(71,276)
Net interest income	**591,582**	**554,639**

* Other interest includes interest income on loans and advances to customers and interest expense on borrowings from JPMorgan Chase undertakings.

Net interest income for the year ended 31 December 2016 includes $286 million income and $370 million expense from and to JPMorgan Chase undertakings (2015: $223 million income, $318 million expense).

8. Fee and commission expense

Fee and commission expense contains expenses recharged through Firm attribution agreements from JPMorgan Chase undertakings for whom the employees of the Company conduct business. $736 million of intercompany recharges included in trading profit in 2015 has been reclassified to fee and commission expense to correctly reflect the substance of the balance and to conform with current year presentation.

9. Directors' emoluments

	2016	2015
	$'000	$'000
Emoluments	4,461	6,322
Total contributions to a defined contribution plan	14	17
Total value of long term incentive plans for all directors	3,784	2,033
Compensation to non-executive directors	851	768
Number of directors who exercised share options	4	2
Number of directors with shares received or receivable under LTIPs	2	1
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 only. 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 $3,091,725 (2015: $4,413,241).

The contribution to the defined contribution scheme for the highest paid director during 2016 was $5,101 (2015: $7,540). The highest paid director exercised share options during 2016 and 2015. Shares were received or are receivable by the highest paid director under long-term incentive plans during 2016 (shares were received or receivable by the highest paid director under long term incentive plans during 2015).

10. Profit on ordinary activities before taxation

	2016	2015
	$'000	$'000
Profit on ordinary activities before taxation is stated after charging:		
Depreciation of tangible fixed assets	1,290	803
Auditors' remuneration for the audit of the Company's annual financial statements	2,468	2,794
Audit-related assurance services	849	50
Wages and salaries	733,942	717,530
Social security costs	138,753	129,935
Other pension and benefits costs	59,262	62,358
Share-based awards	249,203	231,034

The average monthly number of persons providing services to the Company during the year was 1,586 (2015: 1,501). The average monthly number of staff employed by the European branches during the year was 138 (2015: 134).

11. Tax on profit on ordinary activities

(a) Analysis of tax charge for the year	2016 $'000	2015 $'000
Current taxation		
UK Corporation tax on profit for the year	831,585	359,549
Overseas taxation	169,405	230,551
Less: Double tax relief	(180,277)	(170,608)
Adjustments in respect of previous years	25,385	57,836
Current tax expense for the year	846,098	477,328
Deferred tax (note 12):		
Origination and reversal of temporary differences	8,137	5,697
Adjustment in respect of previous period	(11,844)	—
Effect of rate change on opening balance	(582)	(19,737)
Deferred tax credit for the year	(4,289)	(14,040)
Total tax expense for the year	841,809	463,288

(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 (28%). The differences are explained below:

	2016 $'000	2015 $'000
Profit on ordinary activities before taxation	3,987,453	3,138,234
Profit on ordinary activities before taxation multiplied by standard rate of corporation tax in UK of 28.00% (2015: 20.25%).	1,116,487	635,385
Effects of:		
Non-deductible expenses	77,817	46,624
Income not taxable	(52,792)	(4,781)
Dividend income	(168,000)	(101,250)
Transfer pricing adjustments	10,381	(53,195)
Other adjustment	2,577	(93)
Adjustments in respect of previous years	13,541	57,836
Group relief claimed for nil consideration	(146,748)	(157,444)
Foreign taxation suffered	(10,873)	59,943
Impact of change in rate on deferred tax	(581)	(19,737)
Total tax expense for the year	841,809	463,288

12. Deferred tax

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

	2016	2015
	$'000	$'000
Deferred tax assets:		
Deferred tax assets to be recovered after more than 12 months	96,747	73,809
Deferred tax asset to be recovered within 12 months	48,373	31,340
	145,120	105,149
Deferred tax liabilities:		
Deferred tax liability to be reversed after more than 12 months	(8,213)	(9,386)
Deferred tax liability to be reversed within 12 months	(1,173)	(1,173)
Deferred tax asset (net)	135,734	94,590

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

	2016	2015
	$'000	$'000
As at 1 January	94,590	68,150
Depreciation (in excess)/short of capital allowances	(576)	1,073
Deferral of share-based payments	24,152	29,089
Other adjustment	17,568	(3,722)
As at 31 December	135,734	94,590

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 2015	2,570	52,084	13,496	68,150
Credited/(charged) to the income statement	1,073	16,419	(3,452)	14,040
Credited directly to equity	—	12,670	—	12,670
Charged directly to other comprehensive income	—	—	(270)	(270)
At 31 December 2015	3,643	81,173	9,774	94,590
(Charged)/credited to the income statement	(576)	6,475	(1,610)	4,289
Credited directly to equity	—	17,677	270	17,947
Credited directly to other comprehensive income	—	—	18,908	18,908
At 31 December 2016	3,067	105,325	27,342	135,734

13. Loans and advances to banks

	2016	2015
	$'000	$'000
Loans and advances to banks	6,123,936	4,673,268

Included within loans and advances to banks is $4.3 billion (2015: $1.8 billion) held with JPMorgan Chase undertakings.

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. The Company has considered its rights and obligations relating to funds belonging to clients that are held subject to client money protection under the Client Assets Sourcebook, with banks, exchanges and clearing houses, and concluded that such amounts should not be recognised on balance sheet. Therefore, client money assets amounting to $12.5 billion (2015: $12.3 billion) of which $4.5 billion is included in loans and advances to banks and $8.0 billion included in Debtors.

14. 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.

	2016	2015
	$'000	$'000
Loans and advances to customers	3,100,053	3,292,824

There were no material past due or impaired loans and advances to customers as at 31 December 2016 (2015: nil).

The credit quality of loans and advances to customers is managed within the Firm's Credit Risk Management function, refer to the Strategic report.

15. Securities financing activities

JPMS plc enters into resale agreements, repurchase agreements, securities borrowed transactions 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.

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 29 for additional information on netting arrangements.

15. Securities financing activities (continued)

	2016	2015
	$'000	$'000
Securities purchased under agreements to resell	130,416,852	136,836,484
Securities borrowed	25,831,106	15,038,887
	156,247,958	151,875,371
Securities sold under agreements to repurchase	61,657,271	65,522,171
Securities loaned	20,133,325	11,315,697
	81,790,596	76,837,868

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

	2016	2015
	$'000	$'000
Securities purchased under agreements to resell	41,017,708	66,901,757
Securities borrowed	20,449,114	10,305,219
	61,466,822	77,206,976
Securities sold under agreements to repurchase	12,366,287	27,579,858
Securities loaned	18,205,412	8,869,782
	30,571,699	36,449,640

16. Financial assets held for trading

In connection with its client-driven market-making activities, the Company transacts in debt and equity instruments and derivatives.

	2016	2015
	$'000	$'000
Debt and equity instruments	89,327,429	90,975,293
Derivative receivables	233,718,379	208,632,529
	323,045,808	299,607,822

Financial assets held for trading includes $124.9 billion held with JPMorgan Chase undertakings (2015:$125.9 billion).

17. Financial assets designated at fair value through profit or loss

	2016	2015
	$'000	$'000
Equity instruments	144,728	125,285
Loans	170,931	—
	315,659	125,285

18. Debtors

	2016	2015
	$'000	$'000
Trade debtors	22,534,256	17,857,938
Other debtors	33,938,769	20,304,953
	56,473,025	38,162,891

Trade debtors mainly consists of unsettled trades. Other debtors includes $33.5 billion of cash collateral provided on derivatives (2015: $19.0 billion). A review of the Company's debtors and trade creditors (note 23) identified that offsetting control accounts were incorrectly presented as gross on the balance sheet in 2015. Accordingly, $4.8 billion has now been netted.

Debtors includes the following balances from JPMorgan Chase undertakings:

	2016	2015
	$'000	$'000
Trade debtors	10,641,074	6,884,083
Other debtors	14,189,512	4,603,319
	24,830,586	11,487,402

Trade debtors mainly consists of accounts receivable from JPMorgan Chase undertaking and unsettled trades. Other debtors includes $14.1 billion of cash collateral provided on derivatives (2015: $4.6 billion).

19. Other assets

	2016	2015
	$'000	$'000
Deferred taxation	135,734	94,590
Prepayments	508	9,640
Accrued income	447,989	477,844
	584,231	582,074

20. Investments in JPMorgan Chase undertakings

	2016	2015
	$'000	$'000
Investments in JPMorgan Chase undertakings at cost		
At 1 January	3,458,789	3,458,566
Write down - see below	(117,359)	—
Realisation of investments - see below	(223)	(2,494,884)
Additions - see below	—	2,495,107
At 31 December	3,341,207	3,458,789

During the year, on review of the carrying amount of the Company's investment in Cazenove Group Limited, the investment has been written down by $117.4 million.

During the first quarter of 2016, the Company received a final cash distribution of $517,000 from its subsidiary, Bank One Europe Limited, of which $294,000 was recognised as a gain on disposal in the Income statement. Bank One Europe Limited was dissolved shortly thereafter.

20. Investments in JPMorgan Chase undertakings (continued)

In the third quarter of 2015, as part of an internal re-organisation, the Company entered into certain transactions with other JPMorgan Chase undertakings, namely:

- The Company acquired 100% share capital of Bank One Europe Limited, all of the membership interest in CP Group Holding Cooperatief U.A., and a 99.99999% limited partnership interest in Asselijn Finance C.V., fair-valued respectively at \$193 million, \$1,073 million, and \$1,229 million, against issuance of shares to its parent, J.P. Morgan Chase International Holdings. The fair value of these entities was primarily driven by the cash held.
- The Company received cash distributions from CP Group Holding Cooperatief U.A and Asselijn Finance C.V, in the amount of \$1,073 million, and \$1,229 million respectively, thereby realising its investment in the above companies. Asselijn Finance C.V. was dissolved shortly thereafter. The Company also received a cash distribution of \$193 million from Bank One Europe Limited.
- The Company received an additional cash contribution of \$5 million from its parent, J.P. Morgan Chase International Holdings.

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
J.P. Morgan Europe Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Banking	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
CP Group Holding Cooperatief U.A.	Strawinskylaan 1135, Tower B, 11th Floor, Amsterdam, 1077, Netherlands	Investment company	Direct	100
Chase Securities International Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Investment company	Indirect	100
Chase International Securities (C.I.) Limited	Forum 4, Grenville Street, St. Helier, JE2 4UF, Jersey	Investment company	Indirect	100
Chemical Nominees Limited	25 Bank Street, Canary Wharf, London, E14 5JP, England	Investment company	Indirect	100
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 [(a)]	25 Bank Street, Canary Wharf, London, E14 5JP, England	Holding company	Indirect	51
J.P. Morgan Cazenove Limited [(a)]	25 Bank Street, Canary Wharf, London, E14 5JP, England	Investment company	Indirect	51
JPMorgan Cazenove Service Company [(a)]	25 Bank Street, Canary Wharf, London, E14 5JP, England	Service company	Indirect	51
Cheyne Capital Guaranteed S.A. Series 2007-1 [(b)]	2 Boulevard Konrad Adenauer, Luxembourg, L-1115, Luxembourg	Notes issuer	Direct	100

(a) Although JPMS plc has majority ownership interest in these companies, majority voting interest and therefore control is held by another JPMorgan Chase group undertaking.

(b) The above entity is a special purpose entity which meets the definition (per section 1162 of the Companies Act 2006) of a subsidiary undertaking.

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.

21. Unconsolidated structured entities

Structured entities

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 structured entities in which the Company has control are consolidated into the parent undertakings of the Company, as set out in note 20 to these financial statements.

The Company has involvement with various structured entities, originated within the Firm or by third parties. These typically include securitisations, credit protection purchased credit linked notes, collateralised loan and debt obligations, and other structured financings.

Material interests held in SPE's include residential and commercial mortgage-backed securities and other asset-backed securities. These interests relate to securitisation bonds where the underlying assets are residential and commercial mortgages, consumer loans, student loans, trade receivables, and credit card 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 carrying amounts of the Company's interest in unconsolidated structured entities recognised on the balance sheet. The maximum exposure to loss is considered as approximate to the carrying amounts. It 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.

		Interest in unconsolidated structured entities			
	Fair value of assets held by SPE	**Financial assets and liabilities held for trading**	**Loans and advances to customers**	**Other**	**Total**
31 December 2016	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed securities	128,093,000	750,000	—	—	750,000
Commercial mortgage-backed securities	21,654,000	95,000	365,000	—	460,000
Other asset-backed securities	27,923,000	174,000	50,000	—	224,000
Credit-related notes and asset swap vehicles	47,022,000	227,000	—	—	227,000
Collateralised debt obligations	6,883,000	101,000	—	—	101,000
Other	674,664,000	1,978,000	—	—	1,978,000
Total assets	906,239,000	3,325,000	415,000	—	3,740,000
Maximum exposure to loss	906,239,000	3,325,000	415,000	—	3,740,000
Total liabilities	—	—	—	52,000	52,000

21. Unconsolidated structured entities (continued)

		Interest in unconsolidated structured entities			
	Fair value of assets held by SPE	Financial assets and liabilities held for trading	Loans and advances to customers	Other	Total
31 December 2015	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed securities	170,236,000	739,000	—	—	739,000
Commercial mortgage-backed securities	42,645,000	245,000	324,000	—	569,000
Other asset-backed securities	47,035,000	991,000	—	—	991,000
Credit-related notes and asset swap vehicles	12,369,000	76,000	—	—	76,000
Collateralised debt obligations	1,326,000	4,000	—	—	4,000
Other	447,471,000	1,645,000	—	4,000	1,649,000
Total assets	721,082,000	3,700,000	324,000	4,000	4,028,000
Maximum exposure to loss	721,082,000	3,700,000	324,000	4,000	4,028,000
Total liabilities	—	1,000	—	262,000	263,000

22. Financial liabilities held for trading

	2016	2015
	$'000	**$'000**
Debt and equity instruments	42,248,042	32,835,296
Derivative payables	235,757,064	214,396,540
Other financial liabilities	15,520,640	16,126,634
	293,525,746	263,358,470

Financial liabilities held for trading includes $152.1 billion held with JPMorgan Chase undertakings (2015:$150.9 billion).

23. Trade creditors and other liabilities

	2016	2015
	$'000	**$'000**
Trade creditors [(a)]	29,755,510	25,486,331
Other liabilities:		
Accruals and deferred income	1,399,456	2,140,900
Taxation and social security [(b)]	575,237	391,940
Other [(c)]	23,844,456	17,604,645
Total Other liabilities	25,819,149	20,137,485
Total Trade creditors and Other liabilities	55,574,659	45,623,816

(a) Trade creditors predominantly consists of unsettled trades, brokerage fees payable and liabilities in respect of assets transferred but not derecognised (note 32) and includes $2.6 billion with other JPMorgan Chase undertakings (2015: $1.8 billion). Amounts owed to JPMorgan Chase undertakings presented on the balance sheet now represents financing and collateral arrangements with other JPMorgan Chase undertakings. Non-financing amounts owed to JPMorgan Chase undertakings of $1.8 billion in 2015 has now been presented in trade creditors to conform with current year presentation.

(b) Taxation and social security includes provisions for Corporate tax, Overseas tax and Bank levy.

(c) Other includes $23.5 billion (2015: $17.2 billion) of cash collateral received related to OTC derivatives.

24. Called-up share capital

	2016	2015
	$'000	$'000
Issued and fully paid share capital		
At 1 January		
1,039,262 ordinary shares (2015: 973,098) of $10,000 each	10,392,620	9,730,980
34,648 preferred ordinary shares (2015: 34,648) of $10,000 each	346,480	346,480
680,685 preference shares (2015: 680,685) of $10,000 each	6,806,850	6,806,850
50,000 ordinary shares (2015: 50,000) of £1.24 each	100	100
Movements during the year		
66,164 ordinary shares issued of $10,000 each	—	661,640
At 31 December		
1,039,262 ordinary shares (2015: 1,039,262) of $10,000 each	10,392,620	10,392,620
34,648 preferred ordinary shares (2015: 34,648) of $10,000 each	346,480	346,480
680,685 preference shares (2015: 680,685) of $10,000 each	6,806,850	6,806,850
50,000 ordinary shares (2015: 50,000) of £1.24 each	100	100
2 ordinary shares (2015: 2) of £1 each	—	—
	17,546,050	17,546,050

	2016	2015
	$'000	$'000
Preference shares in issue		
5-year floating rate of $10,000 each*	2,650,000	2,650,000
10-year fixed rate of $10,000 each*	2,156,850	2,156,850
20-year fixed rate of $10,000 each*	2,000,000	2,000,000
	6,806,850	6,806,850

* Additional disclosure on the terms per tranche of preference shares and preferred ordinary shares is provided under note 25.

25. Dividends

Interim dividends of $358,107,690 were paid on the preference shares (2015: $357,645,559) and $5,261,655 on the preferred ordinary shares of the Company in 2016 (2015: $5,201,233). An interim dividend of $686,630,655 (2015: $517,153,208) was paid on the ordinary shares of the Company for 2016. No final dividend was paid or proposed for 2016 (2015: nil).

The dividend rate on the preferred ordinary shares is 0.9% over 12 month U.S. dollar LIBOR on the nominal amount, and, if resolved to be distributed, is payable in priority to any dividend payable on ordinary shares, with no right to accumulation in the event of a deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any preferred ordinary share at par, together with accrued dividend due, at any time after 26 March 2007. In the event of a winding-up the preferred ordinary shareholders shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholders. The preferred ordinary shares carry no voting rights at a general meeting of the Company. The ordinary shares carry 100% of the voting rights.

The dividend rate on the 5-year floating rate preference shares is 0.9% over 12 month U.S. dollar LIBOR on the nominal amount, and, if resolved to be distributed, is payable in priority to any dividend payable on ordinary shares, but pari passu to any payment to the holders of the preferred ordinary shares or any other preference shares, with no right to accumulation in the event of a deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any 5-year floating rate preference share at par, together with accrued dividend due, at any time after 9 June 2009. In the event of a winding-up the preference shareholders shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholders but pari passu to any payment to the holders of preferred ordinary shares or other preference shares. The 5-year floating rate preference shares carry no voting rights at general meetings.

The dividend rate on the 10-year fixed rate preference shares is a fixed rate of 2.75% and 2.85% per series, above the 10-year U.S. Treasury Rate as at the date of issue, and, if resolved to be distributed, is payable in priority to any dividend payable on the ordinary shares, but pari passu to any payment to the holders of the preferred ordinary shares or any other preference shares, with no right to accumulation in the event of deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem any series of the 10-year fixed rate preference shares at par at any time after the 10th anniversary of the date of issue of that series provided that the Company may only redeem exactly 20 per cent of the total number of preference shares issued in that series at par. In the event of a winding-up, the 10-year fixed rate preference shareholder shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholder but pari passu to any payment to the holders of the preferred ordinary shares and any other preference shares. The preference shares carry no voting rights at general meetings.

The dividend rate on the 20-year fixed rate preference shares is a fixed rate of 8% and, if resolved to be distributed, is payable in priority to any payment of dividend or other distribution to the holders of any junior obligations, but pari passu to any payment of dividend or other distribution to the holders of any parity obligations, with no right to accumulation in the event of deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any 20-year fixed rate preference share at par, together with accrued dividend due, at any time after 20 years and one month of the date of issue of that series. In the event of a winding-up, the 20-year fixed rate preference shareholder shall be repaid both capital and any accrued dividend due in priority to any payment to the holders of ordinary shares and any other securities issued by the Company, but pari passu to any payment to the holders of any other series of preference shares issued by the Company. The preference shares carry no voting rights at general meetings.

26. Notes to the statement of cash flows

	2016	2015
	$'000	$'000
Profit before income tax	3,987,453	3,138,234
Adjustments for:		
Depreciation of tangible fixed assets	1,290	803
Impairment of investments in JPMorgan Chase undertakings	117,359	—
Other non-cash movements	681,129	(216,324)
Operating cash flows before changes in operating assets and liabilities	**4,787,231**	**2,922,713**
Changes in operating assets		
Decrease/(increase) in loans and advances to customers	192,771	(1,234,654)
Decrease in securities purchased under resale agreements	6,419,632	8,605,651
(Increase)/decrease in securities borrowed	(10,792,219)	1,523,377
(Increase)/decrease in financial assets held for trading	(23,437,986)	4,925,993
Increase in financial assets designated at fair value through profit or loss	(190,374)	(54,397)
(Increase)/decrease in debtors and other assets	(18,329,453)	823,232
Decrease in prepayments and accrued income	38,987	113,204
	(46,098,642)	**14,702,406**
Changes in operating liabilities		
(Decrease)/increase in securities sold under repurchase agreements	(3,864,900)	7,970,980
Increase/(decrease) in securities loaned	8,817,628	(10,189,502)
Increase/(decrease) in financial liabilities held for trading	30,167,276	(2,721,865)
Increase/(decrease) in trade creditors	4,269,179	(12,796,489)
Increase/(decrease) in other liabilities	6,128,016	(7,033,403)
(Decrease)/increase in accruals and deferred income	(741,444)	1,665,776
	44,775,755	**(23,104,503)**
Cash generated from/(used in) operations	**3,464,344**	**(5,479,384)**

27. Commitments and contingent liabilities

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.

	2016	2015
	$'000	$'000
Unused commitments on loans	15,180,394	14,019,175
Standby letters of credit and guarantees	126,391	73,858
	15,306,785	14,093,033

There are no lending commitments to other JPMorgan Chase undertakings (2015: nil).

27. Commitments and contingent liabilities (continued)

Contingent liabilities

The Company, together with certain other JPMorgan Chase undertakings and third party entities, has been named in a claim brought by the Ente Nazionale di Previdenza ed Assistenza Medici E Degli Odontoiatri ("ENPAM") in the Milan courts in relation to certain alleged breaches of Italian conduct rules. The claim seeks damages against named parties of between EUR 111 and 222 million. The court has set a hearing for 17 May 2017 for the next round of submissions.

Management believe that no provision is required in line with the requirements of IAS 37 'Provisions, contingent liabilities and contingent assets', as the relevant criteria are not met.

28. 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 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.

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 data 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.

28. 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 are used where available.	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 (e.g., plain vanilla options and interest rate and credit default swaps). Inputs include: • Contractual terms including the period to maturity • Readily observable parameters including interest rates and volatility • Credit quality of the counterparty and of the Company • Market funding levels • Correlation levels In addition, the following specific inputs are used for the following derivatives that are valued based on models with significant unobservable inputs: *Structured credit derivatives specific inputs include*: • credit default swaps ("CDS") spreads and recovery rates • Credit correlation between the underlying debt instruments • Actual transactions, where available, are used to regularly recalibrate unobservable parameters *Certain interest rate and foreign exchange ("FX") exotic options specific inputs include:* • Interest rate correlation • Interest rate spread volatility • Foreign exchange correlation • Correlation between interest rates and foreign exchange rates • Parameters describing the evolution of underlying interest rates *Certain commodity derivatives specific inputs include:* • Commodity volatility • Forward commodity price	Level 2 or 3
Financial instruments held for trading - 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	Level 2 or 3

28. 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
• Securities purchased under agreements to resell; • Securities borrowed; • Securities sold under agreements to repurchase; • Securities loaned	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	Level 2

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 2016 and 2015, by major product category and fair value hierarchy.

	Level 1	Level 2	Level 3	Total
	$'000	$'000	$'000	$'000
At 31 December 2016				
Financial assets held for trading:				
Debt and equity instruments	48,988,614	39,530,046	808,769	89,327,429
Derivative receivables	76,571	227,134,018	6,507,790	233,718,379
Financial assets designated at fair value through profit or loss:				
Debt and equity instruments	—	—	315,659	315,659
Total financial assets	49,065,185	266,664,064	7,632,218	323,361,467
Financial liabilities held for trading:				
Debt and equity instruments	31,033,923	11,213,696	423	42,248,042
Derivative payables	76,358	230,220,052	5,460,654	235,757,064
Other financial liabilities	—	11,557,637	3,963,003	15,520,640
Total financial liabilities	31,110,281	252,991,385	9,424,080	293,525,746

28. 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 2015				
Financial assets held for trading:				
Debt and equity instruments	49,028,796	40,644,770	1,301,727	90,975,293
Derivative receivables	51,076	203,406,147	5,175,306	208,632,529
Financial assets designated at fair value through profit or loss:				
Equity instruments	—	—	125,285	125,285
Total financial assets	49,079,872	244,050,917	6,602,318	323,361,467
Financial liabilities held for trading:				
Debt and equity instruments	20,434,283	12,395,940	5,073	32,835,296
Derivative payables	50,925	209,439,157	4,906,458	214,396,540
Other financial liabilities	—	12,989,810	3,136,824	16,126,634
Total financial liabilities	20,485,208	234,824,907	8,048,355	263,358,470

Level 3 valuations

The Firm has established well-documented 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 models 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 model to use. Second, due to the lack of observability of significant inputs, management must assess all relevant empirical data in deriving valuation inputs including, but not limited to, transaction details, yield curves, interest rates, prepayment speed, default rates, volatilities, correlations, 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.

28. 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 2016	**$'000**	**$'000**	**$'000**				
Debt and equity instruments	**1,124,428**	**(423)**	**1,124,005**				
Corporate debt securities and other				Discounted cash flows	Credit spread Yield	40bps – 375bps 1% - 17%	96bps 9%
				Market comparables	Price	$0 - $121	$91
Residential mortgage-backed securities and loans				Discounted cash flows	Yield Prepayment speed Conditional default rate Loss severity	4% - 18% 0% - 20% 0% - 34% 0% - 90%	5% 8% 15% 37%
Commercial mortgage-backed securities and loans				Discounted cash flows	Yield Conditional default rate Loss severity	1% - 32% 0% - 100% 40%	8% 69% 40%
Derivatives	**6,507,790**	**(5,460,654)**	**1,047,136**				
Net interest rate derivatives				Option pricing	Interest rate correlation Interest rate spread volatility	(30)% – 100% 3% – 38%	
Net credit derivatives				Discounted cash flows	Credit correlation	30% – 85%	
Net foreign exchange derivatives				Option pricing	Foreign exchange correlation	(30)% – 65%	
Net equity derivatives				Option pricing	Equity volatility	20% – 60%	
Net commodity derivatives				Discounted cash flows	Forward commodity price	$46 – $59 per barrel	
Other financial liabilities	**—**	**(3,963,003)**	**(3,963,003)**	Option pricing	Interest rate correlation Interest rate spread volatility Foreign exchange correlation Equity correlation	(30)% – 100% 3% – 38% (30)% – 65% (50)% – 80%	
				Discounted cash flows	Credit correlation	30% – 85%	
Total assets and liabilities	**7,632,218**	**(9,424,080)**	**(1,791,862)**				

28. 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 2015	**$'000**	**$'000**	**$'000**				
Debt and equity instruments	1,427,012	(5,073)	1,421,939				
Corporate debt securities and other				Discounted cash flows	Credit spread	60bps – 225bps	146bps
					Yield	1% - 20%	5%
				Market comparables	Price	$0 - $168	$89
Residential mortgage-backed securities and loans				Discounted cash flows	Yield	3% - 26%	6%
					Prepayment speed	0% - 20%	6%
					Conditional default rate	0% - 33%	2%
					Loss severity	0% - 100%	28%
Commercial mortgage-backed securities and loans				Discounted cash flows	Yield	1% - 25%	6%
					Conditional default rate	0% - 91%	29%
					Loss severity	40%	40%
Derivatives	5,175,306	(4,906,458)	268,848				
Net interest rate derivatives				Option pricing	Interest rate correlation	(52)% – 99%	
					Interest rate spread volatility	3% – 38%	
Net credit derivatives				Discounted cash flows	Credit correlation	35 % – 90%	
Net foreign exchange derivatives				Option pricing	Foreign exchange correlation	0 % – 60%	
Net equity derivatives				Option pricing	Equity volatility	20% – 65%	
Net commodity derivatives				Discounted cash flows	Forward commodity price	$22 – $46 per barrel	
Other financial liabilities	—	(3,136,824)	(3,136,824)	Option pricing	Interest rate correlation	(52)% – 99%	
					Interest rate spread volatility	3% – 38%	
					Foreign exchange correlation	0 % – 60%	
					Equity correlation	(50)% – 80%	
				Discounted cash flows	Credit correlation	35 % – 90%	
Total assets and liabilities	6,602,318	(8,048,355)	(1,446,037)				

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.

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.

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

Changes in and ranges of unobservable inputs (continued)

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.

Correlation - Correlation is a measure of the relationship between the movements of two variables (e.g., how the change in one variable influences the change in the other). 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.

Fair value financial instruments valued using techniques that incorporate 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	Income statement	
At 31 December 2016	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Debt and equity instruments					
Corporate debt securities and other	1,116,836	(423)	1,116,413	20,471	(20,471)
Residential mortgage-backed securities	1,550	—	1,550	155	(155)
Commercial mortgage-backed securities	6,042	—	6,042	778	(778)
Total debt and equity instruments	**1,124,428**	**(423)**	**1,124,005**	**21,404**	**(21,404)**
Derivatives*	**6,507,790**	**(5,460,654)**	**1,047,136**	**13,305**	**(13,305)**
Other financial liabilities*	**—**	**(3,963,003)**	**(3,963,003)**	**19,667**	**(19,667)**
Total	**7,632,218**	**(9,424,080)**	**(1,791,862)**	**54,376**	**(54,376)**

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

Fair value financial instruments valued using techniques that incorporate unobservable inputs (continued)

Sensitivity analysis of valuations using unobservable inputs	Fair Value			Favourable change	Unfavourable change
	Asset	Liability	Net	Income statement	
At 31 December 2015	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Debt and equity instruments					
Corporate debt securities and other	1,415,687	(5,073)	1,410,614	9,010	(9,010)
Residential mortgage-backed securities	5,852	—	5,852	222	(222)
Commercial mortgage-backed securities	5,473	—	5,473	467	(467)
Total debt and equity instruments	**1,427,012**	**(5,073)**	**1,421,939**	**9,699**	**(9,699)**
Derivatives*	**5,175,306**	**(4,906,458)**	**268,848**	**15,167**	**(15,167)**
Other financial liabilities*	**—**	**(3,136,824)**	**(3,136,824)**	**27,475**	**(27,475)**
Total	**6,602,318**	**(8,048,355)**	**(1,446,037)**	**52,341**	**(52,341)**

* 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.

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 2016

Financial assets	Debt and equity instruments	Derivative receivables	Total financial assets
	$'000	**$'000**	**$'000**
At 1 January 2016	1,427,012	5,175,306	6,602,318
Total (loss)/gains recognised in profit or loss	(84,711)	1,200,083	1,115,372
Purchases	1,578,086	(185,641)	1,392,445
Sales	(1,303,679)	513,914	(789,765)
Issuances	14,927	298	15,225
Settlements	(106,648)	(219,772)	(326,420)
Transfers in to Level 3	147,701	263,403	411,104
Transfers out of Level 3	(548,260)	(239,801)	(788,061)
At 31 December 2016	1,124,428	6,507,790	7,632,218
Change in unrealised gains related to financial instruments held at 31 December 2016	(47,977)	1,080,402	1,032,425

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

Movement in assets and liabilities in Level 3 during year ended 31 December 2016 (continued)

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
At 1 January 2016	5,073	4,906,458	3,136,824	8,048,355
Total (gains)/loss recognised in profit or loss	8,098	796,473	177,779	982,350
Purchases	(1,865)	18,979	—	17,114
Sales	21,264	720,003	—	741,267
Issuances	—	1,491	2,302,540	2,304,031
Settlements	(32,598)	(938,435)	(1,656,106)	(2,627,139)
Transfers in to Level 3	1,288	243,760	56,015	301,063
Transfers out of Level 3	(837)	(288,075)	(54,049)	(342,961)
At 31 December 2016	423	5,460,654	3,963,003	9,424,080
Change in unrealised losses related to financial instruments held at 31 December 2016	(145)	681,963	74,124	755,942

Movement in assets and liabilities in Level 3 during year ended 31 December 2015

Financial assets	Debt and equity instruments	Derivative receivables	Total financial assets
	$'000	$'000	$'000
At 1 January 2015	5,709,113	6,542,644	12,251,757
Total (loss)/gains recognised in profit or loss	(377,980)	982,562	604,582
Purchases	4,549,375	944,290	5,493,665
Sales	(3,693,458)	(258,056)	(3,951,514)
Issuances	7,220	18,082	25,302
Settlements	(1,744,194)	(1,670,248)	(3,414,442)
Transfers in to Level 3	472,002	256,649	728,651
Transfers out of Level 3	(3,495,066)	(1,640,617)	(5,135,683)
At 31 December 2015	1,427,012	5,175,306	6,602,318
Change in unrealised gains related to financial instruments held at 31 December 2015	165,394	281,628	447,022

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
At 1 January 2015	2,079	5,515,017	3,627,635	9,144,731
Total (gains)/loss recognised in profit or loss	(1,315)	1,326,194	383,267	1,708,146
Purchases	(127,169)	(1,261,352)	—	(1,388,521)
Sales	130,229	2,254,885	—	2,385,114
Issuances	—	52,928	3,279,089	3,332,017
Settlements	(1,260)	(2,141,654)	(2,991,020)	(5,133,934)
Transfers in to Level 3	5,252	210,651	246,678	462,581
Transfers out of Level 3	(2,743)	(1,050,211)	(1,408,825)	(2,461,779)
At 31 December 2015	5,073	4,906,458	3,136,824	8,048,355
Change in unrealised losses related to financial instruments held at 31 December 2015	126	122,604	127,683	250,413

Realised and unrealised gains/(losses) are reported in trading profits in the income statement.

28. 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 2016 and 2015, there were no significant transfers between levels 1 and 2.

During the year ended 31 December 2016, transfers in to and out of level 3 included the following:

- $0.3 billion of assets transferred out of level 3 driven by an increase in observability of corporate bonds and loans; and
- $0.2 billion of assets and $0.2 billion of liabilities transferred in to level 3 driven by a decrease in observability of credit default swaps.

During the year ended 31 December 2015, transfers out of level 3 to level 2 included the following:

- $1.6 billion of assets driven by a decrease in the significance of the unobservable inputs for equity options;
- $0.7 billion of assets and $0.9 billion of liabilities driven by an increase in observability of equity options;
- $0.6 billion of assets and $0.6 billion of liabilities driven by a decrease in the significance of the unobservable inputs for structured notes and offsetting credit hedges;
- $0.4 billion of assets and $0.4 billion of liabilities driven by an increase in observability of interest rate options; and
- $0.3 billion of assets driven by a decrease in the significance of the unobservable inputs for loans.

All transfers are assumed to occur at the beginning of the period in which they occur.

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 securities purchased under agreements to resell, cash and balances at central banks, debtors, other assets, fixed assets, trade creditors and other liabilities.

The Company has $246.5 billion (2015: $206.9 billion) of current financial assets and $236.2 billion (2015: $205.9 billion) of current financial liabilities that are not measured at fair value, including loans and advances to customers of $3.1 billion (2015: $3.3 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.

29. 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	Financial Instruments	Cash	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2016						
Financial assets:						
Securities purchased under agreements to resell [a]	244,294,408	(113,877,556)	130,416,852	(125,057,222)	(1,006,386)	4,353,244
Securities borrowed [a]	25,831,106	—	25,831,106	(23,693,068)	—	2,138,038
Financial assets held for trading [b]	342,284,385	(19,238,577)	323,045,808	(191,509,111)	(19,626,339)	111,910,358
Total	612,409,899	(133,116,133)	479,293,766	(340,259,401)	(20,632,725)	118,401,640
Financial liabilities:						
Securities sold under agreements to repurchase [a]	175,534,827	(113,877,556)	61,657,271	(59,283,948)	(185,403)	2,187,920
Securities loaned [a]	20,133,325	—	20,133,325	(19,275,518)	—	857,807
Financial liabilities held for trading	313,994,831	(20,469,085)	293,525,746	(191,509,111)	(17,046,020)	84,970,615
Total	509,662,983	(134,346,641)	375,316,342	(270,068,577)	(17,231,423)	88,016,342

	Effects of offsetting on balance sheet			Related amounts not offset		
	Gross amounts	Amounts offset	Net amounts reported on balance sheet	Financial Instruments	Cash	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2015						
Financial assets:						
Securities purchased under agreements to resell [a]	193,758,751	(56,922,267)	136,836,484	(133,855,848)	(835,072)	2,145,564
Securities borrowed [a]	15,038,887	—	15,038,887	(13,708,511)	—	1,330,376
Financial assets held for trading [b]	327,497,646	(27,889,824)	299,607,822	(161,820,645)	(15,594,857)	122,192,320
Total	536,295,284	(84,812,091)	451,483,193	(309,385,004)	(16,429,929)	125,668,260
Financial liabilities:						
Securities sold under agreements to repurchase [a]	122,444,438	(56,922,267)	65,522,171	(61,638,580)	(658,657)	3,224,934
Securities loaned [a]	11,315,697	—	11,315,697	(11,140,308)	—	175,389
Financial liabilities held for trading [b]	289,961,140	(26,602,670)	263,358,470	(165,383,416)	(12,032,086)	85,942,968
Total	423,721,275	(83,524,937)	340,196,338	(238,162,304)	(12,690,743)	89,343,291

(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 $270,255 million (2015: $213,882 million). The fair value of securities sold under agreements to repurchase and securities loaned pledged to secure liabilities, prior to netting adjustments, is $188,793 million (2015: $140,138 million). Prior year 'related amounts not offset' have been limited to the inclusion of collateral to the extent of the net amount by counterparty to conform with current year presentation, refer to page 11 of the Strategic report for further detail.

(b) Included within 'Amounts offset' are the respective collateral payable and receivables with certain clearing counterparties.

30. Pensions

During the year, the Company was involved in the following pension schemes in the UK:

- JPMorgan UK Pension Plan ("UKP") - a defined contribution scheme (as a participating employer);
- JPMC UK Retirement Plan - a defined benefit scheme; and
- JPMorgan Cazenove (1987) Pension Scheme ("UKS") - a defined benefit scheme (as a participating employer).

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 2016 amounted to $9,488,000 (2015: $8,165,000). The charge for the year through the income statement was $2,094,000 (2015: $1,620,000), and total loss recognised through statement of comprehensive income was $1,636,000 (2015: gain of $3,297,000).

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 additional members and benefit accruals.

JPMC UK Retirement Plan

The Firm maintains a defined benefit plan that is closed to additional benefit accruals known as the JPMC UK Retirement Plan. Whilst the Company is not a participating employer in this plan, it does have certain obligations 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 calculated in accordance with paragraph 5(2) of Schedule 1A to the Occupational Pension Schemes (Employer Debt) Regulations 2005 (as amended) with effect from 1 June 2011. The Company was not required to make any payments immediately or in relation to the ongoing funding of the plan.

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.

JPMorgan Cazenove (1987) Pension Scheme

The JPMorgan Cazenove (1987) Pension Scheme ("UKS") is an ongoing defined benefit plan. The Company has been a principal employer in relation 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.

The principal assumptions adopted for the valuation of the UKS at 31 December were as follows:

	2016	2015
	% per annum	% per annum
Discount rate	2.5%	3.7%
Rate of salary increase	N/A*	4.3%
Rate of price inflation	3.5%	3.3%
Rate of pension increases	3%	2.9%

* The salary increase assumption no longer applies for the UKS as this plan was closed to future accruals on 31 May 2016.

30. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

Assumed life expectancy on retirement at age 65 were as follows:

	2016	2015
	years	years
Longevity at age 65 for current pensioners		
- Male	24.1	24.0
- Female	25.1	25.0
Longevity at age 65 for future pensioners		
- Male	26.7	26.6
- Female	26.9	26.9

The movements in the UKS' liability for the year ended 31 December was as follows:

	2016	2015
	$'000	$'000
Benefit obligation at beginning of the year	496,540	551,363
Current service costs	775	2,333
Interest costs	16,273	19,168
Actuarial loss/(gain)	138,244	(33,455)
Benefits paid from plan/Company	(23,140)	(18,120)
Exchange rate changes	(93,875)	(24,749)
Benefit obligation at end of the year	534,817	496,540

The movements in the UKS' assets for the year ended 31 December was as follows:

	2016	2015
	$'000	$'000
Fair value of plan assets at beginning of year	450,857	484,412
Expected return on plan assets	14,891	16,961
Actuarial gain/(loss) on plan assets	65,518	(16,586)
Employer contributions (including employer direct benefit payments)	7,866	7,208
Administrative expenses paid from plan assets	(566)	(836)
Benefits paid from plan/Company	(23,140)	(18,120)
Exchange rate changes	(80,620)	(22,182)
Fair value of plan assets at end of the year	434,806	450,857

The equity investments and bonds which are held in the plan assets are quoted and are valued at the current bid price in accordance with IAS 19.

30. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

The sensitivity of the defined benefit obligation to changes in the weighted principal assumption is as follows:

	2016			2015		
	Change in assumption	Increase in assumption	Decrease in assumption	Change in assumption	Increase in assumption	Decrease in assumption
At 31 December	%	% per annum	% per annum	%	% per annum	% per annum
Discount rate	0.25%	(5.44)%	5.72 %	0.25%	(5.03)%	5.28 %
Rate of salary increase	0.25%	N/A*	N/A*	0.25%	0.01 %	(0.01)%
Rate of pension increase	0.25%	3.59 %	(3.53)%	0.25%	1.72 %	(1.68)%
Rate of price inflation	0.25%	3.16 %	(3.17)%	0.25%	2.97 %	(2.94)%
Post-retirement mortality assumption	Increase by one year	3.87 %	—	Increase by one year	3.28 %	—

* 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.

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:

	2016	2015
	$'000	$'000
Present value of wholly or partly funded obligations	534,817	496,540
Fair value of plan assets	434,806	450,857
Deficit for funded plans - net liability	100,011	45,683
Experience adjustments on plan assets	(65,518)	16,586
Experience adjustments on plan liabilities	(6,661)	(7,534)

Movements in the UKS income statement for the year ended 31 December are as follows:

	2016	2015
	$'000	$'000
Current service cost	775	2,333
Interest cost	16,273	19,168
Expected return on plan assets	(14,891)	(16,961)
Administrative expenses paid from plan assets	566	836
Total pension cost recognised in the income statement	2,723	5,376
Exchange rate changes	(13,255)	(2,567)
Net amount recognised in the income statement	(10,532)	2,809

30. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

Movements in the UKS statement of other comprehensive income for the year ended 31 December are as follows:

	2016	2015
	$'000	$'000
Actuarial (loss)/gain immediately recognised	(72,726)	16,869

The asset allocation of the UKS defined benefit schemes was as follows:

	2016	2015
	Percentage of plan assets (%)	Percentage of plan assets (%)
Equity securities	35.6	34.8
Bond securities	62.4	63.3
Cash	2.0	1.9
	100	100

31. Share based payments

The ultimate parent of the Company, JPMorgan Chase & Co. (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. Under the terms of the LTIP, as of 31 December 2016, 78 million shares of common stock were available for issuance through May 2019. The LTIP is the only active plan under which the Firm is currently granting stock-based incentive awards. 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.

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.

31. Share based payments (continued)

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. The Firm typically awards SARs to certain key employees once per year; the Firm also periodically grants employee stock options and SARs to individual employees. There were no material grants of stock options or SARs in 2016, 2015 and 2014. The 2013 grants of SARs to key employees vest rateably over five years (i.e. 20% per year) and awards contain clawback provisions similar to RSUs. The 2013 grants of SARs contain full-career eligibility provisions. SARs generally expire 10 years after the grant date.

The following table summarises additional information about options and SARs outstanding as at 31 December:

	31 December 2016			31 December 2015		
	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	75	19.49	2.05	75	19.49	3.06
$20.01 - $35.00	—	—	—	—	—	—
$35.01 - $50.00	1,144	43.32	4.08	1,614	43.55	4.76
$50.01 and above	—	—	—	1	759.99	0.97
Total	1,219	41.86	3.96	1,690	42.63	4.68

Broad-based employee stock options

No broad-based employee stock options were granted in 2016 or 2015. In prior years, awards were granted by the Firm under the Value Sharing Plan, a non-shareholder-approved plan. For each grant, the exercise price was equal to the Firm's common stock price on the grant date. The options become exercisable over various periods and generally expire 10 years after the grant date.

The weighted average share price during the year ended 31 December 2016 was $65.62 (2015: $63.83).

The total expense for the year relating to share based payments was $249 million (2015: $231 million), all of which relates to equity settled share based payments.

32. Transfer 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 counterparty's recourse is generally not limited to the transferred assets. The fair value of the collateral and the carrying amounts of the liabilities is disclosed in note 29.

The Company has also transferred 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.

32. Transfer of financial assets (continued)

The following is a summary of the fair value of the assets and carrying amount of related liabilities:

Fair value of the assets

	Fair value of the assets		Carrying amount of the related liability	
	2016	2015	**2016**	2015
	$'000	$'000	**$'000**	$'000
Financial assets held for trading	5,720,000	7,422,000	5,268,000	7,224,000

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 a 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 total notional and the market value of all derivatives executed by the Company with such SPEs (including those with such SPEs to which the Company did not transfer any financial assets) amounted to $13.2 billion and $722 million as of 2016 ($8.1 billion and $404 million as of 2015).

33. Financial risk management

Disclosures in relation to the Company's risk management and capital management have been presented in the Strategic report on pages 1 - 23 which forms part of these financial statements.

34. Post balance sheet events

On 19 April 2017, the Board approved interim dividends of $359,303,501 on preference shares and $6,696,499 on preferred ordinary shares of the Company.

During the first quarter of 2017, the Company further obtained standalone credit ratings of 'A1/P-1' and 'AA-/F1+' with stable outlooks from Moody's Investors Service and Fitch Ratings, respectively.

APPENDIX II

Audited financial information of J.P. Morgan Securities plc for the financial year 2015

J.P. MORGAN SECURITIES PLC

(Registered Number: 02711006)

Annual report for the year ended 31 December 2015

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

Report on the financial statements

Our opinion

In our opinion J.P. Morgan Securities plc's financial statements (the "financial statements"):

- give a true and fair view of the state of the Company's affairs as at 31 December 2015 and of its profit for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

What we have audited

The financial statements, included within the Annual report (the "Annual Report"), comprise:

- the balance sheet as at 31 December 2015;
- the income statement and statement of comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information.

The financial reporting framework that has been applied in the preparation of the financial statements is United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law (United Kingdom Generally Accepted Accounting Practice).

In applying the financial reporting framework, the directors have made a number of subjective judgements, for example in respect of significant accounting estimates. In making such estimates, they have made assumptions and considered future events.

Opinion on other matter prescribed by the Companies Act 2006

In our opinion, the information given in the Strategic Report and the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Other matters on which we are required to report by exception

Adequacy of accounting records and information and explanations received

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, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Directors' remuneration

Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

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

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the Statement of directors' Responsibilities set out on page 9, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland) ("ISAs (UK & Ireland"). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

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.

What an audit of financial statements involves

We conducted our audit in accordance with ISAs (UK & Ireland). An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Paolo Taurae (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London 13 April 2016

J.P. MORGAN SECURITIES PLC
Income Statement for the year ended 31 December 2015

	Notes	**2015** $'000	2014 $'000
Interest receivable and similar income	6	1,927,039	2,182,600
Interest payable and similar charges	7	(1,372,400)	(1,681,529)
Net interest income		**554,639**	**501,071**
Fees and commissions receivable		2,593,499	2,573,920
Trading profit		2,651,732	2,347,380
Other operating expense		—	(44,015)
Dividend income		500,000	941,027
Total operating income		**6,299,870**	**6,319,383**
Administrative expenses		(3,160,833)	(3,115,110)
Depreciation	22	(803)	(593)
Profit on ordinary activities before taxation	9	**3,138,234**	**3,203,680**
Tax on profit on ordinary activities	10	(463,288)	(414,631)
Profit for the financial year		**2,674,946**	**2,789,049**

The profit for the year resulted from continuing operations.

Statement of comprehensive income for the year ended 31 December 2015

	Notes	**2015** $'000	2014 $'000
Profit for the financial year		**2,674,946**	**2,789,049**
Other comprehensive income: items that may be reclassified subsequently to profit or loss			
Non-cash dividend - Investment in Group undertaking	20	—	133,282
Non-cash dividend - Financial assets designated at fair value through profit and loss	17	—	49,351
		—	182,633
Other comprehensive income: items that will not be reclassified to profit or loss			
Actuarial gain/(loss) on pension schemes	32	20,166	(10,928)
Tax effect of movement in pension reserve	11	(270)	1,912
		19,896	(9,016)
Other comprehensive income for the year, net of tax		**19,896**	**173,617**
Total comprehensive income for the year		**2,694,842**	**2,962,666**

The notes on pages 18 - 66 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC
Balance sheet as at 31 December 2015

	Notes	2015 $'000	2014 $'000
Assets			
Cash and balances at central banks		65,809	52,968
Loans and advances to banks	12	4,673,268	5,406,082
Loans and advances to customers	13	3,292,824	2,058,170
Securities purchased under agreements to resell	14	136,836,484	145,442,135
Securities borrowed	15	15,038,887	16,562,264
Financial assets held for trading	16	299,607,822	304,533,815
Financial assets designated at fair value through profit or loss	17	125,285	70,888
Debtors	18	42,987,844	38,990,935
Other assets	19	582,074	668,838
Investments in Group undertakings	20	3,458,789	3,458,566
Tangible fixed assets	22	2,137	2,225
Total assets		**506,671,223**	**517,246,886**
Liabilities			
Securities sold under agreements to repurchase	23	65,522,171	57,551,191
Securities loaned	24	11,315,697	21,505,199
Financial liabilities held for trading	25	263,358,470	266,080,335
Trade creditors	26	28,559,675	35,114,727
Amounts owed to Group undertakings		80,391,917	78,552,709
Other liabilities	26	20,137,485	25,383,288
Total liabilities		**469,285,415**	**484,187,449**
Equity			
Called-up share capital	27	17,546,050	16,884,410
Share premium account		9,954,992	8,117,257
Other reserves		1,827,233	1,795,183
Retained earnings		8,057,533	6,262,587
Total equity		**37,385,808**	**33,059,437**
Total liabilities and equity funds		**506,671,223**	**517,246,886**

Approved and authorised for issue by the board of directors on 13 April 2016 and signed on its behalf by:

Sir W. Bischoff	**D.E. Pinto**	**E.A. Korablina**
Chairman & Non Executive Director	Chief Executive Officer & Director	Chief Financial Officer & Director

13 April 2016

The notes on pages 18 - 66 form an integral part of these financial statements.

J.P. MORGAN SECURITIES PLC

Statement of changes in equity for the year ended 31 December 2015

	Note	Called-up share capital	Share premium account	Capital contribution reserve	Pension reserve	Other reserves	Retained earnings	Total
		$'000	$'000	$'000	$'000	$'000	$'000	$'000
Balance as at 1 January 2014		**16,768,470**	**6,683,861**	**1,583,800**	**(1,005)**	**20,619**	**5,444,750**	**30,500,495**
Profit for the year		—	—	—	—	—	2,789,049	**2,789,049**
Other comprehensive income for the year:								
Non-cash dividend - Investment in Group undertaking		—	—	—	—	133,282	—	**133,282**
Non-cash dividend - Financial assets designated at fair value through profit and loss		—	—	—	—	49,351	—	**49,351**
Actuarial loss on pension schemes		—	—	—	(10,928)	—	—	**(10,928)**
Tax effect on movement in pension reserve		—	—	—	1,912	—	—	**1,912**
Total comprehensive income for the year		**—**	**—**	**—**	**(9,016)**	**182,633**	**2,789,049**	**2,962,666**
Issuance of shares	27	115,940	1,433,396	—	—	—	—	**1,549,336**
Write-down of investments on transfer of business	20	—	—	—	—	—	(1,041,212)	**(1,041,212)**
Dividends paid		—	—	—	—	—	(930,000)	**(930,000)**
Movement in other reserves		—	—	—	—	18,152	—	**18,152**
Balance as at 31 December 2014		**16,884,410**	**8,117,257**	**1,583,800**	**(10,021)**	**221,404**	**6,262,587**	**33,059,437**
Profit for the year		—	—	—	—	—	2,674,946	**2,674,946**
Other comprehensive income for the year:								
Actuarial gain on pension schemes	32	—	—	—	20,166	—	—	**20,166**
Tax effect on movement in pension reserve		—	—	—	(270)	—	—	**(270)**
Total comprehensive income for the year		**—**	**—**	**—**	**19,896**	**—**	**2,674,946**	**2,694,842**
Issuance of shares	27	661,640	1,837,735	—	—	—	—	**2,499,375**
Capital contribution	20	—	—	4,815	—	—	—	**4,815**
Dividends paid		—	—	—	—	—	(880,000)	**(880,000)**
Movement in other reserves		—	—	—	—	7,339	—	**7,339**
Balance as at 31 December 2015		**17,546,050**	**9,954,992**	**1,588,615**	**9,875**	**228,743**	**8,057,533**	**37,385,808**

An amount of $17 million and $3 million of current and deferred tax has been credited to Other reserves in 2014 and 2015 respectively. Other reserves also includes movements due to share based payment awards granted to employees by the Group.

The notes on pages 18 - 66 form an integral part of these financial statements.

1. General information

The Company is a principal subsidiary of JPMorgan Chase & Co. (the "Group") in Europe, the Middle East & Africa ("EMEA") and engages in international investment banking activity, including activity across Markets, Investor Services and Banking. 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 and swaps and other derivatives; brokerage and clearing services for exchange traded future and options contracts and providing investment banking advisory services.

The Company is a public limited company and is incorporated and domiciled in England and Wales. The address of its registered office is 25 Bank Street, Canary Wharf, London, E14 5JP, England. The Company's immediate parent undertaking is J.P. Morgan Chase International Holdings, incorporated in England and Wales. The parent undertaking of the smallest group in which the Company's results are consolidated is J.P. Morgan Chase (UK) Holdings Limited. The Company's ultimate parent undertaking and controlling party is JPMorgan Chase & Co., 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.

2. Basis of preparation

The Financial Reporting Council revised financial reporting standards ("FRSs") in the UK and Republic of Ireland for accounting periods beginning on or after 1 January 2015. The revisions fundamentally reform United Kingdom Generally Accepted Accounting Practices ("UK GAAP"), replacing the previous standards ("previous UK GAAP").

These financial statements have been prepared in accordance with Financial Reporting Standard 101, 'Reduced Disclosure Framework' ("FRS 101"). FRS 101 applies the recognition and measurement requirements of International Financial Reporting Standards ("IFRS") as adopted by the European Union, with reduced disclosures. The Company has adopted FRS 101 with a transition date of 1 January 2014. 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, and in accordance with the Companies Act 2006. Certain reclassifications and adjustments to prior year amounts have been made to conform with current presentations.

The detailed effect of the adoption of FRS 101 on the Company's financial statements is described in note 38.

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 Group 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);
- Cash flow statement and related notes IAS 7 'Cash flow statements';
- 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 Group undertakings (IAS 24).

3. 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 judgment. The type and level of judgment 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 and are therefore classified within level 3 of the valuation hierarchy, judgments 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 30.

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 judgments 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 Group see note 30.

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 30.

Defined benefit plans

The present value of the defined benefit obligation depends on various factors that are determined on an actuarial basis using a number of assumptions. This involves making assumptions about discount rates, future salary increases, price inflation and future pension increases. Substantial changes in these assumptions affect the amount of the recognised defined benefit obligation. For further details, see note 32.

4. Significant accounting policies

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

4.1 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, JPMorgan Chase & Co. a company incorporated in the United States of America. It is included in the consolidated financial statements of JPMorgan Chase & Co. which are publically available. Therefore, the Company has elected not to prepare group financial statements in accordance with the dispensation set out in Section 401 of the Companies Act 2006.

4.2 Interest income and expense

Interest receivable and payable are recognised on an effective interest rate basis. Effective interest rate is the rate that exactly discounts estimated future cash flows to the instrument's initial carrying amount. Calculation of the effective interest rate takes into account fees receivable, that are an integral part of the instrument's yield, premiums or discounts on acquisition or issue, early redemption fees and transaction costs. All contractual terms of a financial instrument are considered when estimating future cash flows.

4.3 Other income

Fees and commissions are recognised when the underlying contract becomes legally binding or at the agreed due date if later.

Profits and losses resulting from the purchase and sale of securities and the revaluation of financial instruments are recognised as trading gains or losses on a trade date basis.

4. Significant accounting policies (continued)

4.4 Dividend recognition

Dividend income is recognised when the right to receive payment is established. Dividends are recognised at the fair value of the consideration received. Where the consideration received is an investment in share capital of an entity, the fair value is determined by the market value of the underlying net assets and businesses of the investee. Where the shares received are illiquid or unlisted and are not readily convertible to cash, the dividends are recognised in the statement of comprehensive income. Dividend distributions are recognised in the period in which they are declared and approved.

4.5 Foreign currency translation

Monetary assets and liabilities in foreign currencies are translated into United States ("US") dollars at rates of exchange ruling on the balance sheet date. Income and expense items denominated in foreign currencies are translated into US 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 US dollars at the exchange rate ruling at the date of the transaction.

Non-monetary items denominated in foreign currencies that are stated at fair value are translated into US dollars at foreign exchange rates ruling at the dates when the fair values were determined. Translation differences arising on non-monetary items measured at fair value are recognised in income statement except for differences arising on available-for-sale non- monetary financial assets, which are included in financial assets available-for-sale reserve.

4.6 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 US dollar equity and inter-entity financing arrangements with JPMorgan Chase Bank N.A., US dollar is considered as functional and presentation currency of the Company.

4.7 Tangible assets

Tangible assets are stated at cost less accumulated depreciation. Tangible fixed assets are depreciated on a straight-line basis over their useful economic lives at the annual rates detailed below.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Leasehold improvements	10% or life of the lease if under 10 years
Computers and similar office equipment	33%
Fixtures and fitting	10%

The Company selects its depreciation rates and reviews them regularly to take account of any changes in circumstances. When setting useful economic lives, the principal factors the Company takes into account are the expected rate of technological developments, expected market requirements for the equipment and the intensity at which the assets are expected to be used.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in the income statement.

4. Significant accounting policies (continued)

4.8 Investments in Group undertakings

Investments in Group undertakings are stated at cost less provision for any impairment. Where the investments in the share capital of Group undertakings are acquired by way of a dividend in kind, these are initially recognised at fair value and subsequently at cost less provision for any impairment.

Business combinations are accounted for by applying the acquisition method, except for transfers of businesses between entities under common control within the Group. Predecessor accounting is applied to such transfers and 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.

4.9 Financial assets and financial liabilities

The Company classifies its financial assets and financial liabilities in the following categories: financial assets and financial liabilities held for trading, financial assets and financial liabilities designated at fair value through profit or loss, financial assets available-for-sale and loans and receivables. The directors determine the classification of its investments at initial recognition.

The Company recognises a financial asset or a financial liability on its balance sheet when it becomes a party to the contractual provisions of the instruments, i.e., on trade date. Regular way purchases and sales of financial assets are also recognised on the trade-date, the date on which the Company commits to purchase or sell the asset.

i. Financial assets and financial liabilities held for trading

The Company considers a financial asset or financial liability 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.

Financial assets and financial liabilities held for trading comprise both debt and equity securities and derivatives. These instruments are either held for trading purposes or used for hedging certain assets, liabilities, positions, cash flows or anticipated transactions. Included in financial assets held for trading are the reported receivables (unrealised gains) and in financial liabilities held for trading the reported payables (unrealised losses) related to derivatives. The instruments are initially recognised at fair value in the balance sheet with transaction costs being recorded in profit or loss and any gains or losses are taken directly to the income statement. Subsequently, they are measured at fair value.

Since both the debt and equity securities and the derivatives are managed on a unified basis as part of the trading strategy, which includes hedging relationships between cash securities and derivatives, it is not meaningful to show the gains and losses on the cash instruments separately from the gains and losses on the derivatives; the net gain or loss is reported as trading profits.

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

Financial assets and financial liabilities that the Company designates on initial recognition as being at fair value through profit or loss are recognised at fair value, with transaction costs being recognised in profit or loss and are subsequently measured at fair value. Gains and losses on financial assets and financial liabilities that are designated at fair value through profit or loss are recognised in profit or loss as they arise. A financial instrument may only be designated at inception as held at fair value through profit or loss and cannot subsequently be changed.

Financial assets or financial liabilities are designated 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.

iii. Financial assets available-for-sale

Non-derivative financial assets intended to be held for an indefinite period of time, which may be sold in response to needs for liquidity or changes in interest rates, exchange rates or equity prices, are included within the financial assets available-for-sale category. These are initially recognised at fair value plus directly related transaction costs and subsequently measured at fair value. Any changes in fair values of such assets subsequent to initial recognition are reported as movements in financial assets available-for-sale reserve, net of deferred tax, until the investment is sold, collected or otherwise disposed of, or the financial assets are considered impaired, at which time the cumulative gain or loss previously reported in the statement of comprehensive income is included in the income statement.

4. Significant accounting policies (continued)

4.9 Financial assets and financial liabilities (continued)

iv. Loans and receivables

Loans and receivables includes loans and advances to banks, loans and advances to customers and debtors and are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market except those that are classified as held for trading or designated fair value through profit or loss.

Loans and receivables are initially recognised at fair value including directly related incremental transaction costs. They are subsequently measured at amortised cost, using the effective interest method less any provision for impairment losses. They are derecognised when the rights to receive cash flows have expired or the Company has transferred substantially all the risks and rewards of ownership.

4.10 Trade creditors and borrowings

Other financial liabilities are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

4.11 Derecognition of financial assets and financial liabilities

Financial assets are derecognised when the right to receive cash flows from the assets has expired or when the Company has transferred its contractual right to receive the cash flows of the financial assets, and either substantially:

- all the risks and rewards of ownership have been transferred, along with the unconditional ability to sell or pledge the asset; or
- all the risks and rewards have neither been retained nor transferred but control is not retained.

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

4.12 Impairment of financial assets

The Company assesses at each balance sheet date whether there is any objective evidence that a financial asset or group of financial assets is impaired. A financial asset or portfolio of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset and that that loss event has an adverse impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

When a decline in the fair value of an financial asset available-for-sale has been recognised through the statement of comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognised through the statement of comprehensive income is removed from reserves and recognised in the income statement. Specific provisions are raised against specific loans and advances to customers when the Group considers that the credit worthiness of the borrower has deteriorated such that the recovery of the whole or part of an outstanding advance is in serious doubt.

The amount of the cumulative loss that is removed from reserves and recognised in the income statement is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in the profit or loss account.

Impairment losses recognised in profit or loss for an investment in an equity instrument classified as available-for-sale are not reversed through the income statement.

If, in a subsequent period, the amount of the impairment loss, for debt instruments, decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the reversal of the previously recognised impairment loss is recognised in the income statement.

4. Significant accounting policies (continued)

4.13 Fair value

Financial instruments are recognised at fair value on the date of initial recognition and subsequently remeasured at 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 liabilities held at fair value, most market parameters in the valuation model are either directly observable or are implied from instrument prices. The model may perform numerical procedures in the pricing such as interpolation when input values do not directly correspond to the most actively traded market trade parameters.

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.

4.14 Recognition of deferred day one profit and loss

The Company enters into transactions where fair value is determined using valuation models for which not all inputs are market observable prices or rates. 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 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.

4.15 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 collateral can be in the form of cash or securities. If the collateral is given in cash the transaction is recorded on the balance sheet within securities purchased/ sold under agreement to resell/repurchase. If the collateral is received or given in the form of securities the transaction is recorded off balance sheet. The difference between sales and repurchase price is treated as interest and accrued over the life of the agreements using the effective interest rate method.

4.16 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 collateral 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 lent are treated as interest income or interest expense and accrued over the life of the transaction using the effective interest rate method.

4. Significant accounting policies (continued)

4.17 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.

4.18 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 to set-off and an intention to settle on a net basis.

4.19 Provisions for liabilities and charges

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 resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

4.20 Pensions and other post-retirement benefits

The Company operates both defined benefit and defined contribution schemes for its employees. The Company also operates defined benefit and defined contribution schemes for employees in the European branches.

Defined contribution scheme

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Obligations for contributions to defined contribution pension plans are recognised as an expense and charged to the income statement on an accrual basis.

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 equity in the period in which they occur.

4. Significant accounting policies (continued)

4.21 Share-based payment awards

Share-based awards may be made to employees of the Company under the Group'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 Group's incentive programs is taken into consideration. The Group'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.

5. Segmental analysis

The Company is not in scope of IFRS 8 'Operating segments' and therefore has not provided any segmental analysis. The Company has one class of business, the provision of international Corporate and Investment Banking services within EMEA. The Company operates six branches outside of the UK, but these do not generate material revenues.

6. Interest receivable and similar income

	2015	2014
	$'000	$'000
Financial assets held for trading	1,311,183	1,508,161
Securities purchased under agreements to resell	346,053	449,100
Securities borrowed	68,810	75,940
Other	200,993	149,399
	1,927,039	2,182,600

Interest receivable and similar income includes the following amounts receivable from other Group undertakings:

	2015	2014
	$'000	$'000
Securities purchased under agreements to resell	121,569	157,331
Securities borrowed	68,056	70,596
Other	32,936	18,741
	222,561	246,668

7. Interest payable and similar charges

	2015	2014
	$'000	$'000
Financial liabilities held for trading	796,274	889,818
Securities sold under agreements to repurchase	66,561	176,711
Securities loaned	237,296	242,973
Other	272,269	372,027
	1,372,400	1,681,529

Other interest payable primarily relates to interest on borrowings from Group undertakings.

Interest payable and similar charges includes the following amounts payable to other Group undertakings:

	2015	2014
	$'000	$'000
Securities sold under agreements to repurchase	60,435	49,484
Securities loaned	19,328	80,594
Other	238,547	286,534
	318,310	416,612

8. Directors' emoluments

	2015	2014
	$'000	$'000
Emoluments	6,322	7,422
Total contributions to a defined contribution plan	17	17
Total value of long term incentive plans for all directors	2,033	—
Compensation to non-executive directors	768	362
Number of directors who exercised share options	2	4
Number of directors with shares received or receivable under LTIPs	1	—
Number of directors to whom defined contribution pension rights accrued	4	4

In accordance with the Companies Act 2006, the directors' emoluments above represent the proportion paid or payable in respect of qualifying services only. 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) and the value of share options granted or exercised by directors) of the highest paid director were $4,413,241 (2014: $5,778,250).

The contribution to the defined contribution scheme for the highest paid director during the year was $7,540 (2014: $7,677). The highest paid director exercised share options during 2015 (2014: the highest paid director did not exercise share options). Shares were received or are receivable by the highest paid director under long term incentive plans during 2015 (shares were not received by the highest paid director under long term incentive plans during 2014).

9. Profit on ordinary activities before taxation

	2015	2014
	$'000	$'000
Profit on ordinary activities before taxation is stated after charging:		
Depreciation of tangible fixed assets	803	593
Auditors' remuneration for the audit of the Company's annual financial statements	2,794	2,880
Audit-related assurance services	50	81
Wages and salaries	717,530	729,564
Social security costs	129,935	127,082
Other pension and benefits costs	62,358	67,910
Share based awards	231,034	250,778

The average monthly number of persons providing services to the Company during the year was 1,501 (2014: 1,400). The average monthly number of staff employed by the European branches during the year was 134 (2014: 119).

10. Tax on profit on ordinary activities

	2015	2014
(a) Analysis of tax charge for the year	$'000	$'000
Current taxation		
UK Corporation tax on profit for the year	359,549	416,784
Overseas taxation	230,551	168,986
Less: Double tax relief	(170,608)	(161,441)
Adjustments in respect of previous years	57,836	(234)
Current tax expense for the year	477,328	424,095
Deferred tax (note 11):		
Origination and reversal of temporary differences	5,697	(13,425)
Effect of rate change on opening balance	(19,737)	3,961
Deferred tax credit for the year	(14,040)	(9,464)
Total tax expense for the year	463,288	414,631

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

Changes to the UK corporation tax rates were substantively enacted as part of Finance Bill 2015 on 26 October 2015. These include reductions to the main rate to reduce the rate to 19% from 1 April 2017 and to 18% from 1 April 2020. In addition, a bank surcharge was introduced at 8%.Deferred taxes at the balance sheet date have been measured using these enacted tax rates and reflected in these financial statements.

10. Tax on profit on ordinary activities (continued)

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

The tax charge for the year differs from the standard rate of corporation tax in the UK (20%), reduced from 21% effective from 1 April 2015. The differences are explained below:

	2015	2014
	$'000	$'000
Profit on ordinary activities before taxation	3,138,234	3,203,680
Profit on ordinary activities before taxation multiplied by standard rate of corporation tax in UK (20.25%) (2014 21.49%).	635,385	688,572
Effects of:		
Non-deductible expenses	46,624	83,372
Non-taxable income	(159,226)	(208,984)
Other adjustment	(93)	(764)
Adjustments in respect of previous years	57,836	(234)
Group relief claimed for nil consideration	(157,444)	(167,862)
Foreign taxation suffered	59,943	7,545
Impact of change in rate on deferred tax	(19,737)	3,961
FRS 101 adjustment	—	9,025
Total tax expense for the year	463,288	414,631

11. Deferred tax

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

	2015	2014
	$'000	$'000
Deferred tax assets:		
Deferred tax assets to be recovered after more than 12 Months	73,809	54,500
Deferred tax asset to be recovered within 12 months	31,340	22,676
	105,149	77,176
Deferred tax liabilities:		
Deferred tax liability to be reversed after more than 12 Months	(9,386)	(8,123)
Deferred tax liability to be reversed within 12 months	(1,173)	(903)
Deferred tax asset (net)	94,590	68,150

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

	2015	2014
	$'000	$'000
As at 1 January	68,150	56,774
Depreciation short/(in excess) of capital allowances	1,073	(869)
Deferral of share based payments	29,089	22,761
Other adjustment	(3,722)	(10,516)
As at 31 December	94,590	68,150

11. Deferred tax (continued)

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 2014	3,439	32,530	20,805	56,774
Credited/(charged) to the income statement	(869)	19,554	(9,221)	9,464
Credited directly to other comprehensive income	—	—	1,912	1,912
At 31 December 2014	2,570	52,084	13,496	68,150
Credited/(charged) to the income statement	1,073	16,419	(3,452)	14,040
Credited directly to equity	—	12,670	—	12,670
Charged directly to other comprehensive income	—	—	(270)	(270)
At 31 December 2015	3,643	81,173	9,774	94,590

12. Loans and advances to banks

Loans and advances to banks includes bank balances held with Group undertakings of $1.8 billion (2014: $4.4 billion).

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. The Company has considered its rights and obligations relating to funds belonging to clients that are held subject to client money protection under the Client Assets Sourcebook, with banks, exchanges and clearing houses, and concluded that such amounts should not be recognised on balance sheet. Therefore, client money assets amounting to $12.3 billion (2014: $15.1 billion) (including Loans and advances to banks of $4.4 billion and Debtors of $7.9 billion) and related liabilities are not included in the Company's balance sheet.

13. Loans and advances to customers

	2015	2014
	$'000	$'000
Loans and advances to customers	3,292,824	2,058,170

Disclosure of loans and advances to customers maturity profile:

	2015	2014
	$'000	$'000
Remaining maturity:		
5 years or more	58,085	274,624
5 years or less but over 1 year	2,164,273	1,385,574
1 year or less but over 3 months	240,984	379,879
3 months or less	829,482	18,093
	3,292,824	2,058,170

There were no material past due or impaired loans and advances to customers as at 31 December 2015 (2014: nil).

14. Securities purchased under agreements to resell

	2015	2014
	$'000	$'000
Securities purchased under agreements to resell	136,836,484	145,442,135

Included within securities purchased under agreements to resell, are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Securities purchased under agreements to resell	66,901,757	68,223,393

For the fair value of securities purchased under agreements to resell accepted as collateral refer to note 31.

15. Securities borrowed

	2015	2014
	$'000	$'000
Securities borrowed	15,038,887	16,562,264

Included within securities borrowed, are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Securities borrowed	10,305,219	10,545,876

For the fair value of securities borrowed accepted as collateral refer to note 31.

16. Financial assets held for trading

	2015	2014
	$'000	$'000
At 1 January	304,533,815	163,631,017
Movements during the year	(4,925,993)	140,902,798
At 31 December	299,607,822	304,533,815

Included within financial assets held for trading, are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Financial assets held for trading	125,918,444	117,394,211

17. Financial assets designated at fair value through profit or loss

	2015	2014
	$'000	$'000
At 1 January 2015	70,888	20,090
Movements during the year	54,397	50,798
At 31 December 2015	125,285	70,888

Financial assets designated at fair value through profit or loss represent unlisted equity securities.

18. Debtors

	2015	2014
	$'000	$'000
Trade debtors	10,973,855	11,411,374
Amounts owed by Group undertakings	11,487,402	7,077,680
Other debtors	20,526,587	20,501,881
	42,987,844	38,990,935

Trade debtors mainly consists of unsettled trades. Other debtors includes $14.5 billion of cash collateral provided on derivatives (2014: $13.1 billion).

19. Other assets

	2015	2014
	$'000	$'000
Deferred taxation	94,590	68,150
Prepayments and accrued income	487,484	600,688
	582,074	668,838

20. Investments in Group undertakings

	2015	2014
	$'000	$'000
Investments in Group undertakings at cost		
At 1 January	3,458,566	3,625,233
Additions - see below	2,495,107	2,051,821
Disposals, write-downs and realisation of investments - see below	(2,494,884)	(2,218,488)
At 31 December	3,458,789	3,458,566

20. Investments in Group undertakings (continued)

In the third quarter of 2015, as part of an internal re-organisation, the Company entered into certain transactions with other Group undertakings, namely:

- The Company acquired 100% share capital of Bank One Europe Limited, all of the membership interest in CP Group Holding Cooperatief U.A., and a 99.99999% limited partnership interest in Asselijn Finance C.V., fair-valued respectively at $193 million, $1,073 million, and $1,229 million, against issuance of shares to its parent, J.P. Morgan Chase International Holdings. The fair value of these entities was primarily driven by the cash held.
- The Company received cash distributions from, CP Group Holding Cooperatief U.A and Asselijn Finance C.V, in the amount of $1,073 million, and $1,229 million respectively, thereby realising its investment in above companies. Asselijn Finance C.V was dissolved shortly thereafter. The Company also received a cash distribution of $193 million from Bank One Europe Limited.
- The Company received an additional cash contribution of $5 million from its parent, J.P. Morgan Chase International Holdings.

In the fourth quarter of 2014, the Company entered into various transactions with other Group undertakings, as a part of an internal re-organisation which, in substance involved and was treated as transferring certain Cazenove businesses from Group companies to the Company. The Company acquired 100% share capital of Cazenove Group Limited, against issuance of shares to its parent. The Company recognised its investment in Cazenove Group Limited at its fair value, determined based on the value of the underlying assets and businesses. The Company applied predecessor accounting, and therefore, on transfer of the legal employment of the Cazenove staff to the Company, the excess of fair value over carrying amount of the investment of $1,041 million, was written off to retained earnings.

The holdings of the Company are as follows:

Name	Country of incorporation	Principal activity	Holding	Shares held %
Greenwood Nominees Limited	United Kingdom	Nominee company	Direct	100.00
J.P. Morgan Europe Limited	United Kingdom	Banking	Direct	100.00
Cazenove Group Limited	United Kingdom	Holding company	Direct	100.00
J.P. Morgan Prime Nominees Ltd.	United Kingdom	Nominee company	Direct	100.00
J.P. Morgan Services LLP	United Kingdom	Dormant company	Direct	57.25
Bank One Europe Limited	United Kingdom	Investment company	Direct	100.00
CP Group Holding Cooperatief U.A.	Netherlands	Investment company	Direct	100.00
Chase Securities International Limited	United Kingdom	Investment company	Indirect	100.00
Chase International Securities (C.I.) Limited	Jersey	Investment company	Indirect	100.00
Chase Asset Trading (C.I.) Limited	Jersey	Investment company	Indirect	100.00
Chemical Nominees Limited	United Kingdom	Investment company	Indirect	100.00
Cazenove Holdings Limited	Jersey	Holding company	Indirect	100.00
Cazenove IP Limited	United Kingdom	Investment company	Indirect	100.00
Cazenove US Holdings Limited	United Kingdom	Holding company	Indirect	100.00
JPMorgan Cazenove Holdings	United Kingdom	Holding company	Indirect	100.00
J.P. Morgan Cazenove Limited	United Kingdom	Investment company	Indirect	100.00
JPMorgan Cazenove Service Company	United Kingdom	Service company	Indirect	100.00
Cheyne Capital Guaranteed S.A. Series 2007-1*	Luxembourg	Notes issuer	Direct	100.00
Octopus Mortgages 1 Limited*	Ireland	Commercial real estate	Direct	100.00
Octopus Mortgages 2 Limited*	Ireland	Commercial real estate	Direct	100.00
Octopus Mortgages 3 Limited*	Ireland	Commercial real estate	Direct	100.00
Octopus Mortgages 4 Limited*	Ireland	Commercial real estate	Direct	100.00

* The above entities are special purpose entities which meet the definition (per section 1162 of the Companies Act 2006) of a subsidiary undertaking.

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.

21. Unconsolidated structured entities

Structured Entities

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 structured entities in which the Company has control are consolidated into the parent undertakings of the Company, as set out in note 20 to these financial statements.

The Company has involvement with various structured entities, originated within the Group or by third parties. These typically include securitisations, credit protection purchased credit linked notes, collateralised loan and debt obligations, and other structured financings.

Material interests held in SPE's include residential and commercial mortgage-backed securities and other asset-backed securities. These interests relate to securitisation bonds where the underlying assets are residential and commercial mortgages, consumer loans, student loans, trade receivables, and credit card 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.

The following table shows, by type of structured entity, the carrying amounts of the Company's interest in unconsolidated structured entities recognised on the balance sheet. The maximum exposure to loss is considered as approximate to the carrying amounts. It 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.

		Interest in unconsolidated structured entities				
	Total assets held in unconsolidated VIEs with continuing involvement	Derivatives	Trading assets	Loans	Other	Total
31 December 2015	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed securities	170,236,000	—	739,000	—	—	739,000
Commercial mortgage-backed securities	42,645,000	—	245,000	324,000	—	569,000
Other asset-backed securities [1]	47,035,000	—	991,000	—	—	991,000
Credit related notes and assets swaps vehicles	12,369,000	—	76,000	—	—	76,000
Collateralised debt obligations	1,326,000	—	4,000	—	—	4,000
Other	447,471,000	—	1,645,000	—	4,000	1,649,000
Total assets	721,082,000	—	3,700,000	324,000	4,000	4,028,000
Maximum exposure to loss	721,082,000	—	3,700,000	324,000	4,000	4,028,000
Total liabilities	—	1,000	—	—	262,000	263,000

21. Unconsolidated structured entities (continued)

Interest in unconsolidated structured entities (continued)

	Total assets held in unconsolidated VIEs with continuing involvement	Interest in unconsolidated structured entities				
		Derivatives	Trading assets	Loans	Other	Total
31 December 2014	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Residential mortgage-backed securities	264,586,000	—	932,000	—	—	932,000
Commercial mortgage-backed securities	64,880,000	—	357,000	15,000	—	372,000
Other asset-backed securities [1]	44,629,000	—	447,000	—	—	447,000
Credit related notes and assets swaps vehicles	16,008,000	—	125,000	—	—	125,000
Collateralised debt obligations	4,576,000	—	15,000	—	—	15,000
Other	544,052,000	—	1,247,000	—	—	1,247,000
Total Assets	938,731,000	—	3,123,000	15,000	—	3,138,000
Maximum exposure to loss	938,731,000	—	3,123,000	15,000	—	3,138,000
Total liabilities	—	4,000	—	—	204,000	208,000

(1) Includes auto and student loans structures.

Sponsored entities

The Company considers a "sponsored" SPE to include any entity where: (1) the Company is the primary beneficiary of the structure; (2) the SPE is used by the Company to securitise assets; (3) the SPE issues financial instruments with the Company's name; or (4) the entity is a Company–administered asset-backed commercial paper conduit.

SPE's for which the Company has an interest but no control, are included in the table above. SPE's for which the Company has control are listed in note 20. The Company typically has either an interest or control over sponsored SPE's, and instances where it has neither are rare.

22. Tangible fixed assets

	Leasehold improvements, fixtures and fitting and office equipment	Leasehold improvements, fixtures and fitting and office equipment
	2015	2014
	$'000	$'000
Cost:		
At 1 January	11,979	10,658
Additions	715	1,325
Disposals	(362)	(4)
At 31 December	12,332	11,979
Accumulated depreciation:		
At 1 January	(9,754)	(9,161)
Charged during the year	(803)	(593)
Disposals	362	—
At 31 December	(10,195)	(9,754)
Net book value:		
At 31 December	2,137	2,225

23. Securities sold under agreements to repurchase

	2015	2014
	$'000	$'000
Securities sold under agreements to repurchase	65,522,171	57,551,191

Included within securities sold under agreements to repurchase are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Securities sold under agreements to repurchase	27,579,858	20,398,122

For the fair value of securities sold under agreements to repurchase refer to note 31.

24. Securities loaned

	2015	2014
	$'000	$'000
Securities loaned	11,315,697	21,505,199

Included within securities loaned are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Securities loaned	8,869,782	19,382,910

For the fair value of securities loaned refer to note 31.

25. Financial liabilities held for trading

	2015	2014
	$'000	$'000
At 1 January	266,080,335	126,420,435
Movements during the year	(2,721,865)	139,659,900
At 31 December	263,358,470	266,080,335

Included within financial liabilities held for trading, are the following balances with other Group undertakings:

	2015	2014
	$'000	$'000
Financial liabilities held for trading	150,901,971	148,128,143

26. Trade creditors and other liabilities

	2015	2014
	$'000	$'000
Trade creditors	28,559,675	35,114,727
Other liabilities:		
Accruals and deferred income	2,140,900	475,124
Taxation and social security	391,940	314,684
Other	17,604,645	24,593,480
Total Other liabilities	20,137,485	25,383,288
Total Trade creditors and other liabilities	48,697,160	60,498,015

Trade creditors predominantly consists of unsettled trades, brokerage fees payable and liabilities in respect of assets transferred but not derecognised (note 36). "Other" includes $17,171 million (2014: $18,728 million) of cash collateral received related to OTC derivatives.

27. Called-up share capital

	2015	2014
	$'000	$'000
Issued and fully paid share capital		
At 1 January		
973,098 ordinary shares (2014: 961,504) of $10,000 each	9,730,980	9,615,040
34,648 (2014: 34,648) preferred ordinary shares of $10,000 each	346,480	346,480
680,685 (2014: 680,685) preference shares of $10,000 each	6,806,850	6,806,850
50,000 ordinary shares issued (2014: 50,000) of £1.24 each	100	100
Movements during the year		
66,164 ordinary shares issued (2014: 11,594) of $10,000 each	661,640	115,940
At 31 December		
1,039,262 ordinary shares (2014: 973,098) of $10,000 each	10,392,620	9,730,980
34,648 (2014: 34,648) preferred ordinary shares of $10,000 each	346,480	346,480
680,685 (2014: 680,685) preference shares of $10,000 each	6,806,850	6,806,850
50,000 ordinary shares (2014: 50,000) of £1.24 each	100	100
	17,546,050	16,884,410

	2015	2014
	$'000	$'000
Preference shares in issue		
5 year floating rate of $10,000 each *	2,650,000	2,650,000
10 year fixed rate of $10,000 each *	2,156,850	2,156,850
20 year fixed rate of $10,000 each *	2,000,000	2,000,000
	6,806,850	6,806,850

* Additional disclosure on the terms per tranche of preference shares and preferred ordinary shares is provided under note 28.

28. Dividends

Interim dividends of $357,645,559 were paid on the preference shares (2014: $364,722,605) and $5,201,233 on the preferred ordinary shares of the Company in 2015 (2014: $6,126,536). An interim dividend of $517,153,208 (2014: $559,150,859) was paid on the ordinary shares of the Company for 2015. No final dividend was paid or proposed for 2015 (2014: nil).

The dividend rate on the preferred ordinary shares is 0.9% over 12 month US dollar LIBOR on the nominal amount, and, if resolved to be distributed, is payable in priority to any dividend payable on ordinary shares, with no right to accumulation in the event of a deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any preferred ordinary share at par, together with accrued dividend due, at any time after 26 March 2007. In the event of a winding-up the preferred ordinary shareholders shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholders. The preferred ordinary shares carry no voting rights at a general meeting of the Company. The ordinary shares carrying 100% of the voting rights.

The dividend rate on the 5 year floating rate preference shares is 0.9% over 12 month US dollar LIBOR on the nominal amount, and, if resolved to be distributed, is payable in priority to any dividend payable on ordinary shares, but pari passu to any payment to the holders of the preferred ordinary shares or any other preference shares, with no right to accumulation in the event of a deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any 5 year floating rate preference share at par, together with accrued dividend due, at any time after 9 June 2009. In the event of a winding-up the preference shareholders shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholders but pari passu to any payment to the holders of preferred ordinary shares or other preference shares. The 5 year floating rate preference shares carry no voting rights at general meetings.

The dividend rate on the 10 year fixed rate preference shares is a fixed rate of 2.75% and 2.85% per series, above the Ten-year U.S. Treasury Rate as at the date of issue, and, if resolved to be distributed, is payable in priority to any dividend payable on the ordinary shares, but pari passu to any payment to the holders of the preferred ordinary shares or any other preference shares, with no right to accumulation in the event of deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem any series of the 10 year fixed rate preference shares at par at any time after the 10th anniversary of the date of issue of that series provided that the Company may only redeem exactly twenty per cent of the total number of preference shares issued in that series at par. In the event of a winding-up, the 10 year fixed rate preference shareholder shall be repaid both capital and any accrued dividend due in priority to any payment to the ordinary shareholder but pari passu to any payment to the holders of the preferred ordinary shares and any other preference shares. The preference shares carry no voting rights at general meetings.

The dividend rate on the 20 year fixed rate preference shares is a fixed rate of 8% and, if resolved to be distributed, is payable in priority to any payment of dividend or other distribution to the holders of any junior obligations, but pari passu to any payment of dividend or other distribution to the holders of any parity obligations, with no right to accumulation in the event of deficiency of profits nor any further entitlement to participation in the profits of the Company. Subject to approval from the PRA, the Company may redeem at its option any 20 year fixed rate preference share at par, together with accrued dividend due, at any time after 20 years and one month of the date of issue of that series. In the event of a winding-up, the 20 year fixed rate preference shareholder shall be repaid both capital and any accrued dividend due in priority to any payment to the holders of ordinary shares and any other securities issued by the Company, but pari passu to any payment to the holders of any other series of preference shares issued by the Company. The preference shares carry no voting rights at general meetings.

29. Commitments and contingent liabilities

Commitments

	2015	2014
	$'000	$'000
Lending commitments	14,019,175	10,874,380

There are no lending commitments to other Group undertakings (2014: $nil).

Contingent liabilities

The Company, together with certain other Group undertakings and third party entities, has been named in claims brought by the Ente Nazionale di Previdenza ed Assistenza Medic ("ENPAM") in the Milan courts in relation to certain alleged breaches of Italian conduct rules. The claims seek remedies or damages against the named parties in an amount of approximately EUR 222 million. The parties are in the early stages of litigation, with initial submissions on behalf of the entities named in the proceeding to be submitted in April 2016. Management believe that no provision is required in line with the requirements of IAS 37: Provisions, Contingent Liabilities and Contingent Assets.

30. Assets and liabilities measured at fair value

<u>Fair value</u>

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, where available. If listed prices or quotes are not available, fair value is based on 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.

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 Group's valuation control function, which is part of the Group'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 Group'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 data 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.

30. 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 are used where available.	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	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 (e.g., plain vanilla options and interest rate and credit default swaps). Inputs include: • Contractual terms including the period to maturity • Readily observable parameters including interest rates and volatility • Credit quality of the counterparty and of the Company • Market funding levels • Correlation levels In addition, the following specific inputs are used for the following derivatives that are valued based on models with significant unobservable inputs: *Structured credit derivatives specific inputs include*: • CDS spreads and recovery rates • Credit correlation between the underlying debt instruments • Actual transactions, where available, are used to regularly recalibrate unobservable parameters *Certain interest rate and foreign exchange ("FX") exotic options specific inputs include:* • Interest rate correlation • Interest rate spread volatility • Foreign exchange correlation • Correlation between interest rates and foreign exchange rates • Parameters describing the evolution of underlying interest rates *Certain commodity derivatives specific inputs include:* • Commodity volatility • Forward commodity price	Level 2 or 3
Financial instruments held for trading - 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 credit default swaps ("CDS"); or benchmark credit curves developed by the Company, by industry and credit rating	Level 2 or 3

30. 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 credit default swaps ("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
• Securities purchased under agreements to resell; • Securities borrowed; • Securities sold under agreements to repurchase; • Securities loaned	Valuations are based on discounted cash flows, which consider: • Derivative features. For further information refer to the discussion of derivatives below • Market rates for the respective maturity • Collateral	Level 2

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 2015 and 2014, by major product category and fair value hierarchy.

	Level 1	Level 2	Level 3	Total
	$'000	**$'000**	**$'000**	**$'000**
At 31 December 2015				
Financial assets held for trading:				
Debt and equity instruments	49,028,796	40,644,770	1,427,012	91,100,578
Derivative receivables	51,076	203,406,147	5,175,306	208,632,529
Total financial assets	49,079,872	244,050,917	6,602,318	299,733,107
Financial liabilities held for trading:				
Debt and equity instruments	20,434,283	12,395,940	5,073	32,835,296
Derivative payables	50,925	209,439,157	4,906,458	214,396,540
Other financial liabilities	—	12,989,810	3,136,824	16,126,634
Total financial liabilities	20,485,208	234,824,907	8,048,355	263,358,470

30. 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 2014				
Financial assets held for trading:				
Debt and equity instruments	49,773,194	36,261,520	5,709,113	91,743,827
Derivative receivables	29,477	206,288,755	6,542,644	212,860,876
Total financial assets	49,802,671	242,550,275	12,251,757	304,604,703
Financial liabilities held for trading:				
Debt and equity instruments	21,217,881	12,508,597	2,079	33,728,557
Derivative payables	26,081	209,947,635	5,515,017	215,488,733
Other financial liabilities	—	13,235,410	3,627,635	16,863,045
Total financial liabilities	21,243,962	235,691,642	9,144,731	266,080,335

Level 3 valuations

The Group has established well-documented 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 models that use significant unobservable inputs and are therefore classified within level 3 of the fair value hierarchy, judgments 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, due to the lack of observability of significant inputs, management must assess all relevant empirical data in deriving valuation inputs including, but not limited to, transaction details, yield curves, interest rates, prepayment speed, default rates, volatilities, correlations, 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 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.

30. 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 2015	**$'000**	**$'000**	**$'000**				
Debt and equity instruments	1,427,012	(5,073)	1,421,939				
Corporate debt securities and other				Discounted cash flows Market comparables	Credit spread Yield Price	60bps – 225bps 1% - 20% $0 - $168	146bps 5% $89
Residential mortgage-backed securities and loans				Discounted cash flows	Yield Prepayment speed Conditional default rate Loss severity	3% - 26% 0% - 20% 0% - 33% 0% - 100%	6% 6% 2% 28%
Commercial mortgage-backed securities and loans				Discounted cash flows	Yield Conditional default rate Loss severity	1% - 25% 0% - 91% 40%	6% 29% 40%
Derivatives	5,175,306	(4,906,458)	268,848				
Net interest rate derivatives				Option pricing	Interest rate correlation Interest rate spread volatility	(52)% – 99% 3% – 38%	
Net credit derivatives				Discounted cash flows	Credit correlation	35 % – 90%	
Net foreign exchange derivatives				Option pricing	Foreign exchange correlation	0 % – 60%	
Net equity derivatives				Option pricing	Equity volatility	20 % – 65%	
Net commodity derivatives				Discounted cash flows	Forward commodity price	$22 – $46 per barrel	
Other financial liabilities	—	(3,136,824)	(3,136,824)	Option pricing	Interest rate correlation Interest rate spread volatility Foreign exchange correlation Equity correlation	(52)% – 99% 3% – 38% 0 % – 60% (50)% – 80%	
				Discounted cash flows	Credit correlation	35 % – 90%	
Total assets and liabilities	6,602,318	(8,048,355)	(1,446,037)				

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.

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. 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.

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

Level 3 valuations (continued)

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.

Correlation - Correlation is a measure of the relationship between the movements of two variables (e.g., how the change in one variable influences the change in the other). 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. 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.

Fair value financial instruments valued using techniques that incorporate unobservable inputs

The potential impact as at 31 December 2015 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	Income statement	
At 31 December 2015	**$'000**	**$'000**	**$'000**	**$'000**	**$'000**
Debt and equity instruments					
Corporate debt securities and other	1,415,687	(5,073)	1,410,614	9,010	(9,010)
Residential mortgage-backed securities and loans	5,852	—	5,852	222	(222)
Commercial mortgage-backed securities and loans	5,473	—	5,473	467	(467)
Total debt and equity instruments	**1,427,012**	**(5,073)**	**1,421,939**	**9,699**	**(9,699)**
Derivatives	**5,175,306**	**(4,906,458)**	**268,848**	**15,167**	**(15,167)**
Other financial liabilities	**—**	**(3,136,824)**	**(3,136,824)**	**27,475**	**(27,475)**
Total	**6,602,318**	**(8,048,355)**	**(1,446,037)**	**52,341**	**(52,341)**

30. 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 2015

Financial assets	Debt and equity instruments	Derivative receivables	Total financial assets
	$'000	$'000	$'000
At 1 January 2015	5,709,113	6,542,644	12,251,757
Total (loss)/gains recognised in profit or loss	(377,980)	982,562	604,582
Purchases	4,549,375	944,290	5,493,665
Sales	(3,693,458)	(258,056)	(3,951,514)
Issuances	7,220	18,082	25,302
Settlements	(1,744,194)	(1,670,248)	(3,414,442)
Transfers in to Level 3	472,002	256,649	728,651
Transfers out of Level 3	(3,495,066)	(1,640,617)	(5,135,683)
At 31 December 2015	1,427,012	5,175,306	6,602,318
Change in unrealised gains related to financial instruments held at 31 December 2015	165,394	281,628	447,022

Movement in assets and liabilities in Level 3 during year ended 31 December 2015

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
At 1 January 2015	2,079	5,515,017	3,627,635	9,144,731
Total (gains)/loss recognised in profit or loss	(1,315)	1,326,194	383,267	1,708,146
Purchases	(127,169)	(1,261,352)	—	(1,388,521)
Sales	130,229	2,254,885	—	2,385,114
Issuances	—	52,928	3,279,089	3,332,017
Settlements	(1,260)	(2,141,654)	(2,991,020)	(5,133,934)
Transfers in to Level 3	5,252	210,651	246,678	462,581
Transfers out of Level 3	(2,743)	(1,050,211)	(1,408,825)	(2,461,779)
At 31 December 2015	5,073	4,906,458	3,136,824	8,048,355
Change in unrealised losses related to financial instruments held at 31 December 2015	126	122,604	127,683	250,413

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

Movement in assets and liabilities in Level 3 during the prior year

Financial assets	Debt and equity instruments	Derivative receivables	Total financial assets
	$'000	$'000	$'000
At 1 January, 2014	5,231,393	5,793,058	11,024,451
Total (loss)/gains recognised in profit or loss	(140,608)	2,127,714	1,987,106
Purchases	9,052,314	1,301,508	10,353,822
Sales	(6,880,030)	(514,316)	(7,394,346)
Issuances	98,364	(16,919)	81,445
Settlements	(1,289,894)	(2,090,697)	(3,380,591)
Transfers in to Level 3	1,946,716	227,229	2,173,945
Transfers out of Level 3	(2,309,142)	(284,933)	(2,594,075)
At 31 December 2014	5,709,113	6,542,644	12,251,757
Change in unrealised (losses)/gains related to financial instruments held at 31 December 2014	(395,475)	493,499	98,024

Financial liabilities	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
	$'000	$'000	$'000	$'000
At 1 January, 2014	58,309	5,168,694	3,946,106	9,173,109
Total (gains)/loss recognised in profit or loss	(18,256)	1,444,602	(411,283)	1,015,063
Purchases	(159,728)	(1,599,856)	—	(1,759,584)
Sales	166,393	4,586,881	—	4,753,274
Issuances	23	392,414	3,409,667	3,802,104
Settlements	—	(4,333,573)	(3,375,807)	(7,709,380)
Transfers in to Level 3	4,617	614,676	313,513	932,806
Transfers out of Level 3	(49,279)	(758,821)	(254,561)	(1,062,661)
At 31 December 2014	2,079	5,515,017	3,627,635	9,144,731
Change in unrealised gains/(losses) related to financial instruments held at 31 December 2014	413	(518,251)	408,852	(108,986)

Realised and unrealised gains/(losses) are reported in trading profits in the income statement.

Transfers between levels for instruments carried at fair value on a recurring basis

For the years ended 31 December 2015 and 2014, there were no significant transfers between levels 1 and 2.

During the year ended 31 December 2015, transfers from level 3 to level 2 included the following:

- $1.6 billion of assets driven by a decrease in the significance of the unobservable inputs for equity options;
- $0.7 billion of assets and $0.9 billion of liabilities driven by an increase in observability of equity options;
- $0.6 billion of assets and $0.6 billion of liabilities driven by a decrease in the significance of the unobservable inputs for structured notes and offsetting credit hedges;
- $0.4 billion of assets and $0.4 billion of liabilities driven by an increase in observability of interest rate options; and
- $0.3 billion of assets driven by a decrease in the significance of the unobservable inputs for loans.

All transfers are assumed to occur at the beginning of the period in which they occur.

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

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 securities purchased under agreements to resell, cash and balances at central banks; debtors; other assets; fixed assets; trade creditors and other liabilities. The Company has $206.9 billion (2014: $212.6 billion) of current financial assets and $205.9 billion (2014: $218.1 billion) of current financial liabilities that are not measured at fair value, including loans and advances to customers of $3.3 billion (31 December 2014: $2.1 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.

31. 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	Financial Instruments	Cash and security collateral	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2015						
Financial assets:						
Securities purchased under agreements to resell and securities borrowed [1]	208,797,638	(56,922,267)	151,875,371	—	(151,875,371)	—
Financial assets held for trading [2]	327,497,646	(27,889,824)	299,607,822	(161,820,645)	(15,594,857)	122,192,320
Total	536,295,284	(84,812,091)	451,483,193	(161,820,645)	(167,470,228)	122,192,320
Financial liabilities:						
Securities sold under agreements to repurchase and securities loaned [1]	133,760,135	(56,922,267)	76,837,868	—	(76,837,868)	—
Financial liabilities held for trading	289,961,140	(26,602,670)	263,358,470	(165,383,416)	(12,032,086)	85,942,968
Total	423,721,275	(83,524,937)	340,196,338	(165,383,416)	(88,869,954)	85,942,968

31. 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	Financial Instruments	Cash and security collateral	Net amount
	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2014						
Financial assets:						
Securities purchased under agreements to resell and securities borrowed [1]	215,189,907	(53,185,508)	162,004,399	—	(162,004,399)	—
Financial assets held for trading	343,722,854	(39,189,039)	304,533,815	(156,719,807)	(16,436,435)	131,377,573
Total	558,912,761	(92,374,547)	466,538,214	(156,719,807)	(178,440,834)	131,377,573
Financial liabilities:						
Securities sold under agreements to repurchase and securities loaned [1]	132,241,898	(53,185,508)	79,056,390	—	(79,056,390)	—
Financial liabilities held for trading	304,867,941	(38,787,606)	266,080,335	(163,996,814)	(9,159,428)	92,924,093
Total	437,109,839	(91,973,114)	345,136,725	(163,996,814)	(88,215,818)	92,924,093

[1] 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 $213,882 million (2014: $220,703 million). The fair value of securities sold under agreements to repurchase and securities loaned pledged to secure liabilities, prior to netting adjustments, is $140,138 million (2014: $132,216 million).

The fair value of the security collateral in respect of the above securities financing transactions is, in aggregate, greater than the net amounts reported on balance sheet, and therefore, the related amounts not offset have been limited to the inclusion of cash collateral to the extent of the net balance sheet amount.

[2] Included within "Amounts offset" are the respective collateral payables and receivables with certain clearing counterparties.

32. Pensions

During the year, the Company was involved in the following pension schemes in the UK:

- JPMorgan UK Pension Plan ("UKP") - a defined contribution scheme (as a participating employer).
- JPMC UK Retirement Plan - a defined benefit scheme.
- JPMorgan Cazenove (1987) Pension scheme ("UKS") - a defined benefit scheme (as a participating employer).

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 2015 amounted to $8,165,000 (2014: $11,799,000). The charge for the year through the income statement was $1,620,000 (2014: $1,949,000), and total gain recognised through statement of comprehensive income was $3,297,000 (2014: loss of $10,928,000).

JPMorgan UK Pension Plan

The Company participates in the JPMorgan UK Pension Plan, a defined contribution scheme operated by the Group, which is open to additional members and benefit accruals.

JPMC UK Retirement Plan

The Group maintains a defined benefit plan that is closed to additional benefit accruals known as the JPMC UK Retirement Plan. Whilst the Company is not a participating employer in this plan, it does have certain obligations under a Withdrawal Agreement, dated 24 May 2011, that was entered into in relation to J.P. Morgan Services LLP ("LLP"), a group 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 calculated in accordance with paragraph 5(2) of Schedule 1A to the Occupational Pension Schemes (Employer Debt) Regulations 2005 (as amended) with effect from 1 June 2011. The Company was not required to make any payments immediately or in relation to the ongoing funding of the plan.

32. Pensions (continued)

JPMC UK Retirement Plan (continued)

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
- Any other date agreed between the Company and the Trustee of the Plan

JPMorgan Cazenove (1987) Pension Scheme

The JPMorgan Cazenove (1987) Pension Scheme ("UKS") is an ongoing defined benefit plan. The Company has been a principal employer in relation to UKS plan since August 2012. In December 2014, the Company further agreed to indemnify its indirect subsidiary, JPMorgan Cazenove Service Company, the previous employer, against 97.24% of JPMorgan Service Company's liabilities in respect of the J.P. Morgan Cazenove (1987) Pension Scheme. The Company is therefore considered a legally sponsoring employer in accordance with the requirements of IAS 19.

The principal assumptions adopted for the valuation of the UKS at 31 December 2015 were as follows:

	2015
	% per annum
Discount rate	3.7
Rate of salary increase	4.3
Rate of price inflation	3.3
Rate of pension increases	2.9

Assumed life expectancy on retirement at age 65 were as follows:

	2015
	years
Longevity at age 65 for current pensioners	
- Male	24
- Female	25
Longevity at age 65 for future pensioners	
- Male	26.6
- Female	26.9

The movements in the UKS' liability for the year ended 31 December 2015 was as follows:

	2015
	$'000
Benefit obligation at beginning of the year	551,363
Current service costs	2,333
Interest costs	19,168
Actuarial gain	(33,455)
Benefits paid from plan/ Company	(18,120)
Exchange rate changes	(24,749)
Benefit obligation at end of the year	496,540

32. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

The movements in the UKS' assets for the year ended 31 December 2015 was as follows:

	2015
	$'000
Fair value of plan assets at beginning of year	484,412
Expected return on plan assets	16,961
Actuarial loss on plan assets	(16,586)
Employer contributions (including employer direct benefit payments)	7,208
Administrative expenses paid from plan assets	(836)
Benefits paid from plan/Company	(18,120)
Exchange rate changes	(22,182)
Fair value of plan assets at end of the year	450,857

The equity investments and bonds which are held in the plan assets are quoted and are valued at the current bid price in accordance with IAS 19.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumption is as follows:

	Change in assumption	Increase in assumption	Decrease in assumption
	%	% per annum	% per annum
Discount rate	0.25%	(5.03)%	5.28 %
Rate of salary increase	0.25%	0.01 %	(0.01)%
Rate of pension increase	0.25%	1.72 %	(1.68)%
Rate of price inflation	0.25%	2.97 %	(2.94)%
Post-retirement mortality assumption	Increase by one year	3.28 %	—

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant.

32. Pensions (continued)

JPMorgan Cazenove (1987) Pension Scheme (continued)

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.

Amounts recognised in the balance sheet arising from schemes that are wholly unfunded and those wholly or partly funded as at 31 December 2015 and 31 December 2014 were as follows:

	2015	2014
	$'000	$'000
Present value of wholly or partly funded obligations	496,540	551,363
Fair value of plan assets	450,857	484,412
Deficit for funded plans - net liability	45,683	66,951
Experience adjustments on plan assets	16,586	(26,616)
Experience adjustments on plan liabilities	(7,534)	(298)

Movements in the UKS income statement for the year ended 31 December 2015 are as follows:

	2015
	$'000
Current service cost	2,333
Interest cost	19,168
Expected return on plan assets	(16,961)
Administrative expenses paid from plan assets	836
Total pension cost recognised in the income statement	5,376
Exchange rate changes	(2,567)
Net amount recognised in the income statement	2,809

Movements in the UKS statement of other comprehensive income for the year ended 31 December 2015 are as follows:

	2015
	$'000
Actuarial gain immediately recognised	16,869

The asset allocation of the UKS defined benefit schemes was as follows:

	2015
	Percentage of plan assets (%)
Equity securities	34.8
Bond securities	63.3
Cash	1.9
	100

33. Share based payments

The ultimate parent of the Company, JPMorgan Chase & Co. (the "Group") has granted long-term stock-based awards to certain key employees under the 2005 Long-Term Incentive Plan (the "2005 Plan"). The 2005 Plan became effective on 17 May 2005, and was amended in May 2011. Under the terms of the amended 2005 plan, as of 31 December 2015, 266 million shares of common stock are available for issuance through May 2015. The amended 2005 Plan is the only active plan under which the Group is currently granting stock-based incentive awards. The 2005 Plan, plus prior Group plans and plans assumed as the result of acquisitions, are referred to collectively as the "LTI Plans" and such plans constitute the Group's stock-based incentive plans.

The Group 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 Group 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 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 SARs (stock appreciation rights), 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. The Group typically awards SARs to certain key employees once per year; the Group also periodically grants employee stock options and SARs to individual employees. The 2013, 2012 and 2011 grants of SARs to key employees vest rateably over five years (i.e., 20% per year) and awards contain clawback provisions similar to RSUs. The 2013, 2012 and 2011 grants of SARs contain full-career eligibility provisions. SARs generally expire 10 years after the grant date.

The following table summarises additional information about options and SARs outstanding as at 31 December 2015 and 31 December 2014:

	31 December 2015			31 December 2014		
	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	75	19.49	3.06	175	19.49	4.06
$20.01 - $35.00	—	—	—	50	34.78	0.80
$35.01 - $50.00	1,614	43.55	4.76	1,855	43.60	5.59
$50.01 and above	1	759.99	0.97	2	583.98	1.19
Total	1,690	42.63	4.68	2,082	41.77	5.34

33. Share based payments (continued)

Broad-based employee stock options

No broad-based employee stock options were granted in 2014 or in 2015. In prior years, awards were granted by the Group under the Value Sharing Plan, a non-shareholder-approved plan. For each grant, the exercise price was equal to the Group's common stock price on the grant date. The options become exercisable over various periods and generally expire 10 years after the grant date.

The weighted-average share price during the year ended 31 December 2015 was $63.83 (2014: $58.17).

The total expense for the year relating to share based payments was $231 million (2014: $251 million), all of which relates to equity settled share based payments.

34. Financial risk management

Risk management is an inherent part of the Group's (of which the Company is a part) business activities and the Company has adopted the same risk management policies and procedures as the Group as a whole. The Group and Company's risk management framework and governance structure provide comprehensive controls and ongoing management of the major risks. The Company employs a holistic approach to risk management to ensure the broad spectrum of risk types are considered in managing its business activities. The risk management framework creates a culture of risk awareness and personal responsibility throughout the entity where collaboration, discussion, escalation and sharing of information is promoted. The Company exercises oversight through the Board of Directors and delegation from the Board to various committees and sub-committees which are aligned to both the Group risk management framework and regulatory requirements.

An overview of the key aspects of risk management and use of financial instruments is provided below. A more detailed description of the policies and processes adopted by the Group may be found within the Group annual report.

Credit risk

Credit Risk refers to the risk of loss arising from a borrower, counterparty or obligor failing to meet its contractual obligations. The Company is exposed to credit risk through lending and capital markets activities.

Governance

Credit risk is managed by the Group on a global as well as at a Company level. The Group has developed policies and practices that the Company is subject to, that are designed to preserve the independence and integrity of the approval and decision making process of extending credit. The policies ensure that credit risks are assessed accurately, approved properly, monitored regularly and managed actively at the transaction, client and portfolio levels. In addition, the Company has its own credit risk policy, which contains standards pertaining to governance including: oversight of transactions originated offshore, management of concentrations, credit risk limits and new business initiative approvals. The Company's credit risk policy is reviewed by the DRPC and approved by the board.

The Company has a designated Chief Risk Officer, who is also a Board member of the Company. Credit Executives within the Group, who approve extensions of credit for the Company report to the Company's Chief Risk Officer and ultimately report to the Head of wholesale Credit Risk. Each Line of Business within the Group has its own independent credit risk management function, reporting to the Group Chief Risk Officer.

Methodology

The Credit Risk Management function identifies, measures, limits, manages and monitors credit risk across our businesses. To measure credit risk, the Company 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, volatility in trading markets, risk measurement parameters and risk assessment 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.

Based on these factors and related market-based inputs, the Company estimates credit losses for its exposures. Expected credit losses inherent in the wholesale loan portfolios are reflected in the provision for loan losses, and probable credit losses inherent in lending-related commitments are reflected in the provision for lending related commitments. These losses are estimated using empirical statistical analyses and other factors. In addition, potential and unexpected credit losses are reflected in the allocation of credit risk capital and represent the potential volatility of actual losses relative to the established allowances for loan losses and lending related commitments. The analyses for these losses include stress testing (considering alternative economic scenarios) as described in the Stress testing section below. The methodologies used to estimate credit losses depend on the characteristics of the credit exposure, as described below.

34. Financial risk management (continued)

Credit risk (continued)

Risk-rated exposure

Risk-rated portfolios are generally held in Corporate & Investment Bank. For the risk rated portfolio, credit loss estimates are based on estimates of the probability of default ("PD") and loss severity given a default. The estimation process begins with risk-ratings that are assigned to each loan facility to differentiate risk within the portfolio. These risk ratings are reviewed regularly by Credit Risk management and revised as needed to reflect the borrower's current financial position, risk profile and related collateral. The probability of default is the likelihood that a loan will default and not be fully repaid by the borrower. The loss given default ("LGD") is the estimated loss on the loan that would be realised upon the default of the borrower and takes into consideration collateral and structural support for each credit facility. The probability of default is estimated for each borrower, and a loss given default is estimated for each credit facility. The calculations and assumptions are based on historic experience, financial and economic analysis and management judgement and are reviewed regularly.

Stress testing

Stress testing is important in measuring and managing credit risk in the Company's credit portfolio. The Company uses stress testing to inform decisions on setting risk appetite both at a Company and line of business level. Stress testing results across a range of scenarios and products are regularly reported to relevant management committees providing additional insight into credit portfolio's sensitivities under stress and measurement against risk appetite. This additional insight supports timely management notification and action, when required.

Risk monitoring and management

The Company has adopted and applied the policies and practices developed by the Group. The Groupwide policy framework is designed to preserve the independence and integrity of the approval and decision-making process of extending credit to ensure credit risks are assessed accurately, approved properly, monitored regularly and managed actively at both the transaction and portfolio levels. 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 line of businesses.

Wholesale 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.

Management of the Company's wholesale 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
- Master netting agreements
- Collateral and other risk-reduction techniques

Risk reporting

To enable monitoring of credit risk and effective decision-making, aggregate credit exposure, concentration levels and risk profile changes are reported regularly to senior Credit Risk Management. Detailed portfolio reporting of industry, product and geographic concentrations occurs monthly, and the appropriateness of the allowance for 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 management and the relevant Board of Directors as appropriate.

Credit exposures

<u>Balance sheet exposure by financial asset</u>

The table below presents the Company's gross balance sheet exposure to financial assets and net balance sheet exposure after taking account of assets captured by market risk in the Company's risk management process, enforceable master netting agreements and the value of collateral received in respect of financial assets.

34. Financial risk management (continued)

Credit risk (continued)

Credit exposures (continued)

Balance sheet exposure by financial asset (continued)

Amounts in respect of master netting agreements include the offsetting of derivative assets with liabilities. Derivatives are reported on a net-by-counterparty basis when a legal right of setoff exists under an enforceable netting agreement and the requirements of IAS 32 are met. Securities purchased under agreements to resell and securities borrowed are reported on a net-by-counterparty basis, when the requirements of IAS 32 are met.

	Gross balance sheet exposure [1]	Assets captured by market risk	Master netting agreements and other	Cash & security collateral [4]	Net balance sheet exposure	*Net balance sheet exposure held with:* Group undertakings	External counter parties
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2015							
Financial assets:							
Cash and balances at central banks	65,809	—	—	—	65,809	—	65,809
Loans and advances to banks	4,673,268	—	—	—	4,673,268	1,812,893	2,860,375
Loans and advances to customers	3,292,824	—	—	(2,928,819)	364,005	—	364,005
Securities purchased under agreements to resell and securities borrowed [2]	151,875,371	—	—	(151,875,371)	—	—	—
Financial assets held for trading	299,607,822	(90,975,293)	(165,934,843)	(15,594,857)	27,102,829	—	27,102,829
Financial assets designated at fair value through profit or loss	125,285	(125,285)	—	—	—	—	—
Debtors	42,987,844	—	—	—	42,987,844	11,487,402	31,500,442
Other assets	477,844	—	—	—	477,844	—	477,844
Total [3]	503,106,067	(91,100,578)	(165,934,843)	(170,399,047)	75,671,599	13,300,295	62,371,304

	Gross balance sheet exposure [1]	Assets captured by market risk	Master netting agreements and other	Cash & security collateral [4]	Net balance sheet exposure	*Net balance sheet exposure held with:* Group undertakings	External counter parties
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
At 31 December 2014							
Financial assets:							
Cash and balances at central banks	52,968	—	—	—	52,968	—	52,968
Loans and advances to banks	5,406,082	—	—	—	5,406,082	4,431,028	975,054
Loans and advances to customers	2,058,170	—	—	(1,284,000)	774,170	—	774,170
Securities purchased under agreements to resell and securities borrowed [2]	162,004,399	—	—	(162,004,399)	—	—	—
Financial assets held for trading	304,533,815	(91,672,939)	(167,108,504)	(16,436,435)	29,315,937	—	29,315,937
Financial assets designated at fair value through profit or loss	70,888	(70,888)	—	—	—	—	—
Debtors	38,990,935	—	—	—	38,990,935	7,077,680	31,913,255
Other assets	597,736	—	—	—	597,736	—	597,736
Total [3]	513,714,993	(91,743,827)	(167,108,504)	(179,724,834)	75,137,828	11,508,708	63,629,120

1) Of the above on-balance sheet assets, $217,205 million (2014: $214,813 million) is held with other Group undertakings.

2) 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, and therefore, the related amounts included in the cash and security collateral column have been limited to the inclusion of cash collateral to the extent of the net balance sheet amount.

3) Off balance sheet exposure consists of lending commitments of $14,019 million (2014: $10,874 million).

4) Cash and security collateral received in respect of financial assets held for trading reported in the column is limited to net balance sheet exposure, after taking account of master netting and other arrangements.

34. Financial risk management (continued)

Credit risk (continued)

Credit exposures (continued)

Balance sheet exposure by financial asset (continued)

The Company's credit exposures and credit risk mitigants are further described below:

Financial assets held for trading
Debt and equity instruments are captured by market risk and therefore are not considered in the table above to arrive at net credit risk exposure. Derivatives are reported at fair value on a gross by counterparty basis in the Company's financial statements unless the Company has current legal right of set off and also intends to settle on a net basis. The majority of the credit risk exposure is mitigated by cash collateral, margin arrangements and enforceable master netting arrangements. The counterparty credit risk on the derivative portfolio is generally mitigated by arrangements provided to the Company by JPMorgan Chase Bank N.A.

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 therefore significantly lower than the amounts recorded on the balance sheet, which for the substantial majority represent contractual value before consideration of any collateral received. The Company also has a potential credit exposure on repurchase agreements and securities loaned, which are liabilities on its balance sheet, to the extent that the value of collateral pledged to the counterparty for these transactions exceeds the amount of cash or collateral received.

Debtors and other assets
The Company is exposed to credit risk from its debtors through its amounts due from brokers/dealers, customers and Group undertakings. These primarily comprise receivables related to cash collateral paid to counterparties in respect of derivative financial instruments. In addition, these balances also include receivables related to sales of securities which have traded, but not yet settled. These receivables generally have minimal credit risk due to the low probability of clearing organisation default and the short-term nature of receivables related to securities settlements which are predominately on a delivery versus payment basis. Other assets primarily include accrued interest on trading assets and therefore are captured by market risk.

Loans and advances to banks
The Company places substantially all of its deposits with banks, which are of investment grade to mitigate credit risk exposure.

Financial assets designated at fair value
Financial assets designated at fair value through profit or loss represents unlisted equity securities and are captured by market risk and therefore are removed from the table above to arrive at net credit risk exposure.

Cash and balances at central banks
Cash and balances with central banks include interest-bearing deposits. These are of investment grade.

Loans and advances to customers
The table below presents the Company's credit exposure to loans and advances to customers. The ratings scale is based on the Groups internal risk ratings, which generally correspond to the ratings as defined by S&P and Moody's.

	2015	**2014**
	$'000	**$'000**
Credit rating		
AAA to AA-	8,549	—
A+ to A-	184,710	339,508
BBB+ to BBB-	1,559,354	425,338
BB+ to BB-	904,589	580,220
B+ to B-	623,060	698,326
CCC+ & below	12,562	14,778
	3,292,824	2,058,170

There were no material past due or impaired loans and advances to customers as at 31 December 2015 (2014: nil).

34. Financial risk management (continued)

Credit risk (continued)

Analysis of concentration of 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.

Geographical credit risk concentration	2015	2014
	$'000	$'000
Europe [1]	2,974,951	1,692,996
Rest of the world	317,873	365,174
	3,292,824	2,058,170

[1] Includes balances with Group undertakings.

Industry credit risk concentration	2015	2014
	$'000	$'000
Automotive	303,195	12,163
Banks and financial services	—	203,693
Consumer and retail	161,075	37,652
Healthcare	—	203,173
Oil & gas	184,994	201,162
Real estate	1,632,555	552,213
Technology, media and telecommunications	318,109	9,081
Utilities	251,269	176,558
Other	441,627	662,475
	3,292,824	2,058,170

Liquidity risk

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

Liquidity risk oversight

The Group has a liquidity risk oversight function whose primary objective is to provide assessment, measurement, monitoring, and control of liquidity risk across the Group. Liquidity risk oversight is managed through a dedicated groupwide Liquidity Risk Oversight group. The Chief Investment Office ("CIO"), Treasury, and Corporate ("CTC") Chief Risk Officer ("CRO"), as part of the independent risk management function, has responsibility for groupwide Liquidity Risk Oversight. Liquidity Risk Oversight's responsibilities include but are not limited to:

- Establishing and monitoring limits, indicators, and thresholds, including liquidity appetite tolerances;
- Defining, monitoring, and reporting internal groupwide and legal entity stress tests, and monitoring and reporting regulatory defined stress testing;
- Monitoring and reporting liquidity positions, balance sheet variances and funding activities;
- Conducting ad hoc analysis to identify potential emerging liquidity risks.

Risk governance and measurement

Specific committees responsible for liquidity governance include the groupwide Asset Liability Committee ("ALCO"), line of business and regional ALCOs, CTC Risk Committee, the Company Risk Policy Committee of the Board of Directors ("DRPC") and EMEA Risk Committee.

34. Financial risk management (continued)

Liquidity risk (continued)

Liquidity management

Treasury is responsible for liquidity management. The primary objectives of effective liquidity management are to ensure that the Group's core businesses are able to operate in support of client needs, meet contractual and contingent obligations through normal economic cycles as well as during stress events, and to manage optimal funding mix, and availability of liquidity sources. The Group manages liquidity and funding using a centralised, global approach in order to optimise liquidity sources and uses. In the context of the Group's liquidity management, Treasury is responsible for:

- Analysing and understanding the liquidity characteristics of the Group, lines of business and legal entities' assets and liabilities, taking into account legal, regulatory, and operational restrictions;
- Defining and monitoring groupwide and legal entity liquidity strategies, policies, guidelines, and contingency funding plans;
- Managing liquidity within approved liquidity risk appetite tolerances and limits;
- Setting transfer pricing in accordance with underlying liquidity characteristics of balance sheet assets and liabilities as well as certain off-balance sheet items.

The Company is regulated by the PRA and, from 1 October 2015, was expected to comply with the liquidity coverage ratio ("LCR") guidance set out in the Delegated Act (Commission delegated regulation (EU) 2015/61). The liquidity coverage ratio 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-day calendar day stress period. The LCR was required to be 80% at 1 October 2015, rising to 90% on 1 January 2017 until reaching the 100% minimum by 1 January 2018. At 31 December 2015, the Company was compliant with the fully phased-in LCR.

In December 2010, the Basel Committee introduced an additional measures of liquidity risk: the net stable funding ratio ("NSFR"), which is intended to measure the "available" amount of stable funding relative to the "required" amount of stable funding over a one-year horizon. The standards require that the NSFR be greater than 100%. Full compliance is expected to be required by 1 January 2018.

A regular internal assessment of the liquidity risk management framework is performed which informs the Board of the liquidity risks resulting from business activities in addition to the current and future funding needs of the Company.

Internal stress testing

Liquidity stress tests are intended to ensure sufficient liquidity for the Company under a variety of adverse scenarios. Results of stress tests are therefore considered in the formulation of the Company's funding plan and assessment of its liquidity position. Liquidity outflow assumptions are modelled across a range of time horizons and contemplate both market and idiosyncratic stress. Standard stress tests are performed on a regular basis and ad hoc stress tests are performed in response to specific market events or concerns. Stress scenarios are produced for JPMorgan Chase & Co. and the Group's major subsidiaries.

Contingency funding plan

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

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 MBS, and constitute a significant portion of the federal funds purchased and securities loaned or sold under purchase agreements. The directors believe that the Company's unsecured and secured funding capacity is sufficient to meet its on and off-balance sheet obligations.

34. Financial risk management (continued)

Liquidity risk (continued)

The following table provides details on the maturity of all financial liabilities:

	Less than 1 year 2015 $'000	More than 1 year 2015 $'000	Total 2015 $'000	Less than 1 year 2014 $'000	More than 1 year 2014 $'000	Total 2014 $'000
Securities sold under agreements to repurchase	65,522,171	—	65,522,171	56,839,790	711,401	57,551,191
Securities loaned	11,315,697	—	11,315,697	21,505,199	—	21,505,199
Financial liabilities held for trading	263,358,470	—	263,358,470	266,080,335	—	266,080,335
Trade creditors	28,559,675	—	28,559,675	35,114,727	—	35,114,727
Amounts owed to Group undertakings	80,211,917	180,000	80,391,917	78,372,709	180,000	78,552,709
Other liabilities	17,604,645	—	17,604,645	24,593,480	—	24,593,480
	466,572,575	180,000	466,752,575	482,506,240	891,401	483,397,641

The vast majority of short term funding transactions by way of repurchase agreements and stock lending have short-dated maturities, typically less than one month. Similarly, trade creditors predominantly include cash collateral received and unsettled trades, which have short-dated maturities. Financial liabilities held for trading primarily include derivatives and short positions, and are ordinarily classified as liabilities falling due within one month for the purpose of disclosure under IFRS 7 'Financial Instruments: Disclosures'. Amounts owed to Group undertakings include cash collateral received from Group undertakings, which are short-dated, and revolving committed facilities with other Group undertakings, which typically have a contractual maturity of up to six months.

The Company has also entered into revolving committed liquidity facilities with other Group undertakings to manage liquidity risk.

Market risk

Market risk is the exposure to an adverse change in the market value of financial instruments caused by a change in market parameters. The primary categories of market parameters are:

- Interest Rates - Interest rate risk primarily results from exposure to changes in the level, slope and curvature of the yield curve and the volatility of interest rates;
- Foreign Exchange Rates - Foreign exchange rate risk results from exposure to changes in prices and volatility of currency rates;
- Equity Prices - Equity price risk arises from exposure to changes in prices and volatility of individual equities, equity baskets and equity indices;
- Credit Spreads - Credit spreads are the difference between yields on corporate debt subject to default risk and government bonds free of such risk; and
- Commodity Prices - Commodity price risk results from exposures to changes in prices and volatility of commodities, such as natural gas, crude oil, petroleum products, precious and base metals and electricity.

Market risk management

The Company's Board is ultimately responsible for overseeing the management of market risk. The Company has a designated Chief Risk Officer and Market Risk Officer who have responsibilities in relation to market risk management. The Market Risk management function is an independent risk management function that identifies and monitors market risks throughout the Group and defines market risk policies and procedures. The Market Risk function reports to the Group's Chief Risk Officer.

The Market Risk management function seeks to control risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the Group and the Company's market risk profile for senior management, the Board of Directors and regulators. The Market Risk management function is responsible for the following functions:

- Establishment of a market risk policy framework;
- Independent measurement, monitoring and control of line of business market risk;
- Definition, approval and monitoring of limits; and
- Performance of stress testing and qualitative risk assessments.

34. Financial risk management (continued)

Market risk (continued)

Risk identification and classification

Each line of business is responsible for the management of the market risks within its units. The independent risk management group is responsible for overseeing each line of business and is charged with ensuring that all material market risks are appropriately identified, measured, monitored and managed in accordance with the risk policy framework set out by the Market Risk.

Risk measurement

Because no single measure can reflect all aspects of market risk, the Company uses various metrics, both statistical and non-statistical, including:

- Value-at-Risk (VaR)
- Economic-value stress testing
- Non-statistical risk measures
- Risk identification for large exposures

Value-at-risk

The Company utilises Value-at risk ("VaR"), a statistical risk measure, to estimate the potential loss from adverse market moves in a normal market environment The Group has a single overarching VaR model framework used for calculating Risk Management VaR and Regulatory VaR.

The framework is employed across the Group using historical simulation based on data for the previous 12 months. The framework's approach assumes that historical changes in market values are representative of the distribution of possible outcomes in the immediate future. The Company believes the use of Risk Management VaR provides a stable measure of VaR that closely aligns to the day-to-day risk management decisions made by the lines of business and provides necessary/ appropriate information to respond to risk events on a daily basis.

Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. The Group's VaR model calculations are periodically evaluated and enhanced in response to changes in the composition of the Group's portfolios, changes in market conditions, improvements in the Group's modelling techniques and other factors. Model changes go through a review and approval process by the Model Review Group prior to implementation into the operating environment.

Economic value stress testing

While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behaviour as an indicator of losses, stress testing is intended to capture the Company's exposure to unlikely but plausible events in abnormal markets. The Company runs 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 framework uses a grid-based approach, which calculates multiple magnitudes of stress for both market rallies and market sell-offs for each risk factor. Stress-test results, trends and explanations based on current market risk positions are reported to the Company's senior management and to the lines of business 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 Risk Committees. While most of the scenarios estimate losses based on significant market moves, such as an equity market collapse or credit crisis, the Company also develops scenarios to quantify risk arising from specific portfolios or concentrations of risks, which attempt to capture certain idiosyncratic market movements. Scenarios may be redefined on an ongoing basis to reflect current market conditions. Ad hoc scenarios are run in response to specific market events or concerns.

Non-statistical risk measures

Non-statistical risk measures include sensitivities to variables used to value positions, such as credit spread sensitivities, interest rate basis point values and market values. These measures provide granular information on the Company's market risk exposure. They are aggregated by line-of-business and by risk type and are used for tactical control and monitoring limits. Exposures to credit families using default exposure assuming zero recovery rate are also monitored through the single name exposure framework.

34. Financial risk management (continued)

Market risk (continued)

Risk identification for large exposures (RIFLEs)

The Company has certain potential low-probability but plausible and material, idiosyncratic risks not well-captured by its other existing risk analysis and reporting for credit, market and other risks. Individuals who manage risk positions in the Company's LOBs are responsible for identifying potential losses that could arise from specific, unusual events, such as a potential change in tax legislation, or a particular combination of unusual market moves. Responsibility for identifying and maintaining RIFLEs rests with the line of business.

Profit & Loss (P&L) Drawdowns

P&L drawdowns are tools used to highlight trading losses above certain levels of risk tolerance. P&L drawdowns are defined as the decline in net profit and loss since the year-to-date peak revenue level.

Risk monitoring and control

Market risk limits are employed as the primary control for ensuring that the Company's market risk activities and risk appetite are aligned. Limits are established by the Market Risk management function in agreement with the lines of business. Limits are reviewed regularly by the Market Risk management function and updated as appropriate. Limit utilisations and breaches are reported daily. In addition, the Market Risk management function produce, and distribute relevant daily, weekly and monthly reports to various risk committees and business heads to allow them to exercise their oversight responsibilities.

The table below shows the result of the Company's risk management VaR measures using a 95% confidence level.

	2015			2014			At 31 December	
	Avg.	Min	Max	Avg.	Min	Max	2015	2014
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
95 % VaR	15,937	12,887	22,937	14,973	7,582	23,784	14,966	16,900

The Company's market risk profile is net long risk across fixed income assets and commodities and short in equity and local currency / long USD FX markets. The Company's year end VaR was mainly driven by credit exposure from fixed income assets which are generally held in cash securities across developed, emerging and securitised product markets; offset by long interest rates and short equities.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed processes or systems or due to external events that are neither market nor credit-related. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, inappropriate behaviour of employees, failure to comply with applicable laws and regulations or failure of vendors to perform in accordance with their arrangements. These events could result in financial losses, litigation and regulatory fines, as well as other damage to the Firm. The goal is to keep operational risk at appropriate levels, in light of the Firm's financial strength, the characteristics of its businesses, the markets in which it operates, and the competitive and regulatory environment to which it is subject.

Firmwide Operational Risk Management Framework at JPMC

To monitor and control operational risk, the Firm maintains an overall Operational Risk Management Framework ("ORMF") which comprises governance oversight, risk assessment, capital measurement, reporting and monitoring. The ORMF is intended to enable the Firm to function with a sound and well-controlled operational environment.

Risk Management is responsible for prescribing the ORMF to the lines of business and corporate functions and to provide independent oversight of its implementation. Operational Risk Officers ("OROs") are appointed across each line of business and corporate function to provide this independent oversight.

The lines of business and corporate functions are responsible for adherence to the ORMF. The Firmwide Oversight and Control Group, comprised of dedicated control officers within each of the lines of business and corporate functional areas, as well as a central oversight team, is responsible for day to day review and monitoring of ORMF execution.

35. Capital management

A strong capital position is essential to the firm's business strategy and competitive position. The firm's capital strategy focuses on long-term stability, which enables the firm to build and invest in market-leading businesses, even in a highly stressed environment. Accordingly, its Capital Management Framework is designed to ensure that the Company is adequately capitalised at all times in relation to:

- minimum risk-based regulatory capital requirements (Pillar 1 capital under the Capital Requirements Regulation and Directive (CRD IV), plus Pillar 2 / Individual Capital Guidance set by the PRA and relevant CRD IV buffers);
- minimum leverage requirements (calculated per the final rules in the Capital Requirements Regulation post the delegated act Disclosure requirement applicable from 1 January 2015 and minimum leverage requirement applicable from 1 January 2018 (October 2014));
- the risks faced by the Company, through regular comparisons of regulatory and internal capital requirements; 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 framework used to manage capital 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 daily JPMS plc capital adequacy is reported four days a week. Reporting frequency is reviewed on a quarterly basis to ensure we maintain appropriate oversight in line with the Capital environment. capital adequacy calculations and internal reporting, monthly and ad hoc capital projections, and capital usage limits by business area. Escalation of issues is driven by a framework of specific triggers, set in terms of capital and leverage ratios, movements in those ratios, and other measures.

Risk management is an inherent part of the Group's (of which the Company is a part) business activities and the Company has adopted similar risk management policies and procedures to the Group as a whole, in addition to ensuring the adherence to local regulatory requirements and risk appetite. 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. 'Reverse stress testing' 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.

The composition of capital of the Company as of 31 December, 2015 is as follows. All tiers of capital are shown net of applicable deductions.

	31 December 2015	31 December 2014
	$'000	**$'000**
Common Equity Tier 1 (Equity share capital and reserves)	28,642,341	24,431,539
Other Tier 1 (Preference shares and preferred ordinary shares)	3,607,226	4,122,524
Tier 2 (Preference shares and subordinated loan)	3,616,175	3,136,877
Total capital resources	**35,865,742**	**31,690,940**
Pillar 1 capital requirement (unaudited)	13,845,058	17,052,963
Excess of total capital resources over Pillar 1 capital requirements (unaudited)	22,020,684	14,637,977
Pillar 1 capital ratio (unaudited)	20.7%	14.9%

As of 31 December 2015 and 2014, the Company was adequately capitalised and met all external capital requirements. Capital resources includes unaudited profits.

The Company has made all necessary disclosures on the Group website as required by the Capital Requirements Regulation. These disclosures are not subject to external audit.

36. Transfer 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 counterparty's recourse is generally not limited to the transferred assets. The fair value of the collateral and the carrying amounts of the liabilities is disclosed in notes 23 and 24 of these financial statements.

The Company also enters into certain other transactions, whereby the assets are transferred but the transfer does not meet the derecognition requirements and therefore the assets continue to be recognised on the balance sheet together with the related liability. The following is a summary of the fair value of the assets and carrying amount of related liabilities:

Fair value of the assets

	Fair value of the assets		Carrying amount of the related liability	
	2015	2014	**2015**	2014
	$'000	$'000	**$'000**	$'000
Financial assets held for trading	7,422,000	13,825,000	7,224,000	13,342,000

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 a special purpose vehicle (SPV) with limited other assets and enters into a derivative with the SPV 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 total notional and the market value of all derivatives executed by the Company with such SPVs (including those with such SPVs to which the Company did not transfer any financial assets) amounted to $8.118 billion and $403.5 million as of 31 December 2015 ($6.160 billion and $293.6 million as of 31 December 2014).

37. Post balance sheet events

On 30 March 2016, the Company received a dividend of $600,000,000 from its wholly-owned subsidiary, J.P. Morgan Europe Limited.

On 13 April 2016, the Board approved interim dividends of $358,107,690 on preference shares, $5,261,655 on preferred ordinary shares and $686,630,655 on ordinary shares of the Company.

38. Transition to FRS 101

The following reconciliations set out the impact on the Company's balance sheet and statement of comprehensive income as a result of adopting FRS 101 for the reporting period 31 December 2014, as well as the impact to equity as at 1 January 2014:

Reconciliation of the balance sheet

		At 1 January 2014			At 31 December 2014		
	Notes	As previously stated	Effect of transition	FRS 101 (as restated)	As previously stated	Effect of transition	FRS 101 (as restated)
		$'000	$'000	$'000	$'000	$'000	$'000
Assets							
Cash and cash equivalents at central banks		57,761	—	57,761	52,968	—	52,968
Loans and advances to banks		4,841,934	—	4,841,934	5,406,082	—	5,406,082
Loans and advances to customers		1,220,424	—	1,220,424	2,058,170	—	2,058,170
Securities purchased under agreements to resell		138,350,647	—	138,350,647	145,442,135	—	145,442,135
Securities borrowed		19,500,244	—	19,500,244	16,562,264	—	16,562,264
Financial assets held for trading	a,b	163,584,839	46,178	163,631,017	286,831,457	17,702,358	304,533,815
Financial assets designated at fair value through profit or loss		20,090	—	20,090	70,888	—	70,888
Debtors	c	35,843,516	—	35,843,516	44,953,472	(5,962,537)	38,990,935
Other assets	b	626,510	—	626,510	677,863	(9,025)	668,838
Investments in Group undertakings	d	3,625,233	—	3,625,233	3,391,615	66,951	3,458,566
Intangible assets	e	1,718,138	(1,718,138)	—	2,659,021	(2,659,021)	—
Tangible fixed assets		1,497	—	1,497	2,225	—	2,225
Total assets		**369,390,833**	**(1,671,960)**	**367,718,873**	**508,108,160**	**9,138,726**	**517,246,886**
Liabilities							
Securities sold under agreements to repurchase		69,032,284	—	69,032,284	57,551,191	—	57,551,191
Securities loaned		20,273,501	—	20,273,501	21,505,199	—	21,505,199
Financial liabilities held for trading	a,b	126,420,435	(28,254)	126,392,181	248,021,670	18,058,665	266,080,335
Trade creditors	c	41,277,291	—	41,277,291	41,077,264	(5,962,537)	35,114,727
Amounts owed to Group undertakings		67,770,303	—	67,770,303	78,552,709	—	78,552,709
Other liabilities	a,d	12,472,818	—	12,472,818	25,717,770	(334,482)	25,383,288
Total liabilities		**337,246,632**	**(28,254)**	**337,218,378**	**472,425,803**	**11,761,646**	**484,187,449**
Capital and reserves							
Called-up share capital		16,768,470	—	16,768,470	16,884,410	—	16,884,410
Share premium account		6,683,861	—	6,683,861	8,117,257	—	8,117,257
Other reserves	f	1,603,414	—	1,603,414	1,778,100	17,083	1,795,183
Retained earnings	b,e,f	7,088,456	(1,643,706)	5,444,750	8,902,590	(2,640,003)	6,262,587
Total shareholders' funds		**32,144,201**	**(1,643,706)**	**30,500,495**	**35,682,357**	**(2,622,920)**	**33,059,437**
Total liabilities and shareholders' funds		**369,390,833**	**(1,671,960)**	**367,718,873**	**508,108,160**	**9,138,726**	**517,246,886**

38. Transition to FRS 101 (continued)

Reconciliation of total comprehensive income for the year

		Year ended 31 December 2014		
	Notes	As previously stated	Effect of transition	FRS 101 (as restated)
		$'000	$'000	$'000
Interest receivable and similar income		2,182,600	—	2,182,600
Interest payable and similar charges		(1,681,529)	—	(1,681,529)
Net interest income		**501,071**	—	**501,071**
Fees and commissions receivable - net		2,573,920	—	2,573,920
Trading profit	a	2,376,686	(29,306)	2,347,380
Other operating expense		(44,015)	—	(44,015)
Dividend income		941,027	—	941,027
Total operating income		**6,348,689**	**(29,306)**	**6,319,383**
Administrative expenses		(3,115,110)	—	(3,115,110)
Amortisation of intangible assets	e	(100,329)	100,329	—
Depreciation of tangible fixed assets		(593)	—	(593)
Profit on ordinary activities before taxation		**3,132,657**	**71,023**	**3,203,680**
Tax on profit on ordinary activities	b,f	(388,523)	(26,108)	(414,631)
Profit for the financial year		**2,744,134**	**44,915**	**2,789,049**
Other comprehensive income: items that may be reclassified subsequently to profit or loss				
Non-cash dividend - Investment in Group undertaking		133,282	—	133,282
Non-cash dividend - Financial assets designated at fair value through profit and loss		49,351	—	49,351
		182,633	—	182,633
Other comprehensive income: items that will not be reclassified to profit or loss				
Actuarial loss on pension schemes		(10,928)	—	(10,928)
Tax effect of movement in pension reserve		1,912	—	1,912
		(9,016)	—	(9,016)
Other comprehensive income for the year, net of tax		**173,617**	**—**	**173,617**
Total comprehensive income for the year		**2,917,751**	**44,915**	**2,962,666**

Notes to the balance sheet reconciliation as at 1 January 2014 and 31 December 2014 and total comprehensive income for the year ended 31 December 2014:

a) The Company has reviewed the accounting treatment of derivative trades cleared on behalf of its clients and has concluded that the Company is considered a principal to the trades with the client and the clearing houses. As a result, the Company has recognised the mark-to-market value of these derivative trades of $14.9 billion (31 December 2014: $16.5 billion) on its balance sheet. The Company has further considered these trades for offsetting under IAS 32 'Financial Instruments: Presentation' and derivative assets and liabilities of $4.3 billion with certain counterparties have been netted. There was no impact to equity. The Company also reviewed netting for certain derivative trades cleared for its own business. This has resulted in a further adjustment of $1.1 billion as of 31 December 2014.

38. Transition to FRS 101 (continued)

Notes to the balance sheet reconciliation as at 1 January 2014 and 31 December 2014 and total comprehensive income for the year ended 31 December 2014 (continued):

b) On adoption of IFRS 13, certain valuation adjustments made under previous UK GAAP are no longer required. This has resulted in a net impact to equity as of 31 December 2014 of $36 million, of which $9 million related to tax (1 January 2014: net impact of $74 million).

c) Following a review of the Company's reporting of unsettled trades, the trade debtors and trade creditors balances as of 31 December 2014 have been adjusted by $6 billion, in line with the requirements of IAS 8.

d) As explained in note 32, the Company is considered a sponsoring employer in the JPMorgan Cazenove (1987) Pension scheme following its agreement to indemnify JPMorgan Cazenove Service Company, the previous employer against 97.24% of its liabilities in respect of the scheme. Therefore, the net pension liability of $67 million has been recognised on balance sheet as of 31 December 2014, with the corresponding increase in Investments in Group undertakings, and no impact to equity.

e) The Company has reviewed its accounting policy in respect of the business combinations involving entities under common control, i.e., within the Group and have decided to apply predecessor accounting to these transactions. As a result, goodwill and associated amortisation recognised under previous UK GAAP in respect of the following business combinations has been reversed to retained earnings:

- In the second quarter of 2011, the Company recognised goodwill amounting to $1,957 million in relation to the businesses that were transferred to the Company from another group undertaking, as a part of legal entity simplification efforts. Goodwill (net of amortisation), amounting to $1,718 million has now been reversed to retained earnings as of 1 January 2014.
- In the fourth quarter of 2014, the Company entered into various transactions with other Group undertakings, as a part of an internal re-organisation which, in substance involved and was treated as transferring certain Cazenove businesses from Group companies to the Company. The Company acquired 100% share capital of Cazenove Group Limited, against issuance of shares to its parent. The Company recognised its investment in Cazenove Group Limited at its fair value, determined based on the value of the underlying assets and businesses. On transfer of the legal employment of the Cazenove staff to the Company, the excess of fair value over carrying amount of the investment was recognised as goodwill of $1,041 million (note 20). Goodwill (net of amortisation) of $941 million, has now been reversed to retained earnings as of 31 December 2014.

The Company will continue to apply acquisition accounting to third-party business combinations in accordance with the requirements of IFRS 3.

f) On adoption of IAS 12, 'Income taxes', the Company has recognised tax on share based payments relating to the difference in the amount of the tax deduction and the related cumulative share based payments expense directly in equity. An amount of $17 million was reclassified from current tax and credited to Other reserves as of 31 December 2014.

SIGNATURE PAGE

Amsterdam, as of 30 June 2017

J.P. Morgan Structured Products B.V.

signed by J.C.P. van Uffelen
Managing Director

London, as of 30 June 2017

J.P. Morgan Securities plc

signed by Dirk Urmoneit
Managing Director