Pillar 3 Annual Disclosure Report as at 31st December 2016

J.P. Morgan Capital Holdings Limited

J.P. Morgan Securities Plc

J.P. Morgan Europe Limited

J.P. Morgan International Bank Limited

J.P. Morgan Limited

Bear Stearns UK Holdings Limited

J.P. Morgan Markets Limited

J.P. Morgan Mansart Management Limited

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1. Introduction

Overview

The Basel Committee on Banking Supervision published its set of rules on 16 December 2010, referred to as Basel III.

The Basel framework consists of a three "Pillar" approach:

- **Pillar 1** establishes minimum capital requirements, defines eligible capital instruments, and prescribes rules for calculating risk weighted assets ("RWA");
- **Pillar 2** requires banks to have an Internal Capital Adequacy Assessment Process ("ICAAP") and requires that banking supervisors evaluate each bank's overall risk profile as well as its risk management and internal control processes; and
- **Pillar 3** encourages market discipline through a prescribed set of disclosure requirements which allow market participants to assess the risk and capital profiles of banks.

The transposition of the Basel III framework into European law is in two parts: the Capital Requirements Directive IV (CRD IV/Directive 2013/36/EU) and the Capital Requirements Regulation ("CRR")[1]. It was published in the Official Journal of the European Union on 27 June 2013. Part Eight of CRR includes additional provisions on regulatory disclosure for credit institutions. Both the Directive and the Regulation are applicable since 1 January 2014.

This disclosure contains the Pillar 3 disclosures for highest consolidated level of regulated J.P. Morgan entities within the U.K. and provides information on the Firm's capital structure, capital adequacy, risk exposures, and RWA.

This disclosure fulfils the requirements as set out in Part Eight of CRR, and in the supplementary Implementing Technical Standards ("ITS") and guidelines issued by the European Banking Authority ("EBA").

In accordance with Article 432 CRR and EBA guidelines ("the Guidelines") in EBA/GL/2014/14[2] on material, proprietary or confidential information, the representations in this report are based on materiality as defined in EBA/GL/2014/14.

Frequency of Disclosure (Art. 433)

The UK entities in scope publish an annual report in accordance with Article 433 CRR.

The need to assess whether an institution should disclose some information more frequently than annually, under Part Eight of the CRR originates in Article 433 and the requirements are further articulated in the Guidelines, which were adopted by the Prudential Regulation Authority ("PRA") from 15th October 2015.[3]

All J.P. Morgan Chase entities regulated under the Capital Requirements Directive IV ("CRD IV")[4] have applied the Guidelines by:

- Enhancing the Pillar 3 process to include a full assessment of the need to publish data more frequently than annually; and
- Identifying the key data elements to disclose in order to meet the needs of potential users of the disclosure.

1 Capital Requirements Regulation (CRR) / Regulation [EU] No. 575/2013

2 EBA/GL/2014/14: EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014

3 PRA expectation of firms' compliance with EBA/GL/2014/14: http://www.bankofengland.co.uk/pra/Pages/crdiv/updates.aspx

4 Capital Requirements Directive (CRD IV) / Regulation [EU] Directive 2013/36/EU

Means of Disclosure (Art. 434)

The disclosure report for UK regulated entities is made available according to Article 434 CRR on the website of JPMorgan Chase & Co. at: http://investor.shareholder.com/jpmorganchase/basel.cfm

The ultimate parent of the entities in scope of the disclosure is JPMorgan Chase & Co. ("JPMorgan Chase"), a financial holding company incorporated under Delaware law in 1968. Firmwide disclosure is made under Basel III requirement and is available using the same link as the UK regulated entities disclosure. The report should be read in conjunction with the Annual Report on Form 10-K and the Quarterly Report on Form 10-Q which have been filed with the U.S. Securities and Exchange Commission and available at the following link:
http://investor.shareholder.com/jpmorganchase/sec.cfm

Scope of Application (Art. 436)

These disclosures are made at the highest consolidated level of the regulated J.P. Morgan entities within the U.K. and include disclosure for the following:

- J.P. Morgan Capital Holdings Limited ("JPMCHL"), the primary subsidiaries of which are J.P. Morgan Securities plc. ("JPMS plc"), J.P. Morgan Europe Limited ("JPMEL"), J.P. Morgan International Bank Limited ("JPMIB") and J.P. Morgan Limited ("JPML")
    - The main activities of the entities within the JPMCHL group are Corporate and Investment Bank ("CIB") activities and Global Wealth Management (primarily within JPMIB).
    - JPMCHL is the holding company for a number of regulated entities, which are subject to consolidated supervision at the level of JPMCHL JPML is regulated by the FCA
    - JPMS plc, JPMEL and JPMIB are PRA and FCA dual regulated
- Bear Stearns United Kingdom Holdings Limited ("BSUKHL"), the primary subsidiary of which is J.P. Morgan Markets Limited ("JPMML")
    - The main activities of the entities within the BSUKHL group consist of Corporate & Investment Bank activities.
    - BSUKHL is the holding company for a regulated entity, which is subject to consolidated supervision at the level of BSUKHL
    - JPMML is regulated by the FCA
- J.P. Morgan Mansart Management Limited ("JPMMML") which does not have a UK Parent entity.
    - The main activities of JPMMML are the provision of strategic asset management services via fund solutions.
    - JPMMML is regulated by the FCA
    - A separate disclosure document for J.P. Morgan Asset Management International Limited is available at http://investor.shareholder.com/jpmorganchase/basel.cfm

As at 31st December 2016 for the J.P. Morgan entities in scope for this UK Pillar 3 disclosure there were no significant changes of ownership compared to prior year.
On 31st July 2017 JPMML was sold to J.P. Morgan Financial Investments Limited ("JPMFIL"). JPMFIL is not a UK regulated entity and it financed the purchase entirely with equity. JPMFIL therefore became a holding company for a regulated entity, which is subject to consolidated supervision at the level of JPMFIL. The Q3-17 Pillar 3 for UK Regulated entities will be the first Pillar 3 disclosure under the new ownership structure. JPMML is not in scope for quarterly reporting so the first Pillar 3 to include JPMFIL will be the annual 31st December 2017 disclosure.

The scope of consolidation for regulatory capital purposes is consistent with the accounting basis for consolidation.

This document refers to JPMorgan Chase or the Firm when referring to frameworks, methodologies, systems and controls that are adopted throughout JPMorgan Chase and its subsidiaries. Entity names are used to refer to documents, financial resources and other tangible concepts relevant only to that entity.

As required under Article 436 CRR, it is confirmed that outside of regulatory requirements to hold capital, there are no current or foreseen material practical or legal impediments to the prompt transfer of funds or repayment of liabilities among the parent undertakings or, where applicable, their subsidiaries.

2. Risk Management and Objectives (Art. 435)

Risk Management Framework

Risk is an inherent part of JPMorgan Chase's business activities. When the Firm extends a consumer or wholesale loan, advises customers on their investment decisions, makes markets in securities, or offers other products or services, the Firm takes on some degree of risk. The Firm's overall objective is to manage its business, and the associated risks, in a manner that balances serving the interest of its clients, customers and investors and protects the safety and soundness of the Firm. Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management covers a broad spectrum of risk areas.

The Firm believes that effective risk management requires:

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

The Firm's Operating Committee, which consists of the Chief Executive Officer ("CEO"), Chief Finance Officer ("CFO"), Chief Risk Officer ("CRO") and other senior executives, is the ultimate management escalation point in the Firm, and may refer matters to the Firm's Board of Directors. The Operating Committee is responsible and accountable to the Firm's Board of Directors.

The Firm's CRO is the head of the Independent Risk Management ("IRM") function and reports to the CEO and the Directors' Risk Policy Committee ("DRPC"). The CEO appoints the CRO to create the Risk Management Framework subject to approval by the DRPC in the form of the Primary Risk Policies. The Chief Compliance Officer, who reports to the CRO, is also responsible for reporting to the Audit Committee for the Global Compliance Program. The Firm's Global Compliance Program focuses on overseeing compliance with laws, rules and regulations applicable to the Firm's products and services to clients and counterparties.

The IRM function, comprised of Risk Management and Compliance Organizations, is independent of the businesses. The IRM function sets various standards for the risk management governance framework, including risk policy, identification, measurement, assessment, testing, limit setting (e.g., risk appetite, thresholds, etc.), monitoring and reporting. Various groups within the IRM function are aligned to the LOBs and to corporate functions, regions and core areas of risk such as credit, market, country and liquidity risks, as well as operational, model and reputational risk governance.

The Firm places key reliance on each of its LOBs and other functional areas giving rise to risk. Each LOB or other functional area giving rise to risk is expected to operate its activities within the parameters identified by the IRM function, and within their own management-identified risk and control standards. Because these LOBs and functional areas are accountable for identifying and addressing the risks in their respective businesses and for operating within a sound control environment, they are considered the "first line of defense" within the Firm's risk governance framework.

The Firmwide Oversight and Control Group consists of dedicated control officers within each of the LOB and corporate functions, as well as having a central oversight function. The group is charged with enhancing the Firm's control environment by looking within and across the LOBs and corporate functions to help identify and remediate control issues. The group enables the Firm to detect control problems more quickly, escalate issues promptly and engage other stakeholders to understand common themes and interdependencies among the various parts of the Firm.

As the "second line of defense", the IRM function provides oversight and independent challenge, consistent with its policies and framework, to the risk-creating LOBs and functional areas.

Internal Audit, a function independent of the businesses and the IRM function, tests and evaluates the Firm's risk governance and management, as well as its internal control processes. This function, the "third line of defense" in the risk governance framework, brings a systematic and disciplined approach to evaluating and improving the effectiveness of the Firm's governance, risk management and internal control processes. The Internal Audit Function is headed by the General Auditor, who reports to the Audit Committee.

The independent status of the IRM function is supported by a governance structure that provides for escalation of risk issues to senior management, the Firmwide Risk Committee, or the Board of Directors.

Risk Governance and Oversight

Within the Europe, Middle East and Africa ("EMEA") region, a governance framework has been developed in alignment with Firmwide policies and procedures and provides an additional layer of control on a regional and legal entity basis.

Each regulated legal entity has its own Board of Directors which is accountable for overall oversight of the entity. The Boards delegate certain matters to a number of key regional Committees for regional risk control and oversight. The EMEA governance framework connects legal entity, LOB and global governance structures. The key committees of relevance are the UK Management Committee ("UKMC"), the Regional Management Meeting, the EMEA Risk Committee ("ERC") and the EMEA Operating Committee ("EOC"):

- The primary role of the UKMC is to provide oversight for any business conducted by the Firm in the UK including business booked into UK legal entities or UK branches of ex-UK entities, excluding Asset and Wealth Management business which is not booked in those legal entities delegating authority to the UKMC (Asset and Wealth Management entities have their own management committees where appropriate). In addition, the UKMC provides regional oversight for business conducted within EMEA excluding Asset and Wealth Management business. In this respect, the UKMC complements and is a regional supplement to the existing global and legal entity governance framework in place for relevant EMEA legal entities and businesses. Additionally the Regional Management Meeting provides holistic oversight of EMEA activities outside formal governance structures, including Asset and Wealth Management activity.
- The ERC provides oversight and challenge of risks for any business conducted in EMEA or booked into EMEA entities, and is chaired by the EMEA CRO. The ERC is accountable to the UKMC and the Firmwide Risk Committee ("FRC") (where the EMEA CRO is also a member) and the Boards of the individual legal entities. The ERC met 24 times during 2016.
- The EOC provides oversight and management of the operating environment to ensure appropriate management of operational risk and the maintenance of a sound internal control environment across all LOBs in the EMEA region. The EOC is accountable to the UKMC and the Boards of the individual legal entities.

The Committees above may delegate responsibility for management and oversight of risks to other committees or forums.

Additionally, the EMEA Audit and Compliance Committee reports into the global Audit Committee and the Boards of the individual legal entities, and oversees the integrity of financial statements, monitors and reviews internal financial controls and the effectiveness of the Internal Audit function.

Identification and Measurement of Key Risks

The entities in scope complete the Internal Capital Adequacy Assessment Process ("ICAAP") periodically, which forms part of management and decision-making processes such as the Firm's risk appetite, strategy, capital and risk management frameworks, and stress testing. The ICAAP is used to assess the key risks to which the Firm is exposed; how these risks are measured, managed, monitored and mitigated; and how much capital the Firm should hold to reflect these risks now, in the future and under stressed conditions. Further information is provided on the ICAAP process under Art. 438 of CRR.

Credit Risk

Credit risk is the risk of loss arising from the default of a customer, client or counterparty. The Firm is exposed to credit risk through its underwriting, lending and market-making activities with and for clients and counterparties, as well as through its operating services activities, such as cash management, settlement and clearing activities. Whilst a portion of loans originated or acquired by the Firm's wholesale businesses are generally retained on the balance sheet; the Firm's syndicated loan business distributes a significant percentage of originations into the market and is an important component of portfolio management.

Credit Risk Organization

Credit risk management is overseen by the Firm's CRO. The Firm's credit risk governance consists of the following activities:

- Establishing a comprehensive credit risk policy framework;
- Assigning and managing credit authorities in connection with the approval of all credit exposure;
- Ongoing monitoring and managing of credit exposure across all portfolio segments, including transaction and line approval;
- Setting industry concentration limits and establishing underwriting guidelines
- Managing criticized exposures and delinquent loans; and
- Determining the allowance for credit losses and ensuring appropriate credit risk-based capital management.

Risk Identification and Measurement

The Credit Risk function measures, limits, manages and monitors credit risk across the Firm's businesses. To measure credit risk, the Firm employs methodologies for estimating the likelihood of obligor or counterparty default and the loss severity given a default event and the exposure at 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.

Based on these factors and related market-based inputs, the Firm 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, 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) and are described in the stress testing section below. The methodologies used to estimate credit losses depend on the characteristics of the credit exposure and are described below.

Annually, the Firm completes the ICAAP which forms part of management decision-making processes such as the Firm's risk appetite, strategy, capital and risk management frameworks, and stress testing. The ICAAP is used to assess the material risks to which the Firm is exposed; how these risks are measured, managed, monitored and mitigated; and how much capital the firm should hold to reflect these risks now, in the future and under stressed conditions.

Risk-Rated Exposure

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 probability of default is the likelihood that a borrower will default on its obligation; the loss given default ("LGD") is the estimated loss on the loan that would be realized upon the default and takes into consideration collateral and structural support for each credit facility. The estimation process includes assigning risk ratings to each borrower and credit facility to differentiate risk within the portfolio. These risk ratings are reviewed regularly by Credit Risk and revised as needed to reflect the borrower's current financial position, risk profile and any collateral. The calculations and assumptions are based on both internal and external historical experience and management judgment and are reviewed regularly.

Stress Testing

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

Risk Monitoring and Management

The Firm has developed policies and practices that are 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 LOBs.

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. In addition, wrong-way risk — the risk that exposure to a counterparty is positively correlated with the impact of a default by the same counterparty, which could cause exposure to increase at the same time as the counterparty's capacity to meet its obligations is decreasing — is actively monitored.

Management of the Firm'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; and
- Collateral and other risk-reduction techniques.

In addition to Risk Management, Internal Audit performs periodic exams, as well as continuous review, where appropriate, of the Firm's wholesale portfolios. For risk-rated portfolios, a credit review group within Internal Audit is responsible for:

- Independently validating or changing the risk grades assigned to exposures, and assessing the timeliness of risk grade changes initiated by responsible business units; and
- Evaluating the effectiveness of business units' credit management processes, including the adequacy of credit analyses and risk grading/LGD rationales, proper monitoring and management of credit exposures, and compliance with applicable grading policies and underwriting guidelines accuracy and consistency of risk grades, the timeliness of risk grade changes and the justification of risk grades in credit memoranda.

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 members of Credit Risk. Detailed portfolio reporting of industry, customer, 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, risk committees, senior management and the Board of Directors as appropriate.

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

Firmwide Market Risk Governance

The Firmwide Risk Executive of Market Risk and LOB CROs are responsible for managing firmwide market risk. The LOB Market Risk functions are responsible for establishing methodologies and procedures to measure, monitor and control market risk, using information provided by the firm's risk infrastructure. The Firm's Market Risk Officer and CRO are responsible for application of these processes to the Firm.

Market Risk management, as part of the independent risk management function, is responsible for monitoring market risks across the Firm and defines market risk policies and procedures. The Market Risk function reports to the Firm's CRO. Market Risk seeks to control risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the Firm's market risk profile for senior management, the Board of Directors and regulators. Market Risk is responsible for the following functions:

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

UK LE Market Risk Governance

The UK legal entity Market Risk approach applies the Firmwide approach as outlined above, with the appropriate legal entity governance overlay applied.

Due to the nature of the business conducted in JPMMML, there is limited market risk arising from this activity. The description of Market Risk Management practices described in this document does not apply to this entity as alternative control processes are in place.

Firmwide Risk Measurement

Each LOB is responsible for the management of the market risks within its units. The nature of the hedging and risk mitigation strategies performed across the Group corresponds to the types of activities managed/products booked within each legal entity. These strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level. The independent risk management group responsible for overseeing each LOB is charged with ensuring that all material market risks are appropriately measured, monitored and managed in accordance with the risk policy framework set out by Market Risk.

No single measure can reflect all aspects of market risk. Therefore, the Firm uses various measures, both statistical and non-statistical, to capture market risk, including, but not limited to:

- Value at Risk (VaR);
- Stress Testing;

- Non statistical risk measures;
- Profit and loss drawdowns; and
- Single Name Position Risk ("SNPR").

Not all of the UK legal entities covered by the scope of this disclosure apply all of these measures within their legal entity. Additional measures may be applied as necessary at the legal entity level.

Firmwide Market Risk Monitoring and Management

Market risk limits are employed as the primary second line of defence control to align the Firm's market risk with certain quantitative parameters within the Firm's Risk Appetite framework. As part of its holistic analysis of each legal entity's market risk, Market Risk reviews market risk limits for the legal entity at least semi-annually. Limit reviews appropriately consider the underlying trading, investing and hedging strategies of the business. Reviews of Level 1 and Level 2 limits also consider utilization.

The LOBs are responsible for adhering to established limits against which exposures are monitored and reported. Limit breaches are required to be reported in a timely manner by Risk Management to limit approvers, Market Risk and senior management. In the event of a breach, Market Risk consults with Firm senior management and LOB senior management to determine the appropriate course of action required to return to compliance, which may include a reduction in risk in order to remedy the breach. Certain Firm or LOB level limits that have been breached for three business days or longer, or by more than 30%, are escalated to senior management and the Firmwide Risk Committee.

Material Portfolio of Covered Positions

JPMCHL's market risks arise predominantly from activities in the Firm's CIB business booked in JPMS plc. CIB makes markets in products across fixed income, foreign exchange, equities and commodities markets. JPMCHL's portfolio of covered positions under Basel III is predominantly held by the CIB. Some additional covered positions are held by the Firm's other LOBs. BSUKHL's market risks arise from positions in the Firm's CIB business booked in JP Morgan Markets Limited.

Value-at-Risk ("VaR")

VaR is a statistical risk measure that gauges the potential loss from adverse market moves in a normal market environment. VaR is computed using historical simulation covering the most recent 12 month period, and accounts for diversification by maintaining a cross business risk profile.

The firm has an overarching VaR model framework which is used for risk management and disclosure purposes firmwide and utilizes historical simulation based on data for the previous twelve months. Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level.

Stress Testing

Stress testing is a headline risk identification that captures exposure to unlikely but plausible events in abnormal markets pertinent to the Firm's risks. This measure is designed to create simple or complex scenarios specifying detailed shocks of up to six magnitudes (positive and negative for small, large and severe). The Firm runs weekly stress tests on market-related risks across the LOBs using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates or commodity prices. Stress-test results, trends and explanations based on current market risk positions are reported to the Firm's senior management and to the LOBs 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.

Non-Statistical Risk Measures

Non-statistical risk measures are business risk measures within specific market context (including net open positions, basis point values, option sensitivities, market values, position concentrations and position turnover). They are aggregated by LOB and by risk type, and are also used for monitoring internal market risk limits.

Loss Advisories and Profit and Loss Drawdowns

P&L Drawdowns, whether Maximum Drawdown or Current Drawdown, and Loss Advisories are metrics to advise senior management of potential out-sized losses and to initiate discussion of remedies (e.g. reduction of exposure).

Maximum Drawdown is defined as the largest year-to-date difference of the peak-to-trough gain to loss. Current Drawdown is the largest year-to-date peak gain to current loss.

Single Name Position Risk

SNPR captures exposure to credit families (and entities within credit families) or standalone issuers/issuer families not part of credit families, assuming default of the issuer with zero recovery.

Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors 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 employee behavior, 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 damages 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, and the markets and regulatory environments in which it operates.

Firmwide Operational Risk Management Framework

To monitor and control operational risk, the Firm has an Operational Risk Management Framework ("ORMF") which is designed to enable the Firm to maintain a sound and well-controlled operational environment. The ORMF is comprised of four main components: Governance, Risk Assessment, Measurement, and Monitoring and Reporting.

Governance

The LOBs and corporate functions are responsible for owning and managing their operational risks. The Firmwide Oversight and Control Group, which consists of control officers within each LOB and corporate function, is responsible for the day-to-day execution of the ORMF. LOB and corporate function control committees oversee the operational risk and control environments of their respective businesses and functions. These committees escalate operational risk issues to the Firmwide Control Committee, as appropriate. The Firmwide Risk Executive for Operational Risk Governance ("ORG"), a direct report to the CRO, is responsible for defining the ORMF and establishing minimum standards for its execution. Operational Risk Officers report to both the LOB CROs and to the Firmwide Risk Executive for ORG, and are independent of the respective businesses or corporate functions they oversee.

The Firm's Operational Risk Governance Policy is approved by the DRPC. This policy establishes the ORMF for the Firm. The assessments of operational risk using this framework are reviewed with the DRPC.

Risk Assessment

The Firm utilizes several tools to identify, assess, mitigate and manage its operational risk. One such tool is the Risk and Control Self-Assessment ("RCSA") program which is executed by LOBs and corporate functions in accordance with the minimum standards established by ORG. As part of the RCSA program, LOBs and corporate functions identify key operational risks inherent in their activities, evaluate the effectiveness of relevant controls in place to mitigate identified risks, and define actions to reduce residual risk. Action plans are developed for identified control issues and businesses are held accountable for tracking and resolving issues in a timely manner. Operational Risk Officers independently challenge the execution of the RCSA program and evaluate the appropriateness of the residual risk results. In addition to the RCSA program, the Firm tracks and monitors events that have or could lead to actual operational risk losses, including litigation-related events. Responsible businesses and corporate functions analyze their losses to evaluate the efficacy of their control environment to assess where controls have failed, and to determine where targeted remediation efforts may be required. ORG provides oversight of these activities and may also perform independent assessments of significant operational risk events and areas of concentrated or emerging risk.

Measurement

In addition to the level of actual operational risk losses, operational risk measurement includes operational risk based capital and operational risk losses under both baseline and stressed conditions. The primary component of the operational risk capital estimate is the Loss Distribution Approach (“LDA”) statistical model, which simulates the frequency and severity of future operational risk loss projections based on historical data. The LDA model is used to estimate an aggregate operational risk loss over a one-year time horizon, at a 99.9% confidence level. The LDA model incorporates actual internal operational risk losses in the quarter following the period in which those losses were realized, and the calculation generally continues to reflect such losses even after the issues or business activities giving rise to the losses have been remediated or reduced. As required under the Basel III capital framework, the Firm’s operational risk-based capital methodology, which uses the Advanced Measurement Approach, incorporates internal and external losses as well as management’s view of tail risk captured through operational risk scenario analysis, and evaluation of key business environment and internal control metrics.

The Firm considers the impact of stressed economic conditions on operational risk losses and develops a forward looking view of material operational risk events that may occur in a stressed environment. The Firm’s operational risk stress testing framework is utilized in calculating results for the Firm’s Comprehensive Capital Analysis Review and ICAAP processes.

Monitoring and Reporting

ORG has established standards for consistent operational risk reporting. The standards also reinforce escalation protocols to senior management and to the Board of Directors. Operational risk reports are produced on a firmwide basis as well as by LOB and corporate function.

Liquidity Risk

Liquidity risk is the risk that the entities 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 and liabilities.

Liquidity Risk Oversight

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

- Establishing and monitoring limits, indicators and thresholds including liquidity risk appetite tolerances;
- Defining, monitoring, and reporting internal Firmwide and legal entity stress tests, and monitoring and reporting regulatory defined liquidity stress testing;
- Approving or escalating for review new or updated liquidity stress assumptions;
- Defining, monitoring and reporting liquidity risk metrics that provide insight and control into liquidity risk activities;
- Monitoring and reporting liquidity positions, balance sheet variances and funding activities;
- Conducting ad hoc analysis to identify potential emerging liquidity risks.

The Firm has systems in place to aid in the measurement, management, monitoring and reporting of liquidity risks.

Risk Governance and Measurement

Specific committees responsible for liquidity governance include the Firmwide Asset and Liability Committee ("ALCO"), regional ALCOs, CTC Risk Committee, legal entity specific DRPC and the EMEA Risk Committee.

Liquidity Management

Treasury and CIO are responsible for liquidity management. The primary objectives of effective liquidity management are to ensure that the Firm’s core businesses and material legal entities are able to operate in support of client needs, 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 Firm manages liquidity and funding using a centralised, global approach across its entities, taking into consideration both their current liquidity profile and any potential changes over time, in order to optimise liquidity sources and uses. In the context of the Firm's liquidity management, Treasury is responsible for:

- Analysing and understanding the liquidity characteristics of the Firm, LOB and legal entities' assets and liabilities, taking into account legal, regulatory, and operational restrictions;
- Defining and monitoring Firmwide and legal entity specific 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.

Internal Stress Testing

Liquidity stress tests are intended to ensure the entity has sufficient liquidity under a variety of adverse scenarios, including scenarios analysed as part of the Firm's resolution and recovery planning. Stress scenarios are produced for JPMorgan Chase & Co. Parent Company ("Parent Company") and the Firm's material legal entities, on a regular basis and ad hoc stress tests are performed, as needed, in response to specific market events or concerns. Liquidity stress tests assume all of the Firm's contractual obligations are met and take into consideration varying levels of access to unsecured and secured funding markets, estimated non-contractual and contingent outflows and potential impediments to the availability and transferability of liquidity between jurisdictions and material legal entities such as regulatory, legal or other restrictions.

Liquidity outflow assumptions are modelled across a range of time horizons and contemplate both market and idiosyncratic stress. Results of stress tests are considered in the formulation of the Firm's funding plan and assessment of its liquidity position. The Parent Company acts as a source of funding for the Firm through stock and long-term debt issuances, and its wholly owned direct subsidiary JPMorgan Chase Holdings LLC ("Intermediate Holding Company") which provides funding support to the ongoing operations of the Parent Company and its subsidiaries, as necessary. The Firm maintains liquidity at the Parent Company and the Intermediate Holding Company, in addition to liquidity held at the operating subsidiaries, at levels sufficient to comply with liquidity risk tolerances and minimum liquidity requirements, to manage through periods of stress where access to normal funding sources is disrupted.

Internal Liquidity Adequacy Assessment Process

Annually, JPMCHL and its key legal entities, JPMS plc, JPMEL and JPMIB each complete the Internal Liquidity Adequacy Assessment Process ("ILAAP"), which provides management with an assessment of the adequacy of each entity's liquidity resources to cover liabilities as they fall due in stressed conditions. Stress scenarios cover both market and idiosyncratic events.

The ILAAP details how each entity measures its liquidity risk, the methodologies and assumptions used and how each entity's board determines the size of the Liquid Asset Buffer is appropriate. If changes in an entity's business, strategy, activities or operational environment suggest that the current level of liquid resources or the funding profile is no longer adequate, then the document will be updated more frequently. The ILAAP is reviewed by management and is approved by the Board of each entity.

Liquidity Coverage Ratio ("LCR")

From 1 October 2015, JPMCHL's key legal entities JPMS plc, JPMEL, and JPMIB were required to comply with the LCR guidance set out in the Delegated Act (Commission Delegated Regulation (EU) 2015/61). The LCR is intended to measure the amount of High Quality Liquid Assets held by the in scope entities in relation to estimated net liquidity outflows within a 30-day calendar 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. As at 31 December 2016, the in scope entities were compliant with the fully phased-in LCR.

Additional Liquidity Monitoring Metrics ("ALMM")

The European Commission adopted the ALMM ITS in March 2016. This allows competent authorities to obtain a comprehensive view of the liquidity risk profile of their regulated entities. ALMM reporting for the in-scope entities commenced from April 2016, with a submission date of May 2016.

Net Stable Funding Ratio (“NSFR”)

The Basel Committee final standard for net stable funding ratio is intended to measure the "available" and "required" amounts of stable funding over a one-year horizon. On 23 November, 2016, the European Commission introduced its legislative proposal for the NSFR (“EU NSFR”), amending Regulation (EU) No 575/2013. The proposal is subject to approval from the European Parliament and Council of the EU. The JPMCHL’s key legal entities are expected to comply with the EU NSFR at a level of 100% two years after the date of entry into force of the proposed regulation. This is expected to be 1 January 2019 at the earliest.

Interest Rate Risk in the Banking Book (“IRRBB”)

IRRBB is defined as Interest Rate Risk (“IRR”) resulting from the firm’s traditional banking activities (accrual accounted on and off balance sheet positions) which includes extension of loans and credit facilities, taking deposits and issuing debt (collectively referred to as ‘non-trading’ activities); and also the impact from CIO investment portfolio and other related CIO, Treasury activities. IRR from non-trading activities can occur due to a variety of factors, including but not limited to:

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

Oversight and Governance

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

- Reviews the IRR Management policy;
- Reviews the IRR profile of the firm and compliance with IRR limits; and
- Reviews significant changes to IRR models and/or model assumptions.

In addition to CTC RC, IRR exposures and significant model and/or model assumptions changes are reviewed by the ALCO. The ALCO provides a framework for overseeing the IRR of LOBs, foreign jurisdictions and key legal entities to appropriate LOB ALCOs, Country ALCOs and other local governance bodies.

The CTC RC also governs the IRR Management Group; an independent dedicated Risk Group within CTC and reports into the CTC CRO. IRR Management is responsible for, but not limited to, the following:

- Creating governance over IRR assumptions and parameter selection/calibration; and
- Identifying and monitoring IRR and establishing limits as appropriate.

Risk Identification and Measurement

CIO manages IRRBB exposure on behalf of the firm by identifying, measuring, modelling and monitoring IRR across the firm’s balance sheet. CIO identifies and understands material balance sheet impacts of new initiatives and products and executes market transactions to manage IRR through CIO investment portfolio’s positions. Execution by CIO will be based on parameters established by senior management, per the CIO Investment Policy. In certain Legal entities, Treasury manages IRR in partnership with CIO. LOBs are responsible for developing and reviewing specific LOB IRR modelling assumptions.

Measures to manage IRR are:

- **Earnings-at-Risk** is a primary measure used to gauge the firm’s shorter term IRR exposure which measures the sensitivity of pre-tax income to changes in interest rates over rolling 12 months compared to base scenario (Level 1 Market Risk limit applied).
- **Economic Value Sensitivity** is an additional Firmwide metric utilized to determine changes in asset/liability values due to changes in interest rates.

Securitisation Risk

The risks related to securitisation and resecuritisation positions are managed in accordance with the Firm's credit risk and market risk management policies. The Firm's due diligence procedures and risk management and mitigation of securitisation risk are detailed further under Article 449 of CRR.

Market Risk Monitoring

Market Risk measures, monitors and controls market risk exposures arising from relevant business activities including, but not limited to, trading in securitized products.

Under this framework market risk limits are the primary control used to manage the levels of exposure and risk taken by the business. These limits are set by Market Risk, and it is the responsibility of the business to manage risk exposures within these limits unless expressly authorized by a Temporary Limit Approval.

Market risk reporting and limits are defined by Market Risk utilizing the relevant risk measures which include, but are not limited to, VAR, Stress, and non-statistical measures. The content, frequency and distribution of market reports is defined by Market Risk.

The Market Risk Policy and Procedures include the controls which are used to manage the risk profile of the businesses

In addition to the daily reporting, risk management activities, and frequent discussion between Market Risk and the business, weekly senior management meetings are scheduled between Front Office and Market Risk where such items as, but not limited to, sizeable transactions or market events impacting risk exposures are discussed.

Credit Risk Mitigation

The credit risk team works closely with the business during both the transaction structuring phase and post close (through ongoing monitoring) in order to assess and mitigate the credit risk of both securitisation and re-securitisation positions. Tools typically employed are (i) at the transaction level: analysis of the underlying collateral (data modelling, due diligence, asset audit), structure/documentation negotiation and interest rate/FX derivative hedging strategies; and (ii) at the portfolio level: portfolio limits, transaction diversification and other ongoing assessments.

Risk management is carried out on a regional basis with approval levels for new or renewing transactions being derived by relevant credit specific policies and grids. Credit risk is booked and reported across a variety of risk systems.

Securitisation exposures may be sensitive to interest rates, foreign exchange movements and to the broader credit environment. The firm may employ various hedging strategies for these risks at a transaction and/or portfolio level including swaps, forwards and other credit derivatives.

Fiduciary Risk

Fiduciary risk is the risk of a failure to exercise the applicable high standard of care, to act in the best interests of clients as required under applicable law or regulation.

Depending on the fiduciary activity and capacity in which the Firm is acting, US federal, state and/or international statutes, regulations and common law require the Firm to adhere to specific duties in which the Firm must always place the client's interests above its own.

Each Business with fiduciary obligations and responsible for meeting these obligations. Senior business, legal, risk and compliance managers work with the relevant LOBs with the goal of ensuring that businesses providing investment, trusts and estates, or other fiduciary products or services that give rise to fiduciary duties to clients perform at the appropriate standard relative to their fiduciary relationship with a client. Each LOB and its respective governance forums and committees are responsible for the oversight and management of the fiduciary risks in their businesses in accordance with the firmwide fiduciary risk governance framework. Of particular focus are the policies and practices that address a business's responsibilities to a client, including performance and service requirements and expectations; client suitability determinations; and disclosure obligations and communications. In this way, the relevant LOB governance committees provide oversight of the Firm's efforts to monitor, measure and control the performance and delivery of the products or services to clients that may give rise to such fiduciary duties, as well as the Firm's fiduciary responsibilities with respect to the Firm's employee benefit plans.

The Firmwide Fiduciary Risk Governance Committee is a forum for risk matters related to the Firm's fiduciary activities and oversees the firmwide fiduciary risk governance framework. It supports the consistent identification and escalation of fiduciary risk matters by the relevant LOBs or corporate functions responsible for managing fiduciary activities. The committee escalates significant issues to the firmwide Risk Committee and any other committee considered appropriate.

Leverage Risk

Leverage is defined at a high level as the ratio of a firm's assets, off-balance sheet obligations, commitments and contingencies to its capital base. There is a risk that, either through excessive growth or erosion of the capital base, the degree of leverage becomes unsustainable. This in turn may require unintended corrective measures to the entities' business plans, including distressed selling of assets which might result in losses or in valuation adjustments to remaining assets.

Risk Management

Leverage risk is monitored through the same processes and frameworks as capital adequacy and stress-testing. The latter is particularly important, as it is forward-looking: if the Firm's leverage ratios remain sustainable under stressed conditions, the risk of forced de-leveraging will be low.

Risk Reporting and Measurement

The capital adequacy framework is based around a regular cycle of point-in-time capital and leverage calculations and reporting, supplemented by forward-looking projections and stress-testing. Each part of the process is subject to rigorous control.

The entities in scope complete the ICAAP periodically, which provides management with a view of the impact of severe and unexpected events on earnings, capital resources, risk-weighted assets and balance sheet. The Firm's ICAAP integrates stress testing protocols with capital and leverage planning. More detail on the ICAAP is included in Section 4. Capital Requirements.

Risk Mitigation

The entities in scope are subject to a defined framework of target capital and leverage levels, as well as specific thresholds / triggers for escalation and action. Based on this framework, corrective action is taken as and when required to maintain an appropriate level of leverage.

Business Risk

Business risk is the risk that JPMC or LOB will make inappropriate strategic choices, or are unable successfully to implement selected strategies; and of loss due to variances in volumes, revenue and costs caused by competitive forces, regulatory changes, or other macroeconomic or market issues.

Risk Management

Business risk as it impacts capital is managed through the entities' strategic and business planning as part of their Capital Management Framework.

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

Under the NBIA policy, the business is required to undertake an analysis of the economic, regulatory or legal entity capital impact of the new business, as appropriate. Mandatory signoffs for NBIAs include the CRO or legal entity risk manager for each entity and the EMEA Legal Entity Controller, ensuring the risk implications for an entity are considered in NBIA decisions as well as the compatibility of NBIAs with the strategy for relevant entities. A thorough risk review is also required with LOB and cross functional participation to address all potential risks including any heightened risk due to complexity, valuation and a less favourable economic environment.

Risk Reporting and Measurement

J.P. Morgan's stress testing programme is an important component in managing, measuring and reporting business risk, testing the Firm's financial resilience in a range of severe economic and market conditions. For example, quarterly baseline and stressed capital plans are prepared under the ICAAP framework, which include P&L projections (as well as RWAs and the overall capital position) over the three-year time horizon modelled.

Risk Mitigation

Capital projections are used as a tool to help mitigate business risk. If the baseline capital projections, which include P&L projections from the LOB, show a reduction in the earnings, this could be an indicator that a strategy is not implemented successfully. Similarly, where the stressed capital projections show risks to capital beyond the entities' risk appetite, remedial action is taken.

Additionally, where unacceptable risks are identified through the NBIA process, changes are made to the new business initiative prior to their implementation or the initiative is withdrawn.

Risk Appetite

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

The Firm's Risk Appetite framework is reviewed on an ongoing basis, and is reviewed with the FRC and DRPC at least annually.

Key figures and ratios regarding the interaction between the risk profile and the risk appetite are deemed to be proprietary information as it relates to competitively significant operational conditions and business circumstances, as defined within EBA guidelines EBA/GL/2014/14.

Board Declaration – Adequacy of Risk Management Arrangements

The Boards of entities in scope of the disclosure are satisfied that Management has taken reasonable care to establish and maintain risk systems and controls as appropriate to the business.

Members of the Board of Directors

J.P. Morgan Capital Holdings Limited

The JPMCHL Board is comprised of five directors. The directors are:

Deborah Toennies

Ms. Toennies joined the Board of JPMCHL in February 2016. She is a Managing Director and the Head of Regulatory Affairs for the Corporate and Investment Bank. Prior to this she has held various roles within JPMorgan including Head of Conduit Management and Business Development, and as a Managing Director in both Structured Credit Products and Securitised Products Group. Before joining JPMorgan, Ms. Toennies worked at Coldwell Banker as a Senior Auditor, and Arthur Andersen & Company as a Staff Auditor. Ms. Toennies has an MBA in Finance and Strategy Management from the University of Chicago, and a BS in Accountancy from Miami University.

Jean-Jacques Lava

Mr. Lava joined the Board of JPMCHL in February 2016. He joined JPMorgan in 1998, and is currently an Executive Director and the Chief Financial Officer for Continental Europe within the JPMorgan Investment Management line of business. Prior to JPMorgan, Mr Lava worked for Deloitte in Luxembourg focussing on external audit and consultancy work. He is a Board member of JPMorgan Asset Management (Europe) Sarl, and other Asset Management companies. Mr Lava holds a BA specialising in Finance from the University of Liege, and is a chartered accountant.

Jonathan Griffin

Mr. Griffin joined the Board of JPMCHL in June 2006. He is the chairman of JPMCHL and is managing director and CEO of JPMorgan Asset Management (Europe) Sarl (JPMAME) in Luxembourg. Mr. Griffin has held various senior management positions within the JPMorgan group since joining the firm in 1986 and has worked in Germany, Japan, Luxembourg and the UK. JPMAME is an authorised UCITS and AIF Management Company with branches in eight European countries. JPMAME supervises the activities of JPMorgan's Luxembourg domiciled mutual fund ranges which are registered for distribution in over 30 countries worldwide. Mr Griffin has also been a Board member of ALFI (the Association of Luxembourg Mutual Funds) since 2007.

Edward Kemp

Edward Kemp joined the Board of JPMCHL in September 2015. He is currently the Senior Financial Officer and an Executive Director at J.P. Morgan Bank Luxembourg SA. He is a member of the Bank's Executive Committee. He joined J.P. Morgan in March 2015. Before joining J.P. Morgan, he worked for BNY Mellon for eight years, most recently as the group's Senior Risk Officer for Continental Europe, as well as the Chief Risk Officer and member of the Board of Directors of BNY Mellon SA/NV in Brussels. Previously, he was the Chief Financial Officer and a Deputy General Manager of BNY Mellon (Luxembourg) SA. Edward is a Fellow of the Chartered Institute of Management Accountants (FCMA, CGMA), and holds a BSc (Econ) from the London School of Economics and an MBA from Cranfield School of Management.

Frédéric Mouchel

Frédéric Mouchel is a Managing Director in JPMorgan Chase's Corporate & Investment Bank. He recently relocated to Luxembourg where he leads the Treasury Services Business. Prior to taking this role, Frédéric was J.P. Morgan Europe Middle East and Africa (EMEA) Treasurer. Over the last 20 years, Frédéric hashad held various management roles in the firm's Treasury function in the Investment Bank as well as in Finance and Corporate based first in Paris and since 2000 in London. He was EMEA Treasurer since early 2007. Before transferring to the front office and becoming Branch Treasurer for Paris in 1995, he held various positions mostly as a financial controller for market activities. He joined the firm in 1987. Frédéric graduated from Ecole Supérieure des Sciences Commerciales d'Angers – France (ESSCA) in 1986.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended December 31, 2016 as follows:

Name	Internal Directorships	External Directorships
Fred Mouchel	1	0
Deborah Toennies	1	0
Jean-Jacques Lava	1	0
Jonathan Griffin	1	1
Edward Kemp	1	0

Note: Directorships held within the same group are counted as a single directorship, and those in organisations with non-commercial objectives are disregarded.

J.P. Morgan Securities plc

The JPMS plc Board is comprised of six non-executive directors and four executive directors. The directors are:

Sir Winfried Bischoff

Sir Win Bischoff is Chairman of the Financial Reporting Council in the United Kingdom and Chairman of JP Morgan Securities plc. He is a member of the International Advisory Board of Akbank TAS, Turkey. Since 1983 he has served on the boards of 10 major public companies (5 in the UK, 3 in the US, 2 in Europe). He was previously Chairman of Lloyds Banking Group plc (2009-2014). Sir Win has substantial experience of leading international committees and boards. His background spans a range of sectors, including banking and capital markets, finance and government regulation and public policy. He was CEO and then Chairman of

Schroders plc (1984-2000), Chairman of Citigroup Europe (2000-2009) and interim CEO and then Chairman of Citigroup Inc (2007-2009). Sir Win was awarded a Knighthood in the New Year Honours List in 2000 for services to the banking industry, and an Honorary Doctorate in Science by City University, London in the same year. In 2016 he was awarded a Non-Executive Director Lifetime Achievement Award.

Laban Jackson

For further information in relation to Mr Jackson, please see the below link.

http://www.jpmorganchase.com/corporate/About-JPMC/board-of-directors.htm#jackson

Professor Scott Moeller

Professor Moeller joined the Board of JPMS plc as a Non-Executive Director in July 2012. He is also the Chairman of the JPMS plc Directors' Risk Policy Committee, a role he has held since 2013 and Chairman of the J.P. Morgan Europe Limited Directors' Risk Policy Committee, a role he has held since 2014. Professor Moeller is the director and founder of the M&A Research Centre at Cass Business School where he is also a Professor in the Practice of Finance. Prior to teaching, Professor Moeller was at Deutsche Bank in London for six years in several senior banking positions. Prior to Deutsche Bank, he worked first at Booz Allen & Hamilton Management Consultants for over five years and then at Morgan Stanley for over twelve years in New York, Japan, and finally as co-manager and then member of the board of Morgan Stanley Bank AG in Germany.

Jane Moran

Ms Moran joined the Board of JPMS plc as a Non-Executive Director in December 2015. She is currently the Global Chief Information Officer at Unilever, a role she has held since 2014. Prior to joining Unilever, Ms Moran spend 14 years at Thomson Reuters in both the US and UK in a number of CIO roles including: CCBN (a Thomson acquisition), Thomson Financial, Thomson Reuters Markets, and finally Global Chief Information Officer. Ms Moran is a member of the CIO councils for Salesforce.com, SAP, and Workday, and a member of the Advisory Council on Computing and Information Technology of Brown University. Ms Moran holds a MBA from Boston University and a BA in History from Brown University.

Jason Sippel

Mr Sippel is co-head of Global Equities, with responsibility for the firm's industry-leading Cash Equities and Equity Derivatives franchises. In addition, Mr Sippel and his co-head, Mark Leung, work jointly with Investor Services in leading the Global Prime Services business, including Prime Brokerage, Equity Financing and Agency Clearing. Mr Sippel has been a trader for the entirety of his JPMorgan career, starting in Credit and Rates Derivatives and Exotics Trading before moving to Equities in 2007. His principal focus during that time was in building client franchises, predominantly in structured and corporate derivatives, and in managing the resulting complex risks. More recently, Mr Sippel took on additional responsibilities in Cash Equities trading. Prior to his current role, Jason was the head of Global Prime Services from 2015-2016, where he oversaw the firm's market leading Prime Brokerage and Clearing business lines. Prior to that role, he was head of Americas Equities Trading from 2012 to 2015, where he oversaw the firm's Equity Derivatives, High-touch Cash Trading and Block Trading businesses in the region. Mr Sippel began his career with J.P. Morgan in Tokyo in 2002 and subsequently held a series of increasingly senior roles in Hong Kong, New York and London. He is a graduate of Trinity Hall, Cambridge University where he studied Economics.

Monique Shivanandan

Ms Shivanandan joined the Board of JPMS plc as a Non-Executive Director in November 2015. She is currently the Chief Information Officer and a Member of Group Executive Committee at Aviva plc, a role she has held since 2014. Prior to joining Aviva, Ms Shivanandan was a Senior Vice President and Chief Technology Officer at Capital Once Financial, and before this a Managing Director and Chief Information Officer at BT Retail. Ms Shivanandan is also a Board member of the Government Digital Services Advisory Board. She holds a BS in Industrial Engineering from Lehigh University.

Mark Garvin

Mr Garvin joined the Board of JPMS plc in September 2011, and in early 2016 became a non-executive director. He is currently Vice Chairman for the Corporate & Investment Bank. Prior to this he was Chairman, Treasury & Securities Services International, a position he held until assuming his current role in 2012. Mr Garvin has worked at JPMorgan and its predecessor banks since 1978, and has held a number of roles including UK Senior Country Officer and EMEA Chief Operating Officer Mr Garvin holds a Bachelor of Science from Georgetown University and an MBA from American University.

Andrew Cox

Mr Cox joined the Board of JPMS plc in November 2001. He is currently a Managing Director, and head of Credit Risk in EMEA. He joined JPMorgan in 1987, and has worked in the New York and London office, primarily in Risk, but with roles in technology and trading room business management. He is a member of the EMEA Risk Committee and other key regional governance forums. Mr Cox holds a Bachelor of Science in Physics from Kings College London.

Elena Korablina

Ms Korablina joined the Board of JPMS plc in February 2014. She is currently the J.P. Morgan Europe, Middle East and Africa ("EMEA") Chief Financial Officer, responsible for finance activities across the region. She is a member of the EMEA Management Committee and other key regional governance forums. Ms Korablina has worked at the firm for nearly nineteen years. Prior to her current role, she held a number of roles at the firm, including EMEA Regional Controller, Global Product Controller for several Markets businesses, and Senior Finance Officer in different locations across Europe, including Moscow, Luxembourg, and London. Before joining J.P. Morgan, Ms Korablina was an auditor with PricewaterhouseCoopers in Moscow. Ms Korablina holds a Bachelor of Science in Mathematical Economics from Moscow State University.

Julia Meazzo

Ms Meazzo joined the Board of JPMSplc in May 2015. She is currently a Managing Director and HR Executive for the EMEA Region. Prior to this she was the Business Manager for Credit Business and Global Emerging Markets, and HR Business Partner in South Africa. Prior to joining JPMorgan, Ms Meazzo worked for Johnson & Johnson, Proctor & Gamble, and Cap Gemini Management Consulting. Ms Meazzo has a degree in Business Commerce from Rhodes University South Africa.

Daniel Pinto

Mr Pinto joined the Board of JPMSplc in 2007. He is currently the CEO of the Corporate & Investment Bank of JPMorgan Chase & Co. and CEO of its Europe, Middle East and Africa region. Mr Pinto has spent his career at JPMorgan and its predecessor companies, beginning with Manufacturers Hanover Trust in Buenos Aires in 1983, where he was a financial analyst and foreign exchange trader. In 1992, he was appointed head of Sales for Chemical Bank in Buenos Aires, and then became head trader and Treasurer of Chemical Bank in Mexico. In 1996, he moved to Chase Manhattan Bank in London, where he was responsible for local markets in Eastern Europe, Middle East, Africa and Asia. In 2002 he assumed responsibility for the markets side of J.P. Morgan's emerging markets business, before being made global head of Emerging Markets in 2006. In 2009, he was made co-head of Global Fixed Income for the Investment Bank before becoming sole head of the group in 2012. He was also made co-CEO of the Corporate & Investment Bank in 2012, and became sole CEO in 2014. He has a bachelor's degree in Public Accounting and a B.S. in Business Administration from Universidad Nacional de Lomas de Zamora in Buenos Aires.

Viswas Raghavan

Mr Raghavan is the Deputy Chief Executive Officer for J.P. Morgan in Europe, the Middle East and Africa (EMEA). He is also the Head of Banking for the region's Corporate & Investment Bank. Based in London, he has over 25 years of corporate finance experience. Before being appointed to his current role, he was head of Global Equity Capital Markets at J.P. Morgan. Prior to that Mr Raghavan was head of J.P. Morgan's Debt and Equity Capital Markets' businesses for Europe & Asia. Mr Raghavan has been an integral part of J.P. Morgan's EMEA business since joining from Lehman Brothers in 2000, where he was Head of Equity-Linked Capital Markets for Europe & Asia. Mr Raghavan graduated from The University of Bombay, India with a BSc in Physics and holds a BSc Honours degree in Electronic Engineering & Computer Science from Aston University, Birmingham, UK.

He is also a Chartered Accountant with the Institute of Chartered Accountants in England & Wales. In 2016, he was awarded an honorary Doctorate in Science (DSc) by Aston University.

Directorships

Members of the Board of Directors held the following directorships during the year ended December 31, 2016:

Name	Executive	Non-Executive
Sir Winfried Bischoff	0	4
Laban Jackson	0	4
Scott Moeller	1	2
Jane Moran	1	2
Monique Shivanandan	1	1
Mark Garvin	1	1
Andrew Cox	1	0
Elena Korablina	1	0
Julia Meazzo	1	0
Daniel Pinto	1	1
Jason Sippel	1	1
Viswas Raghavan	1	0

Note: Directorships held within the same group are counted as a single directorship, and those in organisations with non-commercial objectives are disregarded

Bear Stearns UK Holdings Limited

The BSUKHL Board is comprised of two directors. The directors are:

Stephen White

Mr White joined the Board of BSUKHL in January 2013. He is currently a Managing Director, and UK Controller, covering UK Legal Entity Control and UK Regulatory Reporting. Mr White has over 17 years of experience in the Financial Services industry, working at institutions such as Tullett & Tokyo, HSBC, and Commerzbank AG. Prior to joining JPMorgan, Mr White worked for the Royal Bank of Scotland and ABN Amro as Head of UK Financial Reporting, and GBM Global Controller Change Director. Mr White is a fellow of the Association of Chartered Certified Accountants, and a member of the Association of Corporate Treasurers.

John Hobson

Mr Hobson joined the Board of BSUKHL in June 2015. He is currently an Executive Director and is the UK Legal Entities Controller. Prior to joining JP Morgan, Mr Hobson has 20 years Financial Services experience and has also worked for Barclays, the Royal Bank of Scotland and ABN Amro. Mr Hobson is a member of the Association of Chartered Certified Accountants.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended December 31, 2016 as follows:

Name	Internal Directorships	External Directorships
Stephen White	1	0
John Hobson	1	0

Note: Directorships held within the same group are counted as a single directorship, and those in organisations with non-commercial objectives are disregarded

J.P. Morgan Mansart Management Limited

The JPMMML Board is comprised of three directors. The directors are:

Shahzad Sadique

Mr Sadique joined JPMorgan in 2012, and became a director and the CEO of JPMMML in May of that year. He has over 19 years of industry experience and previously held senior positions as the Head of Morgan Stanley's structured and alternative fund business within their Investment Bank and was co-Head of the retail structuring team for the multi-asset platform at Dresdner Bank. Mr. Sadique began his career at Merrill Lynch in the global equity derivatives group. He graduated with a M.Sc. degree in International Securities and Investment Banking from the ISMA Centre, University of Reading and a BA (Hons) in Financial Economics.

Matthew Melling

Mr Melling joined the Board of JPMMML in May 2014. He is currently a Managing Director and the EMEA Regional Controller. Mr Melling joined JPMorgan in 1996 and has held a number of roles, including EMEA and Global Product Controller for Emerging Markets, and Credit and Emerging Markets Middle Office. He started his career in banking on the NatWest Graduate programme, before moving to Chase Manhattan, a heritage JPMorgan firm. Mr Melling holds a Bachelor of Science in Chemistry from King's College London.

Dale Braithwait

Mr Braithwait joined the Board of JPMMML in March 2014. He is currently the Head of EMEA Risk Strategy, and the global lead for Legal Entity Risk Governance and Oversight. Mr Braithwait chairs the firm's EMEA Legal Entity Risk Committee and is a member of the EMEA Risk Committee and the EMEA Operating Committee. He is also a member of Risk Committees for the Eurex. Mr Braithwait joined J.P. Morgan in 1997 and has held various roles relating to risk management, derivatives clearing, and fund administration, most recently as Global Head of Credit Clearing and Intermediation. During a period from 2003 to 2005, Mr. Braithwait left J.P. Morgan to set-up the Risk, Operations and Finance functions for a fund manager. Mr Braithwait holds a Bachelor of Science in Chemistry from Imperial College, London.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended December 31, 2015 as follows:

Name	Internal Directorships	External Directorships
Shahzad Sadique	1	3
Matthew Melling	1	0
Dale Braithwait	1	0

Note: Directorships held within the same group are counted as a single directorship, and those in organisations with non-commercial objectives are disregarded

Diversity & Inclusion

Diversity and Inclusion are the cornerstones of the Firm's corporate culture. It's part of our DNA. We recognize that we gain strength from a diverse workforce and embrace our differences. At our firm, we are committed to a culture of openness and meritocracy, and believe in giving every individual an opportunity to succeed while bringing their whole selves to work. Our diverse employee base and inclusive environment are strengths that lead to the best solutions for our customers and for every community that we serve.

At a regional level, the Firm has set an internal target to achieve 30% representation of women on several boards in EMEA. These targets will be achieved through periodic reviews of structure, size, composition and performance of Boards, and a promotion and focus on the existing practices embedded in our firm-wide Diversity & Inclusion Strategy. Further information on this Strategy is available at https://www.jpmorgan.com/global/emea/crd4.

3. Own Funds (Art. 437)

Key Change During the Period

- **BSUKHL Capital Resources -** BSUKHL's total capital has decreased from $1,312m to $730m over the period, predominantly as a result of a reduction in Tier 2 capital. BSUKHL's Tier 2 capital is comprised of qualifying own funds relating to sub-ordinated debt issued by its subsidiary Bear Stearns Holdings Limited. As a result of rules under the CRR, recognition of this debt as regulatory capital at the parent level in the form of qualifying own funds is being phased out. This, along with ongoing interest repayments has resulted in divergence between the capital resources of JPMML and its ultimate UK parent, BSUKHL over time. During 2017, the firm completed a reorganisation of the JPMML UK holding company structure to better align the capital resources of JPMML and its new UK parent JPMFIL, removing the qualifying own funds element previously contributing to the capital resources of BSUKHL.
- **Capital Conservation Buffer -** From the 1st January 2016, firms regulated under CRD IV are required to hold a capital conservation buffer. The capital conservation buffer is designed to ensure banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred. This is implemented on a transitional basis, starting at 0.625% of RWAs during 2016 and increasing by 0.625% each year until the final end point of 2.5% from the 1st January 2019.

Own Funds Disclosures

Capital resources represent the amount of regulatory capital available to an entity to cover all risks. Defined under the CRR, capital resources are designated into two tiers, Tier 1 and Tier 2. Tier 1 capital consists of Common Equity Tier 1 ("CET1") and Additional Tier 1 ("AT1"). CET1 is the highest quality of capital and typically represents share capital, reserves and audited profit; AT1 contains hybrid debt instruments; Tier 2 capital typically consists of subordinated debt and other eligible capital instruments.

The information represented in the tables below constitutes the applicable data elements for Own Funds identified in Title VII of the Guidelines. Capital ratios are disclosed in accordance with the CRR.

The final column represents the capital position on a fully-phased in basis after all CRR transitional provisions have expired and phase-out of grandfathered capital instruments under pre-CRR national transposition measures is complete.

Table 1: CRDIV Regulatory Capital for JPMCHL as at 31st December 2016

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
	Common Equity Tier 1 (CET1) Capital: Instruments and Reserves			
1	**Capital instruments and the related share premium accounts**	**8,081**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**8,081**
	of which: Ordinary shares	8,081	EBA list 26 (3)	8,081
2	Retained earnings	27,634	26 (1) (c)	27,634
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	7,499	26 (1)	7,499
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**43,214**		**43,214**

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(1,132)	34, 105	(1,132)
8	Intangible assets (net of related tax liability) (negative amount)	(117)	36 (1) (b), 37, 472 (4)	(117)
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	(12)		0
	of which: Filter for unrealised gains relating to available-for-sale financial assets reserve on equity instruments	(12)	468	0
28	Additional deductions of CET1 Capital due to Article 3 CRR	0		
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(1,261)**		**(1,249)**
29	**Common Equity Tier 1 (CET1) capital**	**41,953**		**41,965**
Additional Tier 1 (AT1) Capital: Instruments				
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	43	85, 86	0
35	of which: instruments issued by subsidiaries subject to phase out	43	486 (3)	0
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**43**		**0**
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013	(2)	477, 477 (3), 477 (4) (a)	0
	of which: Direct holdings of significant investments in the capital of other financial sector entities	(2)		0
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(2)**		**0**
44	**Additional Tier 1 (AT1) capital**	**41**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**41,994**		**41,965**
Tier 2 (T2) Capital: Instruments and Provisions				
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	29	87, 88, 480	72
51	**Tier 2 (T2) capital before regulatory adjustments**	**29**		**72**
Tier 2 (T2) Capital: Regulatory Adjustments				
55	Direct, indirect and synthetic holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(8)	66 (d), 69, 79, 477 (4)	(10)
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(8)**		**(10)**
58	**Tier 2 (T2) capital**	**21**		**62**
59	**Total capital (TC = T1 + T2)**	**42,015**		**42,027**
60	**Total risk weighted assets**	**209,393**		**209,393**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	20.0%	92 (2) (a), 465	20.0%
62	Tier 1 ratio	20.1%	92 (2) (b), 465	20.0%
63	Total capital ratio	20.1%	92 (2) (c)	20.1%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.2%	CRD 128, 129, 130	7.1%
65	of which: capital conservation buffer requirement	0.6%		2.5%
66	of which: countercyclical buffer requirement	0.1%		0.1%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	12.1%	CRD 128	12.1%

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Amounts Below the Thresholds for Deduction (Before Risk Weighting)				
72	Direct, indirect and synthetic holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,225	36 (1) (h), 45, 46, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	3,225
73	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	351	36 (1), (i), 45, 48, 470, 472 (11)	351
74	Empty set in the EU			
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	158	36 (1) (c), 38, 48, 470, 472 (5)	158

Table 2: CRDIV Regulatory Capital for JPMS plc as at 31st December 2016

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**20,343**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**20,343**
	of which: Ordinary shares	20,343	EBA list 26 (3)	20,343
2	Retained earnings	10,153	26 (1) (c)	10,153
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	1,798	26 (1)	1,798
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	(366)		(366)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**31,928**		**31,928**
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(1,130)	34, 105	(1,130)
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	(424)	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79, 470, 472 (11)	(584)
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(1,554)**		**(1,714)**
29	**Common Equity Tier 1 (CET1) capital**	**30,374**		**30,214**
Additional Tier 1 (AT1) Capital: Instruments				
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	3,092	486 (3)	0
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**3,092**		**0**
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013	(2)	477, 477 (3), 477 (4) (a)	0
	of which: Significant investments in the capital of other financial sector entities	(2)		0
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(2)**		**0**
44	**Additional Tier 1 (AT1) capital**	**3,090**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**33,464**		**30,214**
Tier 2 (T2) Capital: Instruments and Provisions				
46	Capital instruments and the related share premium accounts	4,096	62, 63	7,188
51	**Tier 2 (T2) capital before regulatory adjustments**	**4,096**		**7,188**

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Tier 2 (T2) Capital: Regulatory Adjustments				
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(8)	66 (d), 69, 79, 477 (4)	(10)
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(8)**		**(10)**
58	**Tier 2 (T2) capital**	**4,088**		**7,178**
59	**Total capital (TC = T1 + T2)**	**37,552**		**37,392**
60	**Total risk weighted assets**	**200,079**		**199,680**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	15.2%	92 (2) (a), 465	15.1%
62	Tier 1 ratio	16.7%	92 (2) (b), 465	15.1%
63	Total capital ratio	18.8%	92 (2) (c)	18.7%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.2%	CRD 128, 129, 130	7.1%
65	of which: capital conservation buffer requirement	0.6%		2.5%
66	of which: countercyclical buffer requirement	0.1%		0.1%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	10.7%	CRD 128	9.1%
Amounts Below the Thresholds for Deduction (Before Risk Weighting)				
72	Direct, indirect and synthetic holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	2,215	36 (1) (h), 45, 46, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	2,215
73	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,080	36 (1), (i), 45, 48, 470, 472 (11)	3,080
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	89	36 (1) (c), 38, 48, 470, 472 (5)	89
Capital Instruments Subject to Phase-Out Arrangements (Only Applicable Between 1 Jan 2014 and 1 Jan 2022)				
82	Current cap on AT1 instruments subject to phase out arrangements	3,092	484 (4), 486 (3) & (5)	N/A
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	2,061	484 (4), 486 (3) & (5)	N/A

Table 3: CRDIV Regulatory Capital for JPMEL as at 31st December 2016

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**1,629**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**1,629**
	of which: Ordinary shares	1,629	EBA list 26 (3)	1,629
2	Retained earnings	1,952	26 (1) (c)	1,952
3	Accumulated other comprehensive income (and other reserves)	141	26 (1)	141
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**3,722**		**3,722**

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(0)	34, 105	(0)
8	Intangible assets (net of related tax liability) (negative amount)	(72)	36 (1) (b), 37, 472 (4)	(72)
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	(12)		0
	of which: Filter for unrealised gains relating to Available-for-Sale Financial Assets Reserve on Equity Instruments	(12)	468	0
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(84)**		**(72)**
29	**Common Equity Tier 1 (CET1) capital**	**3,638**		**3,650**
Additional Tier 1 (AT1) Capital: Instruments				
44	**Additional Tier 1 (AT1) capital**	**0**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**3,638**		**3,650**
Tier 2 (T2) Capital: Instruments and Provisions				
58	**Tier 2 (T2) capital**	**0**		**0**
59	**Total capital (TC = T1 + T2)**	**3,638**		**3,650**
60	**Total risk weighted assets**	**4,780**		**4,780**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	76.1%	92 (2) (a), 465	76.4%
62	Tier 1 ratio	76.1%	92 (2) (b), 465	76.4%
63	Total capital ratio	76.1%	92 (2) (c)	76.4%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.2%	CRD 128, 129, 130	7.1%
65	of which: capital conservation buffer requirement	0.6%		2.5%
66	of which: countercyclical buffer requirement	0.1%		0.1%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	68.1%	CRD IV 128	68.4%
Amounts Below the Thresholds for Deduction (Before Risk Weighting)				
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	2	36 (1), (i), 45, 48, 470, 472 (11)	2
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	39	36 (1) (c), 38, 48, 470, 472 (5)	39

Table 4: CRDIV Regulatory Capital for JPMIB as at 31st December 2016

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**840**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**840**
	of which: Ordinary shares	840	EBA list 26 (3)	840
2	Retained earnings	(8)	26 (1) (c)	(8)
3	Accumulated other comprehensive income (and other reserves)	399	26 (1)	399
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**1,231**		**1,231**

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(1)	34, 105	(1)
8	Intangible assets (net of related tax liability) (negative amount)	(17)	36 (1) (b), 37, 472 (4)	(17)
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(18)**		**(18)**
29	**Common Equity Tier 1 (CET1) capital**	**1,213**		**1,213**
Additional Tier 1 (AT1) Capital: Instruments				
44	**Additional Tier 1 (AT1) capital**	**0**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**1,213**		**1,213**
Tier 2 (T2) Capital: Instruments and Provisions				
58	**Tier 2 (T2) capital**	**0**		**0**
59	**Total capital (TC = T1 + T2)**	**1,213**		**1,213**
60	**Total risk weighted assets**	**7,565**		**7,565**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	16.0%	92 (2) (a), 465	16.0%
62	Tier 1 ratio	16.0%	92 (2) (b), 465	16.0%
63	Total capital ratio	16.0%	92 (2) (c)	16.0%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.1%	CRD 128, 129, 130	7.0%
65	of which: capital conservation buffer requirement	0.6%		2.5%
66	of which: countercyclical buffer requirement	0.0%		0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.0%	CRD IV 128	8.0%
Amounts Below the Thresholds for Deduction (Before Risk Weighting)				
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	1	36 (1), (i), 45, 48, 470, 472 (11)	1
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	2	36 (1) (c), 38, 48, 470, 472 (5)	2

Table 5: CRDIV Regulatory Capital for JPML as at 31st December 2016

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**174**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**174**
	of which: Ordinary shares	174	EBA list 26 (3)	174
2	Retained earnings	1,355	26 (1) (c)	1,355
3	Accumulated other comprehensive income (and other reserves)	119	26 (1)	119
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**1,648**		**1,648**
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**0**		**0**
29	**Common Equity Tier 1 (CET1) capital**	**1,648**		**1,648**
Additional Tier 1 (AT1) Capital: Instruments				
44	**Additional Tier 1 (AT1) capital**	**0**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**1,648**		**1,648**

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Tier 2 (T2) Capital: Instruments and Provisions				
58	**Tier 2 (T2) capital**	**0**		**0**
59	**Total capital (TC = T1 + T2)**	**1,648**		**1,648**
60	**Total risk weighted assets**	**1,668**		**1,668**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	98.8%	92 (2) (a), 465	98.8%
62	Tier 1 ratio	98.8%	92 (2) (b), 465	98.8%
63	Total capital ratio	98.8%	92 (2) (c)	98.8%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.1%	CRD 128, 129, 130	7.0%
65	of which: capital conservation buffer requirement	0.6%		2.5%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	90.8%	CRD IV 128	90.8%
Amounts Below the Thresholds for Deduction (Before Risk Weighting)				
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	16	36 (1), (i), 45, 48, 470, 472 (11)	16
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	28	36 (1) (c), 38, 48, 470, 472 (5)	28

Table 6: CRDIV Regulatory Capital for BSUKHL as at 31st December 2016

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**629**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**629**
	of which: Ordinary shares	629	EBA list 26 (3)	629
2	Retained earnings	(1,634)	26 (1) (c)	(1,634)
3	Accumulated other comprehensive income (and other reserves)	1,443	26 (1)	1,443
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**438**		**438**
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(0)	34, 105	(0)
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(0)**		**(0)**
29	**Common Equity Tier 1 (CET1) capital**	**438**		**438**
Additional Tier 1 (AT1) Capital: Instruments				
44	**Additional Tier 1 (AT1) capital**	**0**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**438**		**438**
Tier 2 (T2) Capital: Instruments and Provisions				
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	292	87, 88, 480	25
58	**Tier 2 (T2) capital**	**292**		**25**
59	**Total capital (TC = T1 + T2)**	**730**		**463**
60	**Total risk weighted assets**	**96**		**96**

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	456.2%	92 (2) (a), 465	456.2%
62	Tier 1 ratio	456.2%	92 (2) (b), 465	456.2%
63	Total capital ratio	760.7%	92 (2) (c)	482.4%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.1%	CRD 128, 129, 130	7.0%
65	of which: capital conservation buffer requirement	0.6%		2.5%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	450.2%	CRD IV 128	450.2%

Table 7: CRDIV Regulatory Capital for JPMML as at 31st December 2016

Transitional Own Funds Disclosure Template ($'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**126**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**126**
	of which: Ordinary shares	126	EBA list 26 (3)	126
2	Retained earnings	(135)	26 (1) (c)	(135)
3	Accumulated other comprehensive income (and other reserves)	4,077	26 (1)	4,077
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**4,068**		**4,068**
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(0)	34, 105	(0)
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(0)**		**(0)**
29	**Common Equity Tier 1 (CET1) capital**	**4,068**		**4,068**
Additional Tier 1 (AT1) Capital: Instruments				
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	15	486 (3)	0
44	**Additional Tier 1 (AT1) capital**	**15**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**4,083**		**4,068**
Tier 2 (T2) Capital: Instruments and Provisions				
46	Capital instruments and the related share premium accounts	10	62, 63	25
58	**Tier 2 (T2) capital**	**10**		**25**
59	**Total capital (TC = T1 + T2)**	**4,093**		**4,093**
60	**Total risk weighted assets**	**520**		**520**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	782.3%	92 (2) (a), 465	782.3%
62	Tier 1 ratio	785.2%	92 (2) (b), 465	782.3%
63	Total capital ratio	787.1%	92 (2) (c)	787.1%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.1%	CRD 128, 129, 130	7.0%
65	of which: capital conservation buffer requirement	0.6%		2.5%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	777.8%	CRD IV 128	776.3%
Capital Instruments Subject to Phase-Out Arrangements (Only Applicable Between 1 Jan 2014 and 1 Jan 2022)				
82	Current cap on AT1 instruments subject to phase out arrangements	15	484 (4), 486 (3) & (5)	N/A
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	10	484 (4), 486 (3) & (5)	N/A

Table 8: CRDIV Regulatory Capital for JPMMML as at 31st December 2016

	Transitional Own Funds Disclosure Template ($'m)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	**Capital instruments and the related share premium accounts**	**25**	**26 (1), 27, 28, 29, EBA list 26 (3)**	**25**
	of which: Ordinary shares	25	EBA list 26 (3)	25
2	Retained earnings	(7)	26 (1) (c)	(7)
3	Accumulated other comprehensive income (and other reserves)	0	26 (1)	0
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**18**		**18**
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**0**		**0**
29	**Common Equity Tier 1 (CET1) capital**	**18**		**18**
Additional Tier 1 (AT1) Capital: Instruments				
44	**Additional Tier 1 (AT1) capital**	**0**		**0**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**18**		**18**
Tier 2 (T2) Capital: Instruments and Provisions				
58	**Tier 2 (T2) capital**	**0**		**0**
59	**Total capital (TC = T1 + T2)**	**18**		**18**
60	**Total risk weighted assets**	**9**		**9**
Capital Ratios and Buffers				
61	Common Equity Tier 1 ratio	200.0%	92 (2) (a), 465	200.0%
62	Tier 1 ratio	200.0%	92 (2) (b), 465	200.0%
63	Total capital ratio	200.0%	92 (2) (c)	200.0%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systematically important institution buffer expressed as a percentage of risk exposure amount)	5.1%	CRD 128, 129, 130	7.0%
65	of which: capital conservation buffer requirement	0.6%		2.5%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	192.0%	CRD IV 128	192.0%

Own Funds Reconciliation

The tables below present a reconciliation between unaudited balance sheet own funds and regulatory own funds as at 31st December 2016 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 9: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMCHL as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
406,909,774 Ordinary Shares of $10 each	Accounts Note 33	4,069
Share Premium Account	Accounts Page 14	4,012
Pension Reserve	Accounts Page 14	(99)
Other Reserves	Accounts Page 14	7,598
Retained Earnings	Accounts Page 14	27,634
CET1 Capital - Balance Sheet Own Funds		**43,214**
Less Regulatory Adjustments		
(-) Intangible Assets: Goodwill	Accounts Note 21	(117)
(-) Foreseeable Dividends	CRR Art. 26	0
(-) Additional Valuation Adjustments	CRR Art. 34	(1,132)
(-) Available for Sale Financial Asset Reserve	CRR Art. 468	(12)
CET1 Capital - Regulatory Own Funds After Adjustments		**41,953**

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
AT1 Capital		
AT1 Capital - Balance Sheet Own Funds		**0**
AT1 Capital - Qualifying Own Funds	CRR Art. 84	**43**
Less Regulatory Adjustments		
(-) Other Transitional Adjustments to AT1 Capital	CRR Art. 469	(2)
AT1 Capital - Regulatory Own Funds After Adjustments		**41**
T2 Capital		
T2 Capital - Balance Sheet Own Funds		**0**
T2 Capital - Qualifying Own Funds	CRR Art. 84	**29**
Less Regulatory Adjustments		
(-) T2 Instruments of Financial Sector Entities Where the Institution has a Significant Investment	CRR Art. 474	(10)
(+) Other Transitional Adjustments to T2 Capital	CRR Art. 478	2
T2 Capital - Regulatory Own Funds After Adjustments		**21**
Total Regulatory Own Funds		**42,015**

Table 10: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMS plc as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
1,039,262 Ordinary Shares of $10,000 each	Accounts Note 24	10,393
50,000 Ordinary Shares of £1.24 each	Accounts Note 24	0
Share Premium Account	Accounts Page 32	9,951
Other Reserves	Accounts Page 32	1,798
Retained Earnings	Accounts Page 32	10,153
CET1 Capital - Balance Sheet Own Funds		**32,295**
Less Regulatory Adjustments		
(-) Foreseeable Dividends	CRR Art. 26	(366)
(-) Additional Valuation Adjustments	CRR Art. 34	(1,131)
(-) CET1 Instruments of Significant Investments Above 10% Threshold for Deduction	CRR Art. 43	(584)
(+) PRA Transitional Adjustment for CET1 Instruments of Significant Investments Within the Consolidation Group	CRR Art. 469	160
CET1 Capital - Regulatory Own Funds After Adjustments		**30,374**
AT1 Capital		
AT1 Capital - Balance Sheet Own Funds		**0**
Less Regulatory Adjustments		
(+) PRA Transitional Adjustment for Grandfathered AT1 Capital Instruments	CRR Art. 484	3,092
(-) Other Transitional Adjustments to AT1 Capital	CRR Art. 469	(2)
AT1 Capital - Regulatory Own Funds After Adjustments		**3,090**
T2 Capital		
34,648 Preferred Ordinary Shares of $10,000 Each (Preference Shares)[5]	Accounts Note 24	346
5 Year Floating Rate of $10,000 Each (Preference Shares)[5]	Accounts Note 24	2,650
10 Year Fixed Rate of $10,000 Each (Preference Shares) [5]	Accounts Note 24	2,157
20 Year Fixed Rate of $10,000 Each (Preference Shares)	Accounts Note 24	2,000
Subordinated Loan 04/12/2017[6]	Accounts Page 32	180
T2 Capital - Balance Sheet Own Funds		**7,333**

5 Grandfathered instruments eligible for recognition in AT1 subject to limits as per CRR Article 486

6 Component of 'Amounts owed to JPMorgan Chase undertakings'

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
Less Regulatory Adjustments		
(-) PRA Transitional Adjustment for T2 Instruments Grandfathered and Recognised as AT1 Capital Instruments	CRR Art. 484	(3,092)
(-) Amortisation of Subordinated Loan 04/12/2017	CRR Art. 64	(145)
(-) T2 instruments of Financial Sector Entities where the Institution has a Significant Investment	CRR Art. 474	(10)
(+) Other Transitional Adjustments to T2 Capital	CRR Art. 478	2
T2 Capital - Regulatory Own Funds After Adjustments		**4,088**
Total Regulatory Own Funds		**37,552**

Table 11: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMEL as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
1,397,922,234 Ordinary Shares of $1 Each	Accounts Note 36	1,398
Share Premium Account	Accounts Page 24	231
Other Reserves	Accounts Page 24	141
Retained Earnings	Accounts Page 24	1,952
CET 1 Capital - Balance Sheet Own Funds		**3,722**
Less Regulatory Adjustments		
(-) Foreseeable Dividends	CRR Art. 26	0
(-) Additional Valuation Adjustments	CRR Art. 34	(0)
(-) Intangible Assets: Goodwill	Accounts Page 24	(72)
(-) Available for Sale Financial Asset Reserve	CRR Art. 468	(12)
CET1 Capital - Regulatory Own Funds After Adjustments		**3,638**
Total Regulatory Own Funds		**3,638**

Table 12: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMIB as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
840,000,000 Ordinary Shares issues of $1 each	Accounts Note 29	840
Capital Contribution Reserve	Accounts Page 14	400
Retained Earnings	Accounts Page 14	(8)
Cumulative Translation Reserve	Accounts Page 14	(2)
Other Reserves	Accounts Page 14	1
Pension Reserves	Accounts Page 14	(0)
CET1 Capital - Balance Sheet Own Funds		**1,231**
Less Regulatory Adjustments		
(-) Additional Valuation Adjustments	CRR Art. 34	(1)
(-) Intangible Assets	Accounts Page 14	(17)
CET1 Capital - Regulatory Own Funds After Adjustments		**1,213**
Total Regulatory Own Funds		**1,213**

Table 13: Reconciliation of Regulatory Own Funds to Balance Sheet for JPML as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
31,856,207 A Ordinary Shares of $5 Each	Accounts Note 20	159
7,888,874 B Ordinary Shares of £1 Each	Accounts Note 20	15
Other Reserves	Accounts Page 14	119
Retained Earnings	Accounts Page 14	1,355
CET1 Capital - Balance Sheet Own Funds		**1,648**
Less Regulatory Adjustments		
CET1 Capital - Regulatory Own Funds After Adjustments		**1,648**
Total Regulatory Own Funds		**1,648**

Due to exemptions under Financial Reporting Standard ("FRS") 102, BSUKHL is not required to publish consolidated audited financial statements. Therefore the disclosures below are based on unaudited financial statements.

Table 14: Reconciliation of Regulatory Own Funds to Balance Sheet for BSUKHL as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
305,755,086 Ordinary Shares of £1 each		629
Other Reserves		1,443
Accumulated Loss		(1,634)
CET1 Capital - Balance Sheet Own Funds		**438**
Less Regulatory Adjustments		
(-) Additional Valuation Adjustments	CRR Art. 34	(0)
CET1 Capital - Regulatory Own Funds After Adjustments		**438**
AT1 Capital		
AT1 Capital - Regulatory Own Funds After Adjustments		**0**
T2 Capital		
T2 Capital - Balance Sheet Own Funds		**0**
T2 Capital - Qualifying Own Funds	CRR Art. 87	**292**
T2 Capital - Regulatory Own Funds After Adjustments		**292**
Total Regulatory Own Funds		**730**

Table 15: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMML as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
300 Ordinary Shares of £1 Each, Authorised and Issued	Accounts Note 19	0
Share Premium Account	Accounts Page 18	126
Other Reserves	Accounts Page 18	4,077
Accumulated Loss	Accounts Page 18	(135)
CET1 Capital - Balance Sheet Own Funds		**4,068**
Less Regulatory Adjustments		
(-) Additional Valuation Adjustments	CRR Art. 34	(0)
CET1 Capital - Regulatory Own Funds After Adjustments		**4,068**
AT1 Capital		
AT1 Capital - Balance Sheet Own Funds		**0**

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
Less Regulatory Adjustments		
(+) FCA Transitional Adjustment for Grandfathered AT1 Capital Instruments	CRR Art. 484	15
AT1 Capital - Regulatory Own Funds After Adjustments		**15**
T2 Capital		
25 Redeemable Non-Cumulative Preference Shares of $1,000,000 Each	Accounts Note 19	25
T2 Capital - Balance Sheet Own Funds		**25**
Less Regulatory Adjustments		
(-) FCA Transitional Adjustment for T2 Instruments Grandfathered and Recognised as AT1 Capital Instruments	CRR Art. 484	(15)
T2 Capital - Regulatory Own Funds After Adjustments		**10**
Total Regulatory Own Funds		**4,093**

Table 16: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMMML as at 31st December 2016

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	$'m
CET1 Capital		
1 Ordinary Share of £1	Accounts Note 16	0
25,000,000 Ordinary Shares of $1 Each	Accounts Note 16	25
Other Reserves	Accounts Page 13	0
Retained Earnings	Accounts Page 13	(7)
CET1 Capital - Balance Sheet Own Funds		**18**
CET1 Capital - Regulatory Own Funds After Adjustments		**18**
Total Regulatory Own Funds		**18**

Main Features of Capital Instruments

The tables below present the main features of regulatory capital instruments for the in scope entities as at 31st December 2016 required by Commission Implementing Regulation (EU) No 1423/2013. The terms and conditions can be found on the Companies House website.

Table 17: Main Features of Regulatory Capital Instruments for JPMCHL and JPMS plc as at 31st December 2016[7]

Capital Instruments Main Features ($'m)		JPMCHL	JPMS plc							
		CET1	CET1	CET1	CET1	AT1 / T2	AT1 / T2	AT1 / T2	T2	T2
		$10 ordinary shares	$10,000 ordinary shares	£1 ordinary shares	£1.24 ordinary shares	10 year fixed preference shares	5 year floating preference shares	$10,000 preferred ordinary shares	20 year fixed preference shares	$180m subordinated loan
1	Issuer	JPMCHL	JPMS plc	JPMS plc	JPMS plc	JPMS plc	JPMS plc	JPMS plc	JPMS plc	JPMS plc
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement
3	Governing law(s) of the instrument	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	Contracts (Rights of Third Parties) Act 1999
Regulatory treatment										
4	Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Additional Tier 1/Tier 2	Additional Tier 1/Tier 2	Additional Tier 1/Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Consolidated	Solo	Solo	Solo	Solo	Solo	Solo	Solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	$ Ordinary	$ Ordinary	£ Ordinary	£ Ordinary	$ Preference	$ Preference	$ Preferred ordinary	$ Preference	$ Subordinated loan
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	8,081 includes nominal and premium	20,343 includes nominal and premium	0	0	1,294 - AT1 / 863 - T2	1,590 - AT1 / 1060 - T2	208 AT1 / 138 - T2	2,000	34
9	Nominal amount of instrument	10	10,000	1	1	10,000	10,000	10,000	10,000	180
9a	Issue price	10	10,000	1	1.24	10,000	10,000	10,000	10,000	1
9b	Redemption price	N/A	N/A	N/A	N/A	10,000	10,000	10,000	10,000	100%
10	Accounting classification	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Liability

7 Answers in the Main Features of Regulatory Capital Instruments table have been provided using the list of options provided in the COMMISSION IMPLEMENTING REGULATION (EU) No 1423/2013. Rows 19, 21, 22, 23 and 36 are N/A for the ordinary shares

Capital Instruments Main Features ($'m)		JPMCHL	JPMS plc							
		CET1	CET1	CET1	CET1	AT1 / T2	AT1 / T2	AT1 / T2	T2	T2
		$10 ordinary shares	$10,000 ordinary shares	£1 ordinary shares	£1.24 ordinary shares	10 year fixed preference shares	5 year floating preference shares	$10,000 preferred ordinary shares	20 year fixed preference shares	$180m subordinated loan
11	Original date of issuance	$0.2m Nov 18 1999 $2,000m Jan 25 2000 $959m Nov 2 2000 $1,110m Apr 9 2002 $0.01m Dec 12 2006 $0.01m Mar 7 2007 $0.01m Oct 15 2007	$647m Oct 22 1991 $290m Mar 1 2000 $500m Jan 2 2007 $278m Jan 12 2007 $270m Dec 1 2008 $230m Dec 4 2008 $1,200m Dec 16 2008 $300m Jan 30 2009 $2,000m Dec 20 2010 $2,274m May 27 2011 $362m Dec 12 2011 $1,263m Dec 16 2013 $116m Dec 2 2014 $662m Jul 27 2015	$0.000004m Oct 27 1999	$0.1m May 28 2012	$2,087m Oct 30 2007 $70m Dec 4 2007	$510m Jun 9 2004 $325m Dec 22 2004 $302m Feb 23 2005 $450m Nov 17 2005 $150m Mar 2 2006 $200m Mar 20 2006 $713m Oct 1 2007	$346m Mar 26 2002	$2,000m Jan 31 2011	$180m 11 December 2007
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Dated
13	Original maturity date	No maturity	No maturity	No maturity	No maturity	No maturity	No maturity	No maturity	No maturity	14 December 2017
14	Issuer call subject to prior supervisory approval	No	No	No	No	Yes	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	26 October 2017/Par	10 June 2009/Par	26 March 2007/Par	01 February 2021/Par	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coupons / dividends										
17	Fixed or floating dividend/coupon	N/A	N/A	N/A	N/A	Fixed-rate	Floating-rate	N/A	Fixed-rate	Floating-rate
18	Coupon rate and any related index	N/A	N/A	N/A	N/A	2.75% and 2.85% above 10 year treasury at time of issue	0.9% + 12 month US$ LIBOR	0.9% + 12 month US$ LIBOR	8%	0.9% + 3 month US$ LIBOR
19	Existence of a dividend stopper	N	N	N	N	N	N	N	N	N
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Partially discretionary	Fully discretionary	Fully discretionary	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory
21	Existence of step up or other incentive to redeem	N	N	N	N	N	N	N	N	N
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Capital Instruments Main Features ($'m)		JPMCHL	JPMS plc							
		CET1	CET1	CET1	CET1	AT1 / T2	AT1 / T2	AT1 / T2	T2	T2
		$10 ordinary shares	$10,000 ordinary shares	£1 ordinary shares	£1.24 ordinary shares	10 year fixed preference shares	5 year floating preference shares	$10,000 preferred ordinary shares	20 year fixed preference shares	$180m subordinated loan
30	Write-down features	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	Ranks below preference shares in respect of income and capital distributions	Ranks below preferred ordinary and preference shares in respect of income and capital distributions	Ranks below preference ordinary and preference shares in respect of income and capital distributions	Ranks above ordinary shares in respect of income and capital distributions	Ranks above ordinary shares in respect of income and capital distributions	Ranks above ordinary shares in respect of income and capital distributions	Ranks above ordinary shares in respect of income and capital distributions	Unsecured and Unsubordinated Creditors
36	Non-compliant transitioned features	N	N	N	N	N	N	N	N	N
37	If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 18: Main Features of Regulatory Capital Instruments for JPMEL, JPMIB, JPML, BSUKHL, JPMML and JPMMML as at 31st December 2016[7]

Capital Instruments Main Features ($'m)		JPMEL	JPMIB	JPML		BSUKHL	JPMML		JPMMML	
		CET1	CET1	CET1	CET1	CET1	CET1	CET1	CET1	CET1
		$1 ordinary shares	$1 ordinary shares	£1 ordinary shares	$5 ordinary shares	£1 ordinary shares	£1 ordinary shares	$1mm preference shares	£1 ordinary shares	$1 ordinary shares
1	Issuer	JPMEL	JPMIB	JPML	JPML	BSUKHL	JPMML	JPMML	JPMMML	JPMMML
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement	Private Placement
3	Governing law(s) of the instrument	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006
Regulatory treatment										
4	Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Additional Tier 1/Tier 2	Common Equity Tier 1	Common Equity Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Common Equity Tier 1	Common Equity Tier 1
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Solo	Solo	Solo	Solo	Consolidated	Solo	Solo	Solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	$ Ordinary	$ Ordinary shares	£ Ordinary	$ Ordinary	£ Ordinary	£ Ordinary	$ Preference	£ Ordinary	$ Ordinary
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	1,629 includes nominal and premium	840	15	159	629	0	15 - AT1 10 - T2	0	25
9	Nominal amount of instrument	1	1	1	5	1	1	1,000,000	1	1
9a	Issue price	1	1	1	5	1	1	1,000,000	1	1
9b	Redemption price	N/A	N/A	N/A	N/A	N/A	N/A	1,000,000	N/A	N/A
10	Accounting classification	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity
11	Original date of issuance	$0.000001m Sep 08 1992 $95m Sep 30 1993 $350m May 11 1995 $36m May 01 1997 $206m Oct 31 1997 $500m Nov 28 1997 $85m Nov 02 1998 $9m Oct 20 1999 $117m Dec 15 2005	$0.000001m Dec 14 1999 $320m Dec 13 2012 $7m Dec 14 1999 $93m Apr 26 2000 $100m Jun 14 2001 $20m Sep 07 2004 $100m Oct 29 2004 $200m Apr 05 2007 $0.000001m Dec 14 1999	$13m Dec 18 1987 $1m Nov 30 1989 $1m Dec 18 1987	$23m Oct 21 1986 $40m Mar 17 1989 $39m Nov 15 1991 $0.26m Nov 16 1990 $0.00001m Jan 31 1991 $0.00001m Nov 13 1991 $28m Dec 19 1991 $18m Jan 1 1992	$0.000004m Oct 9 2000 $280m Nov 6 2000 $14m Jul 24 2002 $141m May 31 2007 $93m Aug 30 2007 $45m Nov 29 2007		$25m Jan 24 2003	$0.000002m Nov 7 2007	$25m Oct 22 2012
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual		Perpetual	Perpetual	
13	Original maturity date	No maturity	No maturity	No maturity	No maturity	No maturity		No maturity	No maturity	
14	Issuer call subject to prior supervisory approval	No	No	No	No	No		Yes	No	

Capital Instruments Main Features ($'m)		JPMEL	JPMIB	JPML		BSUKHL	JPMML		JPMMML	
		CET1	CET1	CET1	CET1	CET1	CET1	CET1	CET1	CET1
		$1 ordinary shares	$1 ordinary shares	£1 ordinary shares	$5 ordinary shares	£1 ordinary shares	£1 ordinary shares	$1mm preference shares	£1 ordinary shares	$1 ordinary shares
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A		N/A	N/A	
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A		N/A	N/A	
Coupons / dividends										
17	Fixed or floating dividend/coupon	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A
18	Coupon rate and any related index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Existence of a dividend stopper	N	N	N	N	N	N	N	N	N
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary
21	Existence of step up or other incentive to redeem	N	N	N	N	N	N	N	N	N
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
30	Write-down features	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	Only one shareholder and one class of shares - same rights attached to all shares	Ranks pari passu	Ranks pari passu	One class of share & same rights attached to all shares	Ranks pari passu	Ranks pari passu	Ranks pari passu	Ranks pari passu
36	Non-compliant transitioned features	N	N	N	N	N	N	N	N	N
37	If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

4. Capital Requirements (Art. 438)

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.

Internal Capital Adequacy Assessment Process

The entities in scope complete an ICAAP on a periodic basis, which provides management with a view of the impact of severe and unexpected events on earnings, risk-weighted assets and capital. The Firm's ICAAP integrates stress testing protocols with capital planning.

The process assesses the potential impact of alternative economic and business scenarios on the Firm's earnings, capital resources, risk-weighted assets and balance sheet. These scenarios are articulated in terms of macroeconomic factors, which are key drivers of business results; global market shocks, which generate short-term but severe trading losses; and idiosyncratic operational risk events. The scenarios are intended to capture and stress key vulnerabilities and idiosyncratic risks facing the entities in scope. However, when defining a broad range of scenarios, realized events can always be worse. Accordingly, management considers additional stresses outside these scenarios, as necessary. ICAAP results are reviewed by management and the relevant Board of Directors.

Key Changes during the Period

- **Credit Risk** – Increase year on year is driven by trading book policy statement review and legal entity rationalisation
    - **Trading Book Policy Statement Review** - During a review of the firm's Trading Book Policy Statement the definition of the trading / banking book boundary for some SFTs was revised. This resulted in an increase in banking book SFT exposure. The transfer to the banking book also reduced collateral eligibility for a number of hedge fund counterparties which increased Items Associated with Particularly High Risk.
    - **Legal Entity Rationalisation** – Counterparty Risk and Credit Valuation Adjustment Risk resulting from derivatives transactions increased during the period. This was driven by ongoing business migrations as part of strategic legal entity rationalisation.
- **Position Risk** – Increase year on year is driven by interest rate market risk offset by a decrease in equity market risk
    - **Interest Rate Market Risk -** Increase in general risk due to an increase in Euro exposure, offset by a decrease in specific risk driven by reduced securitisations exposure. Other decreases in specific risk were noted in securities priced in Brazilian Real, Swiss Franc and Pound Sterling.
    - **Equity Market Risk -** Decrease in capital requirement related to exotics products (variance swaps, volatility swaps and dividend futures). Smaller decreases in specific risk arose across securities with the largest decrease seen in Netherlands, Germany and China.
- **Foreign-Exchange Risk -** Increased due to an increase in long exposure in EURO, YEN and GBP. The removal of USD as a closely correlated currencies against GBP in October 2016 also contributed to the increase.
- **Credit Exposure Class Breakdown** – Changes in the breakdown were due to short term credit assessment interpretation and clarifications from an EBA Q&A
    - **Short Term Credit Assessment -** During the year there was a change in the interpretation for short term treatment which resulted in a decrease in exposure reported as Short Term Credit Assessment and an increase in Institutions and Corporates. Previously all trades with Corporates and Institutions maturing within 3 months were included in Short Term Credit Assessment. A change was made to only include exposures to Corporates and Institutions maturing within 3 months where a short term credit assessment is also available.
    - **Reclass from Other to Equity Exposures** – As a result of the publication of EBA Q&A 2013_670[8] in October 2016, the firm has reclassed exposures to significant investments under the threshold for deduction from Other to Equity.

8 http://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2013_670

Minimum Capital Requirements

The tables below present minimum capital requirements for JPMCHL and its significant regulated subsidiaries, BSUKHL and its significant regulated subsidiary and JPMMML.

The standardised approach has been used for the calculation of Credit Risk and Market Risk Capital Requirements and the UK regulated entities do not make use of modelled approaches included the Internal Ratings Based Approach. The Basic Indicator Approach ("BIA") has been used for the calculation of Operational Risk Capital Requirements. Operational Risk for the limited licence firm's JPML and JPMMML are captured under the Fixed Overheads Requirement. The minimum capital requirement under the Fixed Overheads approach is calculated as the higher of the Fixed Overheads Requirement and the sum of market risk, credit risk and other Pillar 1 capital requirements.

The minimum capital requirements below represent the Pillar 1 requirements as per the CRR. They do not include additional minimum requirements set out by the PRA or FCA as part of the firm's Individual Capital Guidance (''ICG''). In accordance with PRA Supervisory Statement SS31/15, the firm is not required to disclose its ICG.

Table 19: Minimum Capital Requirements for JPMCHL and Significant Subsidiaries as at 31st December 2016

	JPMCHL		JPMS plc		JPMEL		JPMIB		JPML	
Risk Type ($'m)	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA
Credit Risk (inc. Counterparty Risk)	**8,322**	**104,024**	**8,101**	**101,260**	**204**	**2,554**	**535**	**6,693**	**29**	**364**
Position Risk	3,764	47,051	3,591	44,882	10	124	2	25	0	0
Commodity Risk	106	1,326	106	1,326	0	0	0	0	0	0
Foreign-Exchange Risk	776	9,699	776	9,699	0	0	0	0	0	0
Market Risk	**4,646**	**58,076**	**4,473**	**55,907**	**10**	**124**	**2**	**25**	**0**	**0**
Default Fund Contribution Requirement	128	1,604	128	1,604	0	0	0	0	0	0
Settlement Risk	27	337	22	271	5	67	0	0	0	0
Credit Valuation Adjustment Risk	2,417	30,218	2,402	30,021	0	0	16	197	0	0
Large Exposures Risk	0	0	0	0	0	0	0	0	0	0
Operational Risk	1,211	15,134	881	11,016	163	2,035	52	650	0	0
Additional Amount Due to Fixed Overheads	0	0	0	0	0	0	0	0	104	1,304
Total	**16,751**	**209,393**	**16,007**	**200,079**	**382**	**4,780**	**605**	**7,565**	**133**	**1,668**

Table 20: Minimum Capital Requirements for Credit and Counterparty Risk for JPMCHL and Significant Subsidiaries as at 31st December 2016

	JPMCHL		JPMS plc		JPMEL		JPMIB		JPML	
Credit Exposure Class ($'m)	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA
Central Governments or Central Banks	110	1,374	96	1,202	8	97	0	6	6	70
Regional Governments or Local Authorities	1	14	1	14	0	0	0	0	0	0
Public Sector Entities	3	37	3	36	0	0	0	0	0	0
Multilateral Development Banks	2	24	2	24	0	0	0	0	0	0
Institutions	1,449	18,110	1,425	17,811	11	138	7	86	3	41
Corporates	4,793	59,907	4,185	52,317	168	2,099	439	5,489	0	0
Secured by Mortgages on Immovable Property	67	834	0	0	0	0	67	834	0	0
Items Associated with Particularly High Risk	1,408	17,595	1,404	17,548	0	0	4	48	0	0
Claims on Institutions and Corporates with a Short-Term Credit Assessment	383	4,789	377	4,717	5	60	1	13	0	0
Equity	0	0	581	7,262	0	4	0	2	3	40
Other Items	106	1,340	27	329	12	156	17	215	17	213
Total	**8,322**	**104,024**	**8,101**	**101,260**	**204**	**2,554**	**535**	**6,693**	**29**	**364**

Table 21: Minimum Capital Requirements for BSUKHL, JPMML and JPMMML as at 31st December 2016

	BSUKHL		JPMML		JPMMML	
Risk Type ($'m)	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA
Credit Risk (inc. Counterparty Risk)	**7**	**90**	**39**	**494**	**0**	**5**
Position Risk	0	0	0	0	0	0
Commodity Risk	0	0	0	0	0	0
Foreign-Exchange Risk	0	0	0	0	0	0
Market Risk	**0**	**0**	**0**	**0**	**0**	**0**
Default Fund Contribution Requirement	0	0	0	0	0	0
Settlement Risk	0	0	0	0	0	0
Credit Valuation Adjustment Risk	0	2	0	2	0	0
Large Exposures Risk	0	4	0	0	0	0
Operational Risk	0	0	2	24	0	0
Additional Amount Due to Fixed Overheads	0	0	0	0	0	4
Total	**7**	**96**	**41**	**520**	**0**	**9**

Table 22: Minimum Capital Requirements for Credit and Counterparty Risk for BSUKHL, JPMML and JPMMML as at 31st December 2016

	BSUKHL		JPMML		JPMMML	
Credit Exposure Class ($'m)	Capital Requirement	RWA	Capital Requirement	RWA	Capital Requirement	RWA
Central Governments or Central Banks	0	5	0	5	0	0
Regional Governments or Local Authorities	0	0	0	0	0	0
Public Sector Entities	0	0	0	0	0	0
Multilateral Development Banks	0	0	0	0	0	0
Institutions	4	48	4	48	0	4
Corporates	0	3	33	410	0	0
Secured by Mortgages on Immovable Property	0	0	0	0	0	0
Items Associated with Particularly High Risk	0	0	0	0	0	0
Claims on Institutions and Corporates with a Short-Term Credit Assessment	0	0	0	0	0	0
Equity	1	11	1	11	0	0
Other Items	2	23	1	20	0	1
Total	**7**	**90**	**39**	**494**	**0**	**5**

5. Exposure to Counterparty Credit Risk (Art. 439)

Internal Capital and Credit Limits for Counterparty Credit Exposures

The Firm expresses counterparty credit exposure using the several measures of potential future exposure using Monte-Carlo methods. Monte-Carlo simulation models generate mark-to-market distributions for a portfolio of financial instruments under various future market states. This calculation takes into account the effects of credit risk mitigants, such as close-out netting and collateral agreements.

Peak exposure to a counterparty is a weighted average expected tail loss above the 93.5 percentile. For derivatives, the Firm uses Peak as its primary measure for credit limits and credit approvals.

Derivative Risk Equivalent ("DRE") is a less extreme measure of potential credit loss than Peak. DRE is a measure that expresses the risk of derivative exposure on a basis intended to be equivalent to the risk of loan exposures. The measurement is done by equating the unexpected loss in a derivative counterparty exposure (which takes into consideration both the loss volatility and the credit rating of the counterparty) with the unexpected loss in a loan exposure (which takes into consideration only the credit rating of the counterparty).

Finally, Average exposure is a measure of the expected fair value of the Firm's derivative receivables at future time periods, including the benefit of collateral. Average exposure over the total life of the derivative contract is used as the primary metric for pricing purposes and is used to calculate Credit Valuation Adjustment ("CVA"), while average exposure over the first year of the derivative contract is the primary metric for calculating regulatory credit capital.

For securities financing transactions ("SFT"), the Firm uses Securities Risk Equivalent, a measure conceptually close to DRE.

In order to assess the internal credit capital required to support its business in the event of unexpected credit losses, the Firm uses Economic Capital. To compute Economic Capital, the loss distribution for the wholesale portfolio is calculated by running Monte-Carlo simulations using J.P. Morgan's Proprietary Capital Model with a one-year horizon. The principal drivers of portfolio capital are:

- The risk characteristics of individual exposures; and
- The correlations among different borrowers.

Portfolio capital is allocated to each exposure using a formula based on the exposure's Risk Grade, Probability of Default ("PD"), Loss Given Default ("LGD"), Loan Equivalent exposure amount, and tenor.

Policies for Securing Collateral and Establishing Credit Reserves

Entities in scope are covered by firmwide policies relating to the type of acceptable collateral posted in support of all forms of credit exposure. Cash and certain high quality bonds are generally considered acceptable collateral.

The receipt of collateral to secure credit exposures is reflected through the LGD estimate at the facility level for traditional credit products and through the expected exposure estimate for Over the Counter ("OTC") derivatives and repo-style transactions. The existence of guarantees is reflected in the internal risk grade assigned to the exposure, if the guarantee meets certain documentation standards and provides acceptable coverage of the obligor's indebtedness and economic and political risks. To address residual risk related to collateral and guarantees, the Firm has instituted policies to assess and monitor the enforceability and effectiveness of these credit risk mitigants.

Wrong-Way Risk Policies

The firm may be exposed to additional credit risk as a result of the wrong way nature of certain OTC derivatives and securities financing trades, or the wrong way nature of collateral taken against OTC derivative exposures. Wrong way risk is broadly defined as the potential for increased correlation between the Firm's exposure to a counterparty and the counterparty's credit quality. Accordingly J.P. Morgan has established a credit policy that defines the CIB governance framework and additional controls to cover specific and general wrong way risk. OTC derivatives and securities financing trades that exhibit wrong way risk will have conservative credit exposure assigned which would lead to higher CVA, regulatory credit capital and economic credit capital than for unrelated trades.

Impact of Credit Rating Downgrade

The impact of a downgrade in the Firm's credit rating is considered in the JPMorgan Chase & Co. SEC 10-K filing, at a firmwide level. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioural factors (which the Firm believes are incorporated in its liquidity risk and stress testing metrics). Credit rating downgrade analysis is incorporated within the liquidity risk metrics for JPMCHL's key entities (JPMS plc, JPMEL and JPMIB).

Counterparty Credit Risk Analysis

The tables below show counterparty credit risk exposures after the application of credit risk mitigation, analysed by the type of financial contract. Counterparty credit risk exposures are calculated under the standardised approaches set out in the CRR. All derivative exposures are calculated using the Mark to Market method (CRR Article 274) and SFTs using the Financial Collateral Comprehensive Method (''FCCM'') (CRR Article 223). 'Other' financial contract types relates to Long Settlement Transactions which are treated under the FCCM method. There is no counterparty credit risk in JPML or JPMMML.

Table 23: Counterparty Credit Exposure by Financial Contract Type for JPMCHL and Significant Subsidiaries as at 31st December 2016

Financial Contract Type ($'m)	JPMCHL		JPMS plc		JPMEL		JPMIB	
	MTM Approach	Other Approach	MTM Approach	Other Approach	MTM Approach	Other Approach	MTM Approach	Other Approach
Interest Rate Contracts	34,548	0	34,483	0	0	0	65	0
Foreign Currency Contracts	20,004	0	19,561	0	45	0	399	0
Equities Contracts	34,857	0	34,736	0	0	0	143	0
Precious Metals (exc. Gold) Contracts	60	0	60	0	0	0	0	0
Commodities (exc. Precious Metals) Contracts	12,028	0	12,028	0	0	0	0	0
Securities Financing Transactions	0	39,968	0	39,479	0	473	0	117
Credit Derivatives	7,415	0	7,371	0	0	0	43	0
Other	0	2,051	0	2,051	0	0	0	0
Total Exposure	**108,912**	**42,019**	**108,239**	**41,530**	**45**	**473**	**650**	**117**

Table 24: Counterparty Credit Exposure by Financial Contract Type for BSUKHL and JPMML as at 31st December 2016

Financial Contract Type ($'m)	BSUKHL		JPMML	
	MTM Approach	Other Approach	MTM Approach	Other Approach
Interest Rate Contracts	0	0	0	0
Foreign Currency Contracts	2	0	2	0
Equities Contracts	1	0	1	0
Precious Metals (exc. Gold) Contracts	0	0	0	0
Commodities (exc. Precious Metals) Contracts	2	0	2	0
Securities Financing Transactions	0	0	0	0
Credit Derivatives	0	0	0	0
Other	0	0	0	0
Total Exposure	**5**	**0**	**5**	**0**

The table below shows the counterparty credit risk exposures for derivatives. Exposures reported under the Mark to Market method are subject to appropriate netting and collateral offsets and require adjustment for market driven movements that may lead to increased replacement cost at the time of default, i.e. the potential future credit exposure.

Table 25: Breakdown of Counterparty Credit Risk Exposure for Derivatives as at 31st December 2016

Legal Entity ($'m)	Gross Positive Fair Value of Contracts	Potential Future Credit Exposure	Netting Benefit	Net Current Credit Exposure	CRM	Net Derivatives Credit Exposure
JPMCHL	314,471	186,800	(310,411)	190,860	(81,948)	108,912
JPMS plc	313,886	185,979	(309,042)	190,823	(82,585)	108,238
JPMEL	13	32	0	45	0	45
JPMIB	628	793	(565)	856	(206)	650
BSUKHL	3	2	0	5	0	5
JPMML	3	2	0	5	0	5

Credit Derivatives Breakdown

The table below presents a breakdown of credit derivatives notionals for each entity by product type and whether they are held for client intermediation or for the firm's own portfolio. The firm makes limited use of credit derivatives hedges for the purpose of credit risk mitigation as disclosed in Section 17. Credit derivatives trading activity is only carried out within JPMS plc and JPMIB.

Table 26: Credit Derivatives Notional Breakdown for All Entities as at 31st December 2016

Notional Amount ($'m)	JPMCHL	JPMS plc	JPMIB
Firm's Own Portfolio			
Credit Default Swaps (Single Name & Indices)			
Bought	59	59	0
Sold	59	59	0
Total Return Swaps			
Bought	24,532	24,532	0
Sold	0	0	0
Client Intermediation			
Credit Default Swaps (Single Name & Indices)			
Bought	162,742	162,525	217
Sold	162,742	162,525	217
Total Return Swaps			
Bought	4,342	4,342	0
Sold	1,446	1,446	0

6. Countercyclical Capital Buffers (Art. 440)

Under Basel III, each firm is required to hold an additional capital buffer against macroeconomic risks associated with an increase in aggregate credit. Each firm is required to calculate its institution-specific countercyclical buffer rate as a weighted average of the buffer rates that have been set for each jurisdiction to which the firm has relevant credit exposures. The countercyclical buffer is then the institution-specific countercyclical buffer rate multiplied by total RWA.

The tables below show a breakdown of the geographic distribution of relevant credit exposures along with the calculation of the institution-specific countercyclical capital buffer as per Commission Delegated Regulation (EU) 2015/1555. There are no banking securitisation exposures and therefore no relevant credit exposures arising from banking book securitisation exposures are shown below.

All of JPMMML's relevant credit exposures are to the United Kingdom and therefore the geographic distribution of JPMMML's exposures is not disclosed in the tables below.

Table 27: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMCHL as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
Norway	886	717	52	13	65	0.79%	1.500%
Sweden	2,072	187	151	13	164	2.00%	1.500%
Hong Kong	1,861	179	148	20	168	2.04%	0.625%
Belgium	3,518	128	107	7	114	1.39%	0.000%
British Virgin Islands	3,061	551	283	21	304	3.69%	0.000%
Cayman Islands	11,289	671	1,234	53	1,287	15.62%	0.000%
France	8,472	881	309	91	400	4.85%	0.000%
Germany	4,269	414	275	101	376	4.56%	0.000%
Ireland	2,746	322	244	98	342	4.15%	0.000%
Italy	3,547	504	230	61	291	3.53%	0.000%
Jersey	1,537	273	129	26	155	1.88%	0.000%
Luxembourg	5,931	1,125	479	112	591	7.17%	0.000%
Netherlands	4,796	1,019	341	136	477	5.79%	0.000%
Spain	2,410	345	177	102	279	3.39%	0.000%
Switzerland	1,063	13	73	42	115	1.39%	0.000%
United Kingdom	19,228	3,360	835	475	1,309	15.93%	0.000%
United States	11,210	796	752	95	847	10.29%	0.000%
Other Countries (Own Funds Requirement <1%)	8,342	2,294	614	336	950	11.54%	0.000%
Total	**96,238**	**13,779**	**6,433**	**1,802**	**8,235**	**100%**	

Table 28: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMS plc as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
Norway	732	717	38	13	51	0.68%	1.500%
Sweden	1,995	187	148	12	160	2.15%	1.500%
Hong Kong	1,612	179	128	20	148	1.99%	0.625%
Belgium	3,277	128	92	7	99	1.33%	0.000%
British Virgin Islands	2,112	551	207	21	228	3.05%	0.000%
Cayman Islands	10,856	671	1,198	54	1,252	16.78%	0.000%
France	7,873	881	262	91	353	4.74%	0.000%
Germany	4,051	414	258	100	358	4.81%	0.000%
Ireland	2,693	322	240	98	338	4.53%	0.000%
Italy	2,073	504	111	61	172	2.31%	0.000%
Jersey	1,465	273	123	26	149	2.00%	0.000%
Luxembourg	5,595	1,125	448	113	561	7.52%	0.000%
Netherlands	4,749	1,019	336	137	473	6.34%	0.000%
Spain	1,846	345	133	101	234	3.14%	0.000%
Switzerland	1,008	13	68	42	110	1.48%	0.000%
United Kingdom	18,196	3,022	761	451	1,212	16.26%	0.000%
United States	9,170	796	596	95	691	9.27%	0.000%
Other Countries (Own Funds Requirement <1%)	7,259	2,294	527	337	864	11.58%	0.000%
Total	**86,562**	**13,441**	**5,674**	**1,779**	**7,453**	**100%**	

Table 29: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMEL as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
Norway	151	0	14	0	14	6.98%	1.500%
Sweden	39	0	1	0	1	0.63%	1.500%
Belgium	95	0	7	0	7	3.42%	0.000%
France	315	0	23	0	23	11.71%	0.000%

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
Germany	41	0	3	0	3	1.66%	0.000%
Italy	31	0	2	0	2	1.24%	0.000%
Luxembourg	163	0	16	0	16	8.25%	0.000%
Netherlands	22	0	3	0	3	1.31%	0.000%
Spain	230	0	18	0	18	9.24%	0.000%
Switzerland	39	0	3	0	3	1.56%	0.000%
United Kingdom	218	248	11	19	29	14.38%	0.000%
United States	1,038	0	77	0	77	38.22%	0.000%
Other Countries (Own Funds Requirement <1%)	31	0	3	0	3	1.39%	0.000%
Total	**2,413**	**248**	**181**	**18**	**199**	**100%**	

Table 30: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMIB as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
Norway	3	0	0	0	0	0.04%	1.500%
Sweden	38	0	3	0	3	0.58%	1.500%
Hong Kong	248	0	20	0	20	3.77%	0.625%
Bahamas	216	0	17	0	17	3.28%	0.000%
Belgium	146	0	8	0	8	1.60%	0.000%
British Virgin Islands	948	0	76	0	76	14.38%	0.000%
Cayman Islands	432	0	35	0	35	6.67%	0.000%
France	284	0	23	0	23	4.37%	0.000%
Germany	176	0	14	0	14	2.67%	0.000%
Greece	74	0	6	0	6	1.13%	0.000%
India	88	0	7	0	7	1.34%	0.000%
Italy	1,443	0	116	0	116	21.95%	0.000%
Jersey	73	0	6	0	6	1.10%	0.000%
Luxembourg	174	0	13	0	13	2.51%	0.000%
Spain	333	0	27	0	27	5.06%	0.000%

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
United Kingdom	818	0	65	0	65	12.40%	0.000%
United States	364	0	29	0	29	5.52%	0.000%
Other Countries (Own Funds Requirement <1%)	767	0	62	0	62	11.64%	0.000%
Total	**6,625**	**0**	**527**	**0**	**527**	**100%**	

Table 31: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPML as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
United States	214	0	17	0	17	99.88%	0.000%
Other Countries (Own Funds Requirement <1%)	2	0	0	1	1	0.12%	0.000%
Total	**216**	**0**	**17**	**1**	**18**	**100%**	

Table 32: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for BSUKHL as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
United Kingdom	3	0	0	0	2	13.64%	0.000%
United States	23	0	2	0	2	86.36%	0.000%
Total	**26**	**0**	**2**	**0**	**2**	**100%**	

Table 33: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMML as at 31st December 2016

Breakdown by Country ($'m)	General Credit Exposures	Trading Book Exposure	Own Funds Requirements			Own Funds Requirement Weights	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Sum of Long and Short Position of Trading Book	Of which: General Credit Exposures	Of which: Trading Book Exposures	Total		
United Kingdom	410	0	32	0	32	95.34%	0.000%
United States	20	0	2	0	2	4.66%	0.000%
Total	**430**	**0**	**34**	**0**	**34**	**100%**	

Table 34: Amount of Institution-Specific Countercyclical Capital Buffer as at 31st December 2016

$'m	JPMCHL	JPMS plc	JPMEL	JPMIB	JPML	BSUKHL	JPMML	JPMMML
Total Risk Exposure Amount	209,446	200,079	4,780	7,565	1,668	96	520	9
Institution Specific Countercyclical Buffer Rate	0.05%	0.05%	0.11%	0.03%	0.00%	0.00%	0.00%	0.00%
Institution Specific Countercyclical Buffer Requirement	**114**	**110**	**5**	**2**	**0**	**0**	**0**	**0**

7. Credit Risk Adjustments (Art. 442)

Definitions

The following definitions are used for accounting purposes:

- **Impairment of financial assets:** Impairment losses on loans and receivables are measured as the difference between the financial assets carrying amount and the present value of the estimated future cash flows discounted at the financial asset's effective interest rate.
- **Impairment of non-financial assets:** An impairment loss is recognized 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).
- **Past due:** A financial asset is past due when a counterparty has failed to make a payment when contractually due.

Credit Risk Adjustments for Loan Assets

The firm 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 are measured as the difference between the financial assets carrying amount and the present value of the estimated future cash flows discounted at the financial assets 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 firm 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. 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. Impairment provisions are determined by modelling the current exposure, taking into account such factors as duration and probabilities of default.

Credit Risk Adjustments for Derivatives

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 firm, 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 firm by JPMorgan Chase Bank N.A., and therefore the firm takes account of these arrangements in estimating the fair value of its derivative portfolio.

Credit Risk Exposures before Credit Risk Mitigation

The following tables show the credit risk exposures (including counterparty risk) before the application of credit risk mitigation. JPMMML's capital requirement for credit risk (including counterparty risk) is $315k and therefore additional disclosures have not been made throughout section 7 and 9. The firm has calculated average exposure based on the average of the four quarter end points during the year.

Table 35: Credit Risk Exposures before CRM for JPMCHL and Significant Subsidiaries as at 31st December 2016

Exposure Class ($'m)	JPMCHL		JPMS plc		JPMEL		JPMIB		JPML	
	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure
Central Governments or Central Banks	48,619	36,314	48,261	35,968	156	133	173	196	28	23
Regional Governments or Local Authorities	483	1,226	483	1,226	0	0	0	0	0	0
Public Sector Entities	283	375	281	373	0	0	1	2	0	0
Multilateral Development Banks	49	62	49	62	0	0	0	0	0	0
Institutions	96,285	95,423	94,920	94,696	3,126	935	9,388	4,987	2,038	103
Corporates	111,897	100,009	102,577	93,247	3,748	4,304	5,571	2,249	2	10
Secured by Mortgages on Immovable Property	834	937	0	0	0	0	834	937	0	0
Items Associated With Particularly High Risk	15,221	13,512	15,190	13,496	0	0	32	16	0	0
Claims on Institutions and Corporates With a Short-Term Credit Assessment	17,796	47,991	17,522	44,935	211	2,469	63	10,371	0	0
Equity	0	5	2,969	1,465	2	1	1	1	16	0
Other Items	1,340	1,813	329	1,253	156	212	215	133	214	0
Total Exposure	**292,807**	**297,667**	**282,581**	**286,721**	**7,399**	**8,054**	**16,278**	**18,892**	**2,298**	**136**

Table 36: Credit Risk Exposures before CRM for BSUKHL and JPMML as at 31st December 2016

Exposure Class ($'m)	BSUKHL		JPMML	
	Exposure	Avg. Exposure	Exposure	Avg. Exposure
Institutions	166	128	165	113
Corporates	3	8	410	305
Claims on Institutions and Corporates With a Short-Term Credit Assessment	0	1,063	0	1,066
Equity	11	8	11	8
Other Items	22	60	20	60
Total Exposure	**202**	**1,267**	**606**	**1,552**

Credit Risk Exposures after Credit Risk Mitigation

The following tables show the credit risk exposures (including counterparty risk) after the application of credit risk mitigation.

Table 37: Credit Risk Exposures after CRM for JPMCHL and Significant Subsidiaries as at 31st December 2016

Exposure Class ($'m)	JPMCHL		JPMS plc		JPMEL		JPMIB		JPML	
	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure	Exposure	Avg. Exposure
Central Governments or Central Banks	34,605	22,453	34,246	22,107	157	134	173	196	28	23
Regional Governments or Local Authorities	349	996	349	996	0	0	0	0	0	0
Public Sector Entities	160	191	159	189	0	0	1	2	0	0
Multilateral Development Banks	47	56	47	56	0	0	0	0	0	0
Institutions	49,687	41,695	48,648	42,078	2,978	869	9,182	2,400	2,038	103
Corporates	79,360	70,530	71,617	65,685	2,254	2,467	5,488	2,168	2	10
Secured by Mortgages on Immovable Property	834	937	0	0	0	0	834	937	0	0
Items Associated With Particularly High Risk	11,926	10,638	11,894	10,622	0	0	32	16	0	0
Claims on Institutions and Corporates With a Short-Term Credit Assessment	17,467	45,290	17,193	40,836	211	2,373	62	10,355	0	0
Equity	0	5	2,969	1,465	2	1	1	1	16	0
Other Items	1,340	1,813	329	1,253	156	212	215	133	214	0
Total Exposure	**195,775**	**194,604**	**187,451**	**185,287**	**5,758**	**6,056**	**15,988**	**16,208**	**2,298**	**136**

Table 38: Credit Risk Exposures after CRM for BSUKHL and JPMML as at 31st December 2016

Exposure Class ($'m)	BSUKHL		JPMML	
	Exposure	Avg. Exposure	Exposure	Avg. Exposure
Institutions	166	128	165	113
Corporates	3	8	410	305
Claims on Institutions and Corporates With a Short-Term Credit Assessment	0	100	0	100
Equity	11	8	11	8
Other Items	22	60	20	60
Total Exposure	**202**	**304**	**606**	**586**

Geographical Location of Exposures

The tables below show exposure at default after credit risk mitigation broken down by credit exposure class and geographic location of the obligor or counterparty.

Table 39: Geographical Analysis of Credit Exposures for JPMCHL as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Central Governments or Central Banks	211	32,801	22	2	278	1,291	34,605
Regional Governments or Local Authorities	0	311	0	0	0	38	349
Public Sector Entities	1	10	119	0	9	21	160
Multilateral Development Banks	0	12	0	18	3	14	47
Institutions	6,507	15,767	13,554	1,355	7,659	4,845	49,687
Corporates	22,429	36,633	9,641	89	4,301	6,267	79,360
Secured by Mortgages on Immovable Property	473	98	75	9	17	162	834
Items Associated With Particularly High Risk	1,140	1,456	156	0	2	9,172	11,926
Claims on Institutions and Corporates With a Short-Term Credit Assessment	634	4,582	5,900	326	2,878	3,147	17,467
Other Items	12	0	1,328	0	0	0	1,340
Total Exposure	**31,407**	**91,670**	**30,795**	**1,799**	**15,147**	**24,957**	**195,775**

Table 40: Geographical Analysis of Credit Exposures for JPMS plc as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Central Governments or Central Banks	143	32,630	22	2	278	1,171	34,246
Regional Governments or Local Authorities	0	311	0	0	0	38	349
Public Sector Entities	0	10	119	0	9	21	159
Multilateral Development Banks	0	12	0	18	3	14	47
Institutions	6,505	15,678	12,597	1,407	7,658	4,803	48,648
Corporates	20,817	32,993	8,675	19	3,908	5,205	71,617
Items Associated With Particularly High Risk	1,140	1,441	156	0	2	9,155	11,894
Claims on Institutions and Corporates With a Short-Term Credit Assessment	634	4,519	5,750	326	2,870	3,094	17,193
Equity	2,953	0	16	0	0	0	2,969
Other Items	0	0	329	0	0	0	329
Total Exposure	**32,191**	**87,595**	**27,664**	**1,772**	**14,728**	**23,501**	**187,451**

Table 41: Geographical Analysis of Credit Exposures for JPMEL as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Central Governments or Central Banks	39	0	0	0	0	118	157
Institutions	2,473	64	400	0	0	41	2978
Corporates	205	962	893	0	0	194	2,254
Claims on Institutions and Corporates With a Short-Term Credit Assessment	0	1	149	0	8	53	211
Equity	0	0	0	0	0	0	0
Other Items	12	0	144	0	0	0	156
Total Exposure	**2,731**	**1,027**	**1,586**	**0**	**8**	**406**	**5,758**

Table 42: Geographical Analysis of Credit Exposures for JPMIB as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Central Governments or Central Banks	2	171	0	0	0	0	173
Public Sector Entities	1	0	0	0	0	0	1
Institutions	8,818	25	339	0	0	0	9,182
Corporates	1,407	2,677	73	69	393	869	5,488
Secured by Mortgages on Immovable Property	473	98	75	9	17	162	834
Items Associated With Particularly High Risk	0	15	0	0	0	17	32
Claims on Institutions and Corporates With a Short-Term Credit Assessment	0	61	1	0	0	0	62
Equity	1	0	0	0	0	0	1
Other Items	0	0	215	0	0	0	215
Total Exposure	**10,702**	**3,047**	**703**	**78**	**410**	**1,048**	**15,988**

Table 43: Geographical Analysis of Credit Exposures for JPML as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Central Governments or Central Banks	28	0	0	0	0	0	28
Institutions	2,003	0	34	1	0	0	2,038
Corporates	1	0	0	0	0	1	2
Equity	16	0	0	0	0	0	16
Other Items	0	0	214	0	0	0	214
Total Exposure	**2,048**	**0**	**248**	**1**	**0**	**1**	**2,298**

Table 44: Geographical Analysis of Credit Exposures for BSUKHL as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Institutions	0	0	166	0	0	0	166
Corporates	3	0	0	0	0	0	3
Equity	11	0	0	0	0	0	11
Other Items	0	0	22	0	0	0	22
Total Exposure	**14**	**0**	**188**	**0**	**0**	**0**	**202**

Table 45: Geographical Analysis of Credit Exposures for JPMML as at 31st December 2016

Exposure Class ($'m)	United Kingdom	Europe	United States	Africa	Asia	Rest of World	Total
Institutions	0	0	165	0	0	0	165
Corporates	410	0	0	0	0	0	410
Equity	11	0	0	0	0	0	11
Other Items	0	0	20	0	0	0	20
Total Exposure	421	0	185	0	0	0	606

Industry Analysis of Credit Exposures

The tables below show exposure at default after credit risk mitigation broken down by credit exposure class and the industrial sector associated with the obligor or counterparty.

Table 46: Industry Analysis of Credit Exposures for JPMCHL as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Central Governments or Central Banks	1,319	411	41	32,834	34,605
Regional Governments or Local Authorities	0	0	0	349	349
Public Sector Entities	0	116	15	29	160
Multilateral Development Banks	36	0	0	11	47
Institutions	43,329	6,130	0	228	49,687
Corporates	4,032	49,606	21,778	3,944	79,360
Secured by Mortgages on Immovable Property	6	191	4	633	834
Items Associated With Particularly High Risk	0	11,807	119	0	11,926
Claims on Institutions and Corporates With a Short-Term Credit Assessment	11,922	5,270	274	1	17,467
Other Items	0	0	0	1,340	1,340
Total Exposure	**60,644**	**73,531**	**22,231**	**39,369**	**195,775**

Table 47: Industry Analysis of Credit Exposures for JPMS plc as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Central Governments or Central Banks	1,319	499	41	32,387	34,246
Regional Governments or Local Authorities	0	0	0	349	349
Public Sector Entities	0	116	15	28	159
Multilateral Development Banks	36	0	0	11	47
Institutions	42,275	6,145	0	228	48,648
Corporates	4,032	46,507	19,709	1,369	71,617
Items Associated With Particularly High Risk	0	11,791	103	0	11,894
Claims on Institutions and Corporates With a Short-Term Credit Assessment	11,709	5,209	274	1	17,193
Equity	2,953	16	0	0	2,969
Other Items	0	329	0	0	329
Total Exposure	**62,324**	**70,612**	**20,142**	**34,373**	**187,451**

Table 48: Industry Analysis of Credit Exposures for JPMEL as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Central Governments or Central Banks	0	0	0	157	157
Institutions	2,978	0	0	0	2,978
Corporates	0	263	1,887	104	2,254
Claims on Institutions and Corporates With a Short-Term Credit Assessment	211	0	0	0	211
Equity	2	0	0	0	2
Other Items	0	0	0	156	156
Total Exposure	**3,191**	**263**	**1,887**	**417**	**5,758**

Table 49: Industry Analysis of Credit Exposures for JPMIB as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Central Governments or Central Banks	0	0	0	173	173
Public Sector Entities	0	0	0	1	1
Institutions	9,181	1	0	0	9,182
Corporates	0	3,181	182	2,125	5,488
Secured by Mortgages on Immovable Property	6	191	4	633	834
Items Associated With Particularly High Risk	0	17	15	0	32
Claims on Institutions and Corporates With a Short-Term Credit Assessment	2	60	0	0	62
Equity	0	0	0	1	1
Other Items	0	0	0	215	215
Total Exposure	9,189	3,450	201	3,148	15,988

Table 50: Industry Analysis of Credit Exposures for JPML as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Central Governments or Central Banks	0	0	0	28	28
Institutions	2,036	2	0	0	2,038
Corporates	0	2	0	0	2
Equity	0	0	0	16	16
Other Items	0	0	0	214	214
Total Exposure	**2,036**	**4**	**0**	**258**	**2,298**

Table 51: Industry Analysis of Credit Exposures for BSUKHL as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Institutions	166	0	0	0	166
Corporates	0	2	1	0	3
Equity	0	11	0	0	11
Other Items	0	0	0	22	22
Total Exposure	**166**	**13**	**1**	**22**	**202**

Table 52: Industry Analysis of Credit Exposures for JPMML as at 31st December 2016

Exposure Class ($'m)	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	Total
Institutions	165	0	0	0	165
Corporates	0	409	1	0	410
Equity	0	11	0	0	11
Other Items	0	0	0	20	20
Total Exposure	**165**	**420**	**1**	**20**	**606**

Residual Maturity Analysis of Credit Exposures

The tables below show exposure at default after credit risk mitigation broken down by credit exposure class and residual maturity. Residual maturity is the remaining number of years before an obligation becomes due according to the existing terms of agreement.

Table 53: Residual Maturity Analysis of Credit Exposures for JPMCHL as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Central Governments or Central Banks	440	28,136	828	773	812	3,616	34,605
Regional Governments or Local Authorities	0	38	0	0	6	305	349
Public Sector Entities	0	149	5	2	0	4	160
Multilateral Development Banks	0	19	5	22	0	1	47
Institutions	4,104	27,919	6,694	3,572	3,491	3,907	49,687
Corporates	11,401	28,065	9,207	10,558	6,627	13,502	79,360
Secured by Mortgages on Immovable Property	0	203	427	184	20	0	834
Items Associated With Particularly High Risk	1,236	8,092	835	618	785	360	11,926
Claims on Institutions and Corporates With a Short-Term Credit Assessment	1,484	15,983	0	0	0	0	17,467
Other Items	1,340	0	0	0	0	0	1,340
Total Exposure	**20,005**	**108,604**	**18,001**	**15,729**	**11,741**	**21,695**	**195,775**

Table 54: Residual Maturity Analysis of Credit Exposures for JPMS plc as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Central Governments or Central Banks	104	28,113	828	773	812	3,616	34,246
Regional Governments or Local Authorities	0	38	0	0	6	305	349
Public Sector Entities	0	149	4	2	0	4	159
Multilateral Development Banks	0	19	5	22	0	1	47
Institutions	1,431	29,685	6,570	3,564	3,491	3,907	48,648
Corporates	8,908	25,067	8,535	10,010	6,507	12,590	71,617
Items Associated With Particularly High Risk	1,236	8,063	833	618	785	359	11,894
Claims on Institutions and Corporates With a Short-Term Credit Assessment	1,472	15,721	0	0	0	0	17,193
Equity	2,969	0	0	0	0	0	2,969
Other Items	329	0	0	0	0	0	329
Total Exposure	**16,449**	**106,855**	**16,775**	**14,989**	**11,601**	**20,782**	**187,451**

Table 55: Residual Maturity Analysis of Credit Exposures for JPMEL as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Central Governments or Central Banks	97	22	0	0	0	38	157
Institutions	14	2,865	14	0	0	85	2,978
Corporates	3	524	324	466	44	893	2,254
Claims on Institutions and Corporates With a Short-Term Credit Assessment	0	211	0	0	0	0	211
Equity	0	0	0	0	0	2	2
Other Items	0	0	0	0	0	156	156
Total Exposure	**114**	**3,622**	**338**	**466**	**44**	**1,174**	**5,758**

Table 56: Residual Maturity Analysis of Credit Exposures for JPMIB as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Central Governments or Central Banks	171	0	0	0	0	2	173
Public Sector Entities	0	1	0	0	0	0	1
Institutions	249	8,769	109	8	0	47	9,182
Corporates	2,480	2,475	348	83	76	26	5,488
Secured by Mortgages on Immovable Property	0	203	427	184	20	0	834
Items Associated With Particularly High Risk	0	29	3	0	0	0	32
Claims on Institutions and Corporates With a Short-Term Credit Assessment	13	49	0	0	0	0	62
Equity	0	0	0	0	0	1	1
Other Items	0	0	0	0	0	215	215
Total Exposure	**2,913**	**11,526**	**887**	**275**	**96**	**290**	**15,988**

Table 57: Residual Maturity Analysis of Credit Exposures for JPML as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Central Governments or Central Banks	0	0	0	0	0	28	28
Institutions	0	0	0	0	0	2,038	2,038
Corporates	0	0	0	0	0	2	2
Equity	0	0	0	0	0	16	16
Other Items	0	0	0	0	0	214	214
Total Exposure	**0**	**0**	**0**	**0**	**0**	**2,298**	**2,298**

Table 58: Residual Maturity Analysis of Credit Exposures for BSUKHL as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Institutions	0	25	0	0	0	141	166
Corporates	0	2	0	1	0	0	3
Equity	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	22	22
Total Exposure	**0**	**27**	**0**	**1**	**0**	**174**	**202**

Table 59: Residual Maturity Analysis of Credit Exposures for JPMML as at 31st December 2016

Exposure Class ($'m)	On Demand	< 1 Year	Over 1 Year, Not More Than 3 Years	Over 3 Years, Not More Than 5 Years	Over 5 Years, Not More Than 10 Years	Over 10 Years or Undated	Total
Institutions	0	25	0	0	0	140	165
Corporates	0	410	0	0	0	0	410
Equity	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	20	20
Total Exposure	**0**	**435**	**0**	**0**	**0**	**171**	**606**

Impaired Loans

The tables below present a breakdown of loans and advances to banks and customers as well as any provisions for impairment made against these exposures as at 31st December 2016. There are no loans and advances to banks or customers in JPML, BSUKHL, JPMML or JPMMML.

No provisions for impairment were made during the year in JPMS plc. The provisions for impairment made during the year in JPMEL relate to loans to customers domiciled in the European Union.

Table 60: Analysis of Loans and Impairment Provisions for JPMCHL as at 31st December 2016

Exposure Type ($'m)	Non Impaired Loans	Impaired Loans	Total	Provision for Impairment
Loans and Advances to Banks	17,837	0	17,837	0
Loans and Advances to Customers	8,718	49	8,767	7
Total Exposure	**26,555**	**49**	**26,605**	**7**

Table 61: Analysis of Loans and Impairment Provisions for JPMS plc as at 31st December 2016

Exposure Type ($'m)	Non Impaired Loans	Impaired Loans	Total	Provision for Impairment
Loans and Advances to Banks	6,124	0	6,124	0
Loans and Advances to Customers	3,100	0	3,100	0
Total Exposure	**9,224**	**0**	**9,224**	**0**

Table 62: Analysis of Loans and Impairment Provisions for JPMEL as at 31st December 2016

Exposure Type ($'m)	Non Impaired Loans	Impaired Loans	Total	Provision for Impairment
Loans and Advances to Banks	2,608	0	2,608	0
Loans and Advances to Customers	247	49	296	7
Total Exposure	**2,855**	**49**	**2,904**	**7**

Table 63: Analysis of Loans and Impairment Provisions for JPMIB as at 31st December 2016

Exposure Type ($'m)	Non Impaired Loans	Impaired Loans	Total	Provision for Impairment
Loans and Advances to Banks	9,105	0	9,105	0
Loans and Advances to Customers	5,371	0	5,372	0
Total Exposure	**14,476**	**0**	**14,477**	**0**

Table 64: Analysis of Movement in Impairments and Amounts Taken Directly to P&L for JPMEL for Year Ending 31st December 2016

Allowance for Impairment ($'m)	JPMEL
Starting Period (31st December 2015)	4
Acquisitions and Disposals	0
Exchange and Other Adjustments	0
Unwind of Discount	0
Amounts Written Off	0
Recoveries	0
Amounts Charged Against Profit	3
of which: New and Increased Impairment Allowances	3
Releases	0
Recoveries	0
Ending Period (31st December 2016)	**7**

8. Unencumbered Assets (Art. 443)

Disclosure of the information required under article 443 of the CRR, including those detailed in the EBA Guidelines on encumbered and unencumbered assets[9], has been made under separate disclosure on June 30th 2017.

This document can be found on the firm's website, adjacent to this document, following the link copied below:

http://investor.shareholder.com/jpmorganchase/basel.cfm

9 EBA/GL/2014/03 published 27th June 2014

9. Use of External Credit Assessment Institutions (Art. 444)

ECAIs and Exposure Classes

Under the Standardised approach, RWA are calculated using credit ratings assigned by External Credit Assessment Institutions ("ECAI"). The firm applies the standard ECAI ratings to risk weight mappings provided by the EBA.

J. P. Morgan uses the following ECAIs to determine risk weights for this purpose:

- Moody's;
- Standard & Poor's ("S&P"); and
- Fitch.

These rating assessments are used for calculation of the risk weights for the following classes of exposure:

- Central governments and central banks;
- Institutions;
- Corporates;
- Securitisation positions;
- Multilateral development banks;
- Regional governments and local authorities; and
- Short-term claims on institutions and corporates.

All other exposure classes are assigned risk weightings described in the standardised approach as per the CRR.

Exposures at Default by Credit Quality Step ("CQS")

Exposure at Default Pre-Credit Risk Mitigation by CQS

The following tables show exposures at default before credit risk mitigation broken down by credit exposure class and CQS. The tables includes both credit and counterparty risk exposures. Risk weights applied for EEA member states are applied under article 114 and hence bucketed under CQS 1. The Credit and Counterparty Risk requirement for JPMMML is only $315k and therefore the supplementary disclosures below are not made.

Table 65: CQS Analysis of Exposures at Default (Pre-CRM) for JPMCHL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	47,396	43	0	0	0	0	1,180	48,619
Regional Governments or Local Authorities	311	0	0	0	0	0	172	483
Public Sector Entities	136	0	0	0	0	0	147	283
Multilateral Development Banks	12	0	0	0	0	0	37	49
Institutions	83,958	903	145	354	0	0	10,925	96,285
Corporates	79,390	1,905	1,362	359	212	0	28,669	111,897
Secured by Mortgages on Immovable Property	464	0	0	0	0	0	370	834
Items Associated With Particularly High Risk	1,983	0	0	0	0	0	13,238	15,221
Claims on Institutions and Corporates With a Short-Term Credit Assessment	16,999	354	191	250	0	0	2	17,796
Other Items	12	0	0	0	0	0	1,328	1,340
Total Exposure	**230,661**	**3,205**	**1,698**	**963**	**212**	**0**	**56,068**	**292,807**

Table 66: CQS Analysis of Exposures at Default (Pre-CRM) for JPMS plc as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	47,038	43	0	0	0	0	1,180	48,261
Regional Governments or Local Authorities	311	0	0	0	0	0	172	483
Public Sector Entities	135	0	0	0	0	0	146	281
Multilateral Development Banks	12	0	0	0	0	0	37	49
Institutions	82,516	964	145	354	0	0	10,940	94,920
Corporates	74,005	1,549	1,155	234	8	0	25,625	102,577
Items Associated With Particularly High Risk	1,968	0	0	0	0	0	13,222	15,190
Claims on Institutions and Corporates With a Short-Term Credit Assessment	16,784	295	191	250	0	0	2	17,522
Equity Investments	2,953	0	0	0	0	0	16	2,969
Other Items	0	0	0	0	0	0	329	329
Total Exposure	**225,722**	**2,851**	**1,491**	**838**	**8**	**0**	**51,669**	**282,581**

Table 67: CQS Analysis of Exposures at Default (Pre-CRM) for JPMEL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	156	0	0	0	0	0	0	156
Institutions	2,968	11	39	56	0	0	51	3,126
Corporates	649	716	221	219	317	67	1,559	3,748
Claims on Institutions and Corporates With a Short-Term Credit Assessment	151	60	0	0	0	0	0	211
Equity	0	0	0	0	0	0	2	2
Other Items	0	0	0	0	0	0	156	156
Total Exposure	**3,924**	**787**	**260**	**275**	**317**	**67**	**1,768**	**7,399**

Table 68: CQS Analysis of Exposures at Default (Pre-CRM) for JPMIB as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	173	0	0	0	0	0	0	173
Public Sector Entities	0	0	0	0	0	0	1	1
Institutions	9,354	0	0	0	0	0	34	9,388
Corporates	0	0	0	0	0	0	5,571	5,571
Secured by Mortgages on Immovable Property	0	0	0	0	0	0	834	834
Items Associated With Particularly High Risk	0	0	0	0	0	0	32	32
Claims on Institutions and Corporates With a Short-Term Credit Assessment	63	0	0	0	0	0	0	63
Equity	0	0	0	0	0	0	1	1
Other Items	0	0	0	0	0	0	215	215
Total Exposure	**9,590**	**0**	**0**	**0**	**0**	**0**	**6,688**	**16,278**

Table 69: CQS Analysis of Exposures at Default (Pre-CRM) for JPML as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	28	0	0	0	0	0	0	28
Institutions	1,868	0	0	0	0	0	170	2,038
Corporates	0	0	0	0	0	0	2	2
Equity	0	0	0	0	0	0	16	16
Other Items	0	0	0	0	0	0	214	214
Total Exposure	**1,896**	**0**	**0**	**0**	**0**	**0**	**402**	**2,298**

Table 70: CQS Analysis of Exposures at Default (Pre-CRM) for BSUKHL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Institutions	165	0	0	0	0	0	1	166
Corporates	0	0	0	0	0	0	3	3
Equity	0	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	0	22	22
Total Exposure	**165**	**0**	**0**	**0**	**0**	**0**	**37**	**202**

Table 71: CQS Analysis of Exposures at Default (Pre-CRM) for JPMML as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Institutions	164	0	0	0	0	0	1	165
Corporates	0	0	0	0	0	0	410	410
Equity	0	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	0	20	20
Total Exposure	**164**	**0**	**0**	**0**	**0**	**0**	**442**	**606**

Exposure at Default Post-Credit Risk Mitigation by CQS

The following tables show exposures at default after credit risk mitigation broken down by credit exposure class and CQS. The tables includes both credit and counterparty risk exposures. Risk weights applied for EEA member states are applied under article 114 and hence bucketed under CQS 1. The Credit and Counterparty Risk requirement for JPMMML is only $315k and therefore the supplementary disclosures below are not made.

Table 72: CQS Analysis of Exposures at Default (Post-CRM) for JPMCHL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	33,816	7	0	0	0	0	782	34,605
Regional Governments or Local Authorities	311	0	0	0	0	0	38	349
Public Sector Entities	98	0	0	0	0	0	62	160
Multilateral Development Banks	12	0	0	0	0	0	35	47
Institutions	38,627	690	136	262	0	0	9,972	49,687
Corporates	58,846	956	705	180	106	0	18,567	79,360
Secured by Mortgages on Immovable Property	464	0	0	0	0	0	370	834
Items Associated With Particularly High Risk	1,474	0	0	0	0	0	10,452	11,926
Claims on Institutions and Corporates With a Short-Term Credit Assessment	16,854	192	191	228	0	0	2	17,467
Other Items	12	0	0	0	0	0	1,328	1,340
Total Exposure	**150,514**	**1,845**	**1,032**	**670**	**106**	**0**	**41,608**	**195,775**

Table 73: CQS Analysis of Exposures at Default (Post-CRM) for JPMS plc as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	33,457	7	0	0	0	0	782	34,246
Regional Governments or Local Authorities	311	0	0	0	0	0	38	349
Public Sector Entities	97	0	0	0	0	0	62	159
Multilateral Development Banks	12	0	0	0	0	0	35	47
Institutions	37,511	752	136	262	0	0	9,987	48,648
Corporates	54,287	778	602	118	4	0	15,828	71,617
Items Associated With Particularly High Risk	1,458	0	0	0	0	0	10,436	11,894
Claims on Institutions and Corporates With a Short-Term Credit Assessment	16,639	133	191	228	0	0	2	17,193

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Equity	2,953	0	0	0	0	0	16	2,969
Other Items	0	0	0	0	0	0	329	329
Total Exposure	**146,725**	**1,670**	**929**	**608**	**4**	**0**	**37,515**	**187,451**

Table 74: CQS Analysis of Exposures at Default (Post-CRM) for JPMEL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	157	0	0	0	0	0	0	157
Institutions	2,874	9	20	28	0	0	47	2,978
Corporates	328	391	116	134	193	67	1,025	2,254
Claims on Institutions and Corporates With a Short-Term Credit Assessment	151	60	0	0	0	0	0	211
Equity	0	0	0	0	0	0	2	2
Other Items	0	0	0	0	0	0	156	156
Total Exposure	**3,510**	**460**	**136**	**162**	**193**	**67**	**1,230**	**5,758**

Table 75: CQS Analysis of Exposures at Default (Post-CRM) for JPMIB as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	173	0	0	0	0	0	0	173
Public Sector Entities	0	0	0	0	0	0	1	1
Institutions	9,148	0	0	0	0	0	34	9,182
Corporates	0	0	0	0	0	0	5,488	5,488
Secured by Mortgages on Immovable Property	0	0	0	0	0	0	834	834
Items Associated With Particularly High Risk	0	0	0	0	0	0	32	32
Claims on Institutions and Corporates With a Short-Term Credit Assessment	62	0	0	0	0	0	0	62
Equity	0	0	0	0	0	0	1	1
Other Items	0	0	0	0	0	0	215	215
Total Exposure	**9,383**	**0**	**0**	**0**	**0**	**0**	**6,605**	**15,988**

Table 76: CQS Analysis of Exposures at Default (Post-CRM) for JPML as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Central Governments or Central Banks	28	0	0	0	0	0	0	28
Institutions	1,868	0	0	0	0	0	170	2,038
Corporates	0	0	0	0	0	0	2	2
Equity	0	0	0	0	0	0	16	16
Other Items	0	0	0	0	0	0	214	214
Total Exposure	**1,896**	**0**	**0**	**0**	**0**	**0**	**402**	**2,298**

Table 77: CQS Analysis of Exposures at Default (Post-CRM) for BSUKHL as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Institutions	165	0	0	0	0	0	1	166
Corporates	0	0	0	0	0	0	3	3
Equity	0	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	0	22	22
Total Exposure	**165**	**0**	**0**	**0**	**0**	**0**	**37**	**202**

Table 78: CQS Analysis of Exposures at Default (Post-CRM) for JPMML as at 31st December 2016

Exposure Class ($'m)	CQS 1	CQS 2	CQS 3	CQS4	CQS 5	CQS 6	Unrated	Total
Institutions	164	0	0	0	0	0	1	165
Corporates	0	0	0	0	0	0	410	410
Equity	0	0	0	0	0	0	11	11
Other Items	0	0	0	0	0	0	20	20
Total Exposure	**164**	**0**	**0**	**0**	**0**	**0**	**442**	**606**

10. Exposure to Market Risk (Art. 445)

JPMCHL's market risks arise predominantly from activities in the Firm's CIB business booked in JPMS plc. CIB makes markets in products across fixed income, foreign exchange, equities and commodities markets. JPMCHL's portfolio of covered positions under Basel III is predominantly held by the CIB. Some additional covered positions are held by the Firm's other LOBs. There is no material market risk in JPML, BSUKHL, JPMML or JPMMML.

Table 79: Minimum Capital Requirement for Market Risk as at 31st December 2016

	JPMCHL		JPMS plc		JPMEL		JPMIB	
Risk Type ($'m)	**Capital Requirement**	**RWA**	**Capital Requirement**	**RWA**	**Capital Requirement**	**RWA**	**Capital Requirement**	**RWA**
Interest Rate PRR	2,312	28,900	2,300	28,751	10	124	2	25
of which: Securitisations	297	3,710	297	3,710	0	0	0	0
Equity PRR	1,271	15,889	1,110	13,869	0	0	0	0
CIU[10] PRR	181	2,262	181	2,262	0	0	0	0
Commodity PRR	106	1,326	106	1,326	0	0	0	0
Foreign Exchange PRR	776	9,699	776	9,699	0	0	0	0
Capital Requirement	**4,646**	**58,076**	**4,473**	**55,907**	**10**	**124**	**2**	**25**

10 Collective Investment Undertakings

11. Operational Risk (Art. 446)

Pillar 1

The BIA is used to calculate Operational Risk Capital Requirement for Pillar 1 for all UK regulated entities with the exception of JPML and JPMMML which are captured under the Fixed Overheads Requirement[11]. The minimum capital requirement under the Fixed Overheads approach is calculated as the higher of the Fixed Overheads Requirement and the sum of market risk, credit risk and other Pillar 1 capital requirements.

The Pillar 1 assessment of Operational risk is a minimum regulatory capital requirement calculated in accordance with the BIA under Basel 3. This approach calculates operational risk capital using a single indicator as a proxy for an institution's overall operational risk exposure – referred to as the "relevant indicator."

The relevant indicator is the sum of a firm's net interest income and its net non-interest income before the deduction of any provisions and operating expenses. The Operational Risk Capital Requirement under the BIA is equal to 15% of the average over the previous 3 years of the relevant indicator. If the relevant indicator for a given year is negative, it is excluded from both the numerator and denominator when calculating the average. The relevant indicator for BSUKHL for the previous three years is zero due to the loss making nature of the entity. Therefore there is no Operational Risk Requirement under the Basic Indicator Approach. Additional capital requirements for Operational Risk for BSUKHL are considered as part of the ICAAP.

The following table detail the operational risk RWAs reported in 2016 split by the method used to calculate operational risk capital requirement for each entity.

Table 80: Risk Weighted Assets for Operational Risk as at 31st December 2016

Calculation Method ($'m)	JPMCHL	JPMS plc	JPMEL	JPMIB	JPML	BSUKHL	JPMML	JPMMML
Basic Indicator Approach	15,134	11,016	2,035	650		0	24	
Fixed Overheads Requirement					1,668			9
Total RWA	**15,134**	**11,016**	**2,035**	**650**	**1,668**	**0**	**24**	**9**

Pillar 2

In addition to Pillar 1 assessment, the firm adopted an internal approach to calculate operational risk capital under Pillar 2.

The Pillar 2 calculation is based on the BIA adjusted for the JPMorgan Chase and Company's ("JPMC") risk profile as calculated in JPMC's global Operational Risk Regulatory Capital ("ORC"). JPMC's Operational Risk Capital is derived from the firm's Advanced Model Approach regulatory capital model which also produces ORC for each major LOB. The ORC attributed to each LOB in the global model, and the global revenue for these LOBs are used to determine the risk profile of a given LOB and are used in determining the Pillar 2 ORC for the UK entities as follows:

- Calculating "global LOB ratios"
    - Dividing firm wide ORC allocated to each global LOB by net operating revenues of that global LOB over the last 12 months.
- Multiplying the "global LOB ratios" and a total of net operating revenues booked by each LOB to that entity. The global net operating revenues for each LE attributed to the corporate sector in the last 12 months are incorporated in the total global net operating revenues of the predominant LOB of that entity (i.e. the LOB that has the higher net operating revenues).

11 PART THREE, Title I, Chapter 1, Article 97, CRR

12. Non Trading Book Equity Investments (Art. 447)

Non Trading Book Equity Investments

The non-trading book equity positions within JPMCHL group entities are primarily related to investments in JPMorgan Chase undertakings. There are no investments in JPMorgan Chase undertakings in the BSUKHL group or in JPMMML. Other positions are strategic in nature but are not material as they form a small part of diversified business portfolios within the entities they are held in. As such, disclosures on their accounting techniques, valuation methodologies and other applicable disclosure items are not made below. Further details on investments in JPMorgan Chase undertaking can be found in the corresponding annual accounts available on the Companies House website.

Accounting Techniques and Valuation Methodologies

Investments in JPMorgan Chase undertakings are reflected on the balance sheet at cost less any provision for impairment. In the opinion of the directors, the value of these investments is not less than the amount at which it is stated on the balance sheet. The balance sheet value is used for the purpose of calculating exposure values from a regulatory capital perspective.

Value of Investments

The table below shows the balance sheet value of investments in JPMorgan Chase undertakings as at 31st December 2016. There were no exchange-traded exposures or private equity exposures as at 31st December 2016.

Table 81: Balance Sheet Value of Investments as at 31st December 2016

Type of Investment ($'m)	JPMS plc	JPMEL	JPMIB	JPML
Exchange Traded	0	0	0	0
Private Equity	0	0	0	0
Investments in JPMorgan Undertakings	3,341	2	1	16
Total Balance Sheet Value	**3,341**	**2**	**1**	**16**

During the year, on review of the carrying amount of JPMS plc's investment in Cazenove Group Limited, the investment was written down by $117.4m.

During Q1-16, JPMS plc received a final cash distribution of $0.5m from its subsidiary, Bank One Europe Limited, of which $0.3m was recognised as a gain on disposal in the income statement. Bank One Europe Limited was dissolved shortly thereafter.

Total impairments of $3m were made in relation to the investments in undertakings of JPML.

During the year, a translation loss on foreign currency investments of $0.2m was made in JPMIB.

13. Exposure to Interest Rate Risk on Positions Not Included in the Trading Book (Art. 448)

JP Morgan Capital Holdings Limited

In addition to the Firmwide IRR measures, JPMCHL's IRRBB is monitored through the standard approach, in line with PRA guidance (as discussed in the PRA's consultation paper (CP 1/15 – Assessing capital adequacy under Pillar 2). In particular, the instantaneous impact of up 200bp parallel shock in rates on the economic value of the non-trading books, as defined within the scope of the Interest Rate Management policy, is estimated for each of the UK entities under JPMCHL. The calculation at JPMCHL level excludes the impact of the residual IRRBB from other LOBs outside CIO & Treasury. The evaluation of the impact of the up 200bp shock on the economic value of JPMCHL's non-trading book vs. the legal entity's capital resources is assessed quarterly.

The following table shows the economic impact for an up 200bp shift in rate for Treasury risk positions in the banking book of JPMCHL as at December 2016, calculated in USD. Change in Economic Value for a decrease in rates is not meaningful, but is also expected to be immaterial.

Table 82: IRRBB for JPMCHL as at 31st December 2016

Non Trading +200bp Economic Impact ($'m)	Non Trading -200bp Economic Impact ($'m)
18	Non-Meaningful Result

Bear Stearns UK Holdings Limited

JPMML's limited banking book activity is generated by intercompany funding in mainly overnight funding of balances, though some longer dated FX swaps are used to convert long US$ to EUR (risk neutral) to match daily funding needs. The interest rate risk ("IRR") on this activity is not material.

14. Exposure to Securitisation Positions (Art. 449)

Securitisation Activities

JPMS plc is the only entity within the JPMCHL group that engages in securitisation activity relating to trading book investor activity; the entity does not act as sponsor or originator. There is no activity in BSUKHL or JPMMML.

Due Diligence

Basel III and CRDIV require that a banking organization is able to demonstrate, to the satisfaction of its regulatory supervisor, a comprehensive understanding of the features of a securitisation exposure that would materially affect its performance. The banking organization's analysis must be commensurate with the complexity of the exposure and the materiality of the exposure in relation to capital of the banking organization. On an ongoing basis (no less frequently than quarterly), the banking organization must evaluate, review, and update as appropriate the analysis required under section 41(c)(1) of the proposed rule for each securitisation exposure.

The Firm's procedures prior to acquisition of a securitisation exposure include an analysis of:

- Structural features of the securitisation that would materially impact the performance of the exposure;
- Relevant information regarding the performance of the underlying credit exposure(s);
- Relevant market data of the securitisation; and
- For resecuritisation exposures, performance information on the underlying securitisation exposures.

In addition to this pre-trade analysis, the firm maintains data related to ongoing performance of the securitisation and resecuritisation exposures. As updated data becomes available, but at least on a quarterly basis for each securitisation and resecuritisation position, the firm's data is updated to reflect this information. This updated performance data is taken into consideration as positions are monitored and evaluated on an ongoing basis.

If the Firm is unable to meet any of the aforementioned due diligence requirements on each securitisation and resecuritisation position, a 1250% risk weight is applied to that position.

Of the entities in scope of the CRR for JP Morgan, only JPMS plc is involved in securitisation activity. JPMS plc was involved solely as an Investor in Securitisation in 2016.

Within JPMS plc, the securitisation business is concentrated in market-making in Asset Backed Securities, Residential Mortgage Backed Securities, Commercial Mortgage Backed Securities and Collateralised Loan Obligations.

Risk Management and Mitigation

Each LOB that transacts in these positions and the Market Risk function work together to monitor the positions, position changes, and the composition of the total portfolio. This includes, but is not limited to, the review of daily positions against approved risk limits using risk measures such as market values, risk factor sensitivities and stress loss scenarios. Covered securitisation and resecuritisation positions are included in the Firm's Risk Management VaR and Regulatory VaR. These positions are included in the market risk and limit reports that are distributed on a daily basis to the trading desks, Risk Management and senior managers within the lines of business.

Various strategies are employed by the Firm to mitigate the risk from securitisation and resecuritisation positions. These include credit risk mitigation at both the transaction and portfolio levels, and include analysis of the underlying collateral, diversification of the positions, and hedging, among others.

JPMorgan Chase securitisation exposures are sensitive to interest rate levels and the overall credit environment. The Firm may hedge credit spread and interest rate risk, and currency risk associated with non-U.S. denominated assets, as needed, related to its securitisation and resecuritisation positions. JPMorgan Chase's policies allow various financial instruments to be employed to mitigate or hedge the risks of securitisation and resecuritisation positions. Examples of these instruments include U.S. Treasuries, interest rate swaps, FX forwards, and various credit derivatives.

The desk takes on different levels of risk depending on the market and the type of risk required to meet the business objectives, along with providing liquidity for our clients at appropriate market levels. The portfolio of risk is mixed between various asset classes, with the concentration of the portfolio as at 31 December 2016 predominantly being senior and mezzanine in the waterfall structure.

Risk Weighting and use of ECAIs

At the European level JPMS Plc calculates capital requirements for securitisations under the CRR. We utilise the standardised approach to calculate risk weighted exposure amounts under Article 251.

As required under the standardised approach used to calculate capital requirements for JPMS plc, the entity applies the following approach to the use of external ratings for the purpose of deriving risk weights:

- Where ratings are provided by three ECAIs, the middle rating is used;
- Where ratings are provided by two ECAIs, the lower rating is used; and
- Where only one rating is provided, this is used.

The Firm applies external ratings from Moody's, Fitch and Standard and Poors for deriving risk weights for all securitisation and resecuritisation positions.

Accounting for Securitisation Positions

The Firm's accounting policies for JPMS plc, under FRS 101, include matters relating to the accounting for securitisations. The determination of whether or not transactions whereby assets are securitized in SPVs is dependent on whether or not the legal rights to the cash flows of the assets have been transferred to the entity, and whether the Firm has transferred substantially all of the assets' risks and rewards. This is in accordance with IAS 39 Financial Instruments: Classification and Measurement, which is the accounting standard that outlines the rules for derecognition of financial assets. This analysis assists in the determination of whether or not the transactions are accounted for as sales or financings. Accounting for synthetic securitisations is determined under the appropriate accounting guidance, such as the guidance for accounting for derivatives and other financial instruments under IAS 39 Financial Instruments: Classification and Measurement. The Firm will recognize arrangements whereby it will provide financial support for the entity depending on the legal form of the arrangement and the substance of the arrangement. Typically the Firm would look to the guidance under IAS 39 for these arrangements as they meet the definition of financial instruments. The Firm notes that where JPMS plc has involvement in securitisations, these interests are reflected in accordance with the guidance under IFRS 10 Consolidated Financial Statements, IFRS 12 Disclosures of Interests in Other Entities and/or IAS 39 Financial Instruments Classification and Measurement.

Key Changes during the Period

There were no significant changes to the Firm's quantitative disclosures for securitisation exposures during the period. All movements reflect standard business-as-usual activity.

Table 83: Outstanding Amount of Exposures Securitised by Seniority as at 31st December 2016

	Securitised Positions Held (as Investor)		
Exposure Type ($'m)	Senior	Mezzanine	First Loss (Equity)
Residential Mortgages	588	158	3
Commercial Mortgages	37	51	7
Of which: Resecuritisations	*0*	*0*	*0*
Loans to Corporates or SMEs	35	199	33
Of which: Resecuritisations	*6*	*38*	*2*
Consumer Loans	63	0	0
Other Assets	19	13	16
Of which: Resecuritisations	*0*	*0*	*2*
Total	**742**	**421**	**59**

Table 84: Aggregate Amount of Securitised Positions Retained or Purchased by Exposure Type as at 31st December 2016

Type of Investment ($'m)	Retained	Purchased	Total
Residential Mortgages	0	750	750
Commercial Mortgages	0	95	95
Of which: Resecuritisations	*0*	*0*	*0*
Loans to Corporates or SMEs	0	267	267
Of which: Resecuritisations	*0*	*46*	*46*
Consumer Loans	0	63	63
Other Assets	0	48	48
Of which: Resecuritisations	*0*	*2*	*2*
Total	**0**	**1223**	**1,223**

Table 85: Aggregate Amount of Securitised Positions Retained or Purchased by Risk Weight Band as at 31st December 2016

Risk Weight Band	IRB S&P Equivalent Rating	Standardised S&P Equivalent Rating	Retained ($'m)	Purchased ($'m)
<= 10%	AAA to A+ (Senior Only)	N/A	0	0
> 10% <= 20%	A to A- (Senior Only) / AAA to A+ (Base Case)	N/A	0	485
> 20% <= 50%	A to A- (Base Case)	AAA to AA-	0	175
> 50% <= 100%	BBB+ to BBB (Base Case)	A+ to A-	0	187
> 100% <= 650%	BBB- (Base Case) to BB (Base Case)	BBB+ to BB-	0	151
> 650% <= 1250%	BB- (Base Case)	N/A	0	224
Deducted	B+ & Below (Base Case)	N/A	0	0
Total			**0**	**1,223**

Table 86: Aggregate Amount of Securitised and Re-securitised Positions by CQS as at 31st December 2016

Securitisation / Resecuritisation ($'m)	CQS 1	CQS 2	CQS 3	CQS 4	Other	Total
Securitisations	485	159	187	125	218	1,174
Resecuritisations	16	0	16	11	6	48
Total	**501**	**159**	**203**	**136**	**224**	**1,223**

15.Remuneration (Art. 450)

Background

This section sets out the remuneration disclosures required under Article 450 of the Capital Requirements Regulation (the "CRR")[1] in relation to the UK Entities, and in respect of the performance year ending 31 December 2016.

The UK Entities are part of the J.P. Morgan Chase & Co group of companies. In this section, the terms "J.P. Morgan" or "Firm" refers to the J.P. Morgan Chase & Co. group of companies, and each of the entities in that group globally, unless otherwise specified.

This section sets out general principles. Details of specific remuneration programmes are set forth in the relevant plan terms and conditions as in force from time to time.

Qualitative Disclosures

As part of the Firm, the UK Entities apply J.P. Morgan's global compensation philosophy and pay practices. The qualitative remuneration disclosures required under Paragraphs 1(a) – (f) of Article 450 CRR for all employees of the Firm's businesses located in EMEA, including staff of the UK Entities, is available in the most recent EMEA Remuneration Policy Disclosure at: http://investor.shareholder.com/jpmorganchase/basel.cfm.

Additional qualitative disclosures specific to the UK Entities

The UK Entities complied with the applicable remuneration requirements of the Capital Requirements Directive ("CRD IV")[4], as implemented in the Prudential Regulation Authority Rulebook and Financial Conduct Authority Handbook (the "Remuneration Rules"). The following additional disclosures should therefore be read in conjunction with the EMEA Remuneration Policy Disclosure:

- In accordance with the UK's Senior Manager Regime, the prescribed responsibility for remuneration was allocated to the Chairman of JP Morgan Securities PLC ("JPMS Chairman").
- In the 2016 performance year, the JPMS Chairman was responsible for overseeing the development and implementation of the remuneration policies and practices applicable to the UK Entities, in conjunction with the Firm's Compensation and Management Development Committee (CMDC)[12].
- The UK Entities undertake an annual review of their staff against the qualitative and quantitative criteria set out in the European Banking Authority's relevant Regulatory Technical Standard[13] to identify those roles which could potentially have a material impact on the risk profile of the UK Entities ("Identified Staff"). This Identified Staff group is reviewed on an ongoing basis and Identified Staff are notified of their status and the impact on their remuneration structure.
- All relevant UK Entities have obtained the relevant shareholder approval in accordance with Article 94(1)g of CRD IV (as implemented by the Remuneration Rules) to pay their Identified Staff a maximum ratio of fixed to variable compensation of 1:2.

Quantitative Disclosures

The following aggregate quantitative disclosures relate to the Firm's UK-regulated Identified Staff, and therefore include relevant employees of the UK Entities and of J.P. Morgan Chase Bank, N.A. – London branch. For the avoidance of doubt, the quantitative remuneration disclosures for JP Morgan Asset Management International Limited have been disclosed separately.

In preparation of these disclosures, the UK Entities have taken into account its obligations to individuals under the EU Data Protection Directive (Directive 95/46/EC) and/or applicable local law. In light of these considerations, the UK Entities have concluded that it is appropriate to aggregate the compensation information in some areas.

Table 87: Total Compensation by Business Area

12 See the latest EMEA Remuneration Policy Disclosure for more details on remuneration governance, including the role of the CMDC

13 Commission Delegated Regulation (EU) No 604/2014

In USD thousands	Total Compensation 2016	Number of Identified Staff
Corporate & Investment Bank	940,048	587
Wealth Management	29,388	25
Other (including Corporate functions)	53,505	60

Table 88: Total Compensation by Category of Employee

In USD thousands	Fixed Compensation 2016 (Cash)	Variable Compensation in respect of 2016			
		Upfront Cash	Upfront Equity	Deferred Cash	Deferred Equity
Management Body	42,568	5,323	1,621	679	46,809
Senior Management	49,550	4,918	2,101	200	47,154
All other Identified Staff	434,988	83,178	68,565	18,384	216,906

Table 89: Analysis of Deferred Compensation

In USD thousands	Outstanding, unvested (value as at 31 December 2016)	Outstanding, vested (value as at 31 December 2016)	Awarded during 2016 (value at award)	Paid out during 2016 (value at pay-out)
Management Body	141,783	8,996	50,144	34,326
Senior Management	165,689	54,343	60,020	42,058
All other Identified Staff	790,135	43,199	304,442	312,818

The total performance adjustment made to deferred compensation for Identified Staff during 2016 was USD 532K.

No sign-on payments were made to Identified Staff during 2016. The table below shows severance payments made to Identified Staff during 2016:

Table 90: Sign-on and Severance Payments

In USD thousands	Number of Identified Staff	Total	Highest award to a single person
Management Body	0	0	0
Senior Management	1	227	227
All other Identified Staff	25	6,973	387

Table 91: 2015 Remuneration Banding for Annual Compensation of Identified Staff Earning at least EUR 1 Million

Total Compensation Bands	Number of Identified Staff
€1,000,001 to €1,500,000	146
€1,500,001 to €2,000,000	71
€2,000,001 to €2,500,000	41
€2,500,001 to €3,000,000	20
€3,000,001 to €3,500,000	11
€3,500,001 to €4,000,000	8
€4,000,001 to €4,500,000	8
€4,500,001 to €5,000,000	5
Over €5,000,001	14

16. Leverage (Art. 451)

Managing Leverage Risk

Leverage risk is monitored through the same processes and frameworks as capital adequacy and stress-testing. The latter is particularly important, as it is forward-looking: if the Firm's leverage ratios remain sustainable under stressed conditions, the risk of forced de-leveraging will be low.

The capital adequacy framework 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. The Firm has adopted a point-in-time calculation of the Leverage Ratio, as per Commission Delegated Regulation 2015/62.

On an annual basis, the Firm completes the ICAAP, which provides management with a view of the impact of severe and unexpected events on earnings, risk-weighted assets, capital and leverage. The Firm's ICAAP integrates stress-testing protocols with capital planning.

The process assesses the potential impact of alternative economic and business scenarios on the Firm's earnings, capital resources, risk-weighted assets and balance sheet. These scenarios are articulated in terms of macroeconomic factors, which are key drivers of business results; global market shocks, which generate short-term but severe trading losses; and idiosyncratic operational risk events. The scenarios are intended to capture and stress key vulnerabilities and idiosyncratic risks facing the entities in scope. However, when defining a broad range of scenarios, realized events can always be worse. Accordingly, management considers additional stresses outside these scenarios, as necessary. ICAAP results are reviewed by management and the relevant Board of Directors.

Leverage Ratio Commentary

- JPMCHL: The leverage ratio decreased by 0.93% (9.39% as at 31 December 2015). The decrease in the leverage ratio is driven by an increase in exposure value impacting the denominator of the ratio. This was mainly attributable to $22bn increase in deposits, $24bn increase in derivatives and $12bn increase in other assets.
- JPMS plc: The leverage ratio decreased by 0.41% (6.74% as at 31 December 2015). The decrease in the leverage ratio is driven by an increase in exposure value impacting the denominator of the ratio. This was mainly attributable to $22bn increase in deposits, $24bn increase in derivatives and $12bn increase in other assets.
- JPMEL: The leverage ratio increased by 7.01% (20.10% as at 31 December 2015). The increase in the leverage ratio is driven by a decrease in exposure value attributable to a decrease in reverse repos.
- JPMIB: The leverage ratio decreased by 0.55% (6.89% as at 31 December 2015). The decrease in the leverage ratio is driven by an increase in exposure value impacting the denominator of the ratio. This was attributable to $3bn increase in deposits partially offset by a decrease in loans $2bn.
- BSUHKL: The leverage ratio decreased by 2.72% (13.67% as at 31 December 2015).The decrease in the leverage ratio was driven by a decrease in Tier 1 capital impacting the numerator of the ratio. This was attributable to the loss made for the year.
- JPMML: The leverage ratio increased by 0.84% (91.44% as at 31 December 2015). The increase in the leverage ratio is driven by a decrease in the exposure value attributable to a decrease in SFT exposures with other JPM group entities.

Table 92: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures as at 31st December 2016

Table LRSum: Leverage Ratio Summary Reconciliation ($'m)		JPMCHL	JPMS plc	JPMEL	JPMIB	BSUKHL	JPMML
1	Total assets as per published financial statements	586,360	569,833	11,316	19,084	4,003	4,406
2	Adjustments for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	0	0	0	0	0	0
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 'CRR')	0	0	0	0	0	0
4	Adjustments for derivative financial instrument	(141,723)	(141,453)	33	(252)	2	2
5	Adjustments for securities financing transactions ('SFTs')	43,449	43,221	201	26	0	0
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	9,507	7,216	1,991	299	0	0
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	0	0	0	0	0	0
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	0	0	0	0	0	0
7	Other adjustments	(1,265)	(2,045)	(72)	(17)	(0)	(0)
8	**Leverage Ratio Exposure**	**496,327**	**476,772**	**13,469**	**19,141**	**4,005**	**4,408**

Table 93: Split of On-Balance Sheet Exposures as at 31st December 2016

Table LRSpl: Split of On-Balance Sheet Exposures ($'m)		JPMCHL	JPMS plc	JPMEL	JPMIB	BSUKHL	JPMML
EU-1	Total on-balance sheet exposures (exc. Derivatives, SFTs and exempted exposures), of which:	184,183	179,866	3,257	15,171	252	656
EU-2	Trading book exposures	122,814	123,691	18	188	55	55
EU-3	Banking book exposures, of which:	61,369	56,176	3,240	14,983	198	601
EU-4	Covered bonds	0	0	0	0	0	0
EU-5	Exposures treated as sovereigns	22,509	22,221	72	174	0	0
EU-6	Exposures to regional governments, MDB, international organisations and PSEs not treated as sovereigns	277	277	0	0	0	0
EU-7	Institutions	8,711	7,992	2,558	9,107	165	164
EU-8	Secured by mortgages of immovable properties	834	0	0	834	0	0
EU-9	Retail exposures	0	0	0	0	0	0
EU-10	Corporate	17,899	13,037	317	4,544	0	406
EU-11	Exposures in default	0	0	0	0	0	0
EU-12	Other exposures (e.g. equity, securitisations and other non-credit obligation assets)	11,138	12,649	292	324	33	31

Table 94: Leverage Ratio Common Disclosure as at 31st December 2016

	Table LRCom: Leverage Ratio Common Disclosure ($'m)	JPMCHL	JPMS plc	JPMEL	JPMIB	BSUKHL	JPMML
On-Balance Sheet Exposures (exc. Derivatives and SFTs)							
1	On-balance sheet items (exc. derivatives, SFTs and fiduciary assets, but including collateral)	184,183	179,866	3,257	15,171	252	656
2	(Asset amounts deducted in determining Tier 1 capital)	(1,265)	(2,045)	(72)	(17)	(0)	(0)
3	**Total on-balance sheet exposures (exc. derivatives, SFTs and fiduciary assets)**	**182,918**	**177,821**	**3,185**	**15,154**	**252**	**655**
Derivatives Exposures							
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	24,251	24,249	13	2	3	3
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	112,049	111,507	33	547	2	2
EU-5a	Exposure determined under Original Exposure Method	0	0	0	0	0	0
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	0	0	0	0	0	0
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(41,669)	(41,574)	0	(95)	(0)	(0)
8	(Exempted CCP leg of client-cleared trade exposures)	(1,917)	(1,917)	0	0	0	0
9	Adjusted effective notional amount of written credit derivatives	162,742	162,525	0	217	0	0
10	Adjusted effective notional offsets and add-on deductions for written credit derivatives	(162,742)	(162,525)	0	(217)	0	0
11	**Total derivative exposures**	**92,714**	**92,265**	**45**	**454**	**4**	**4**
Securities Financing Transaction Exposures							
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	281,618	270,126	8,046	3,207	3,748	3,748
13	(Netted amount of cash payables and cash receivables of gross SFT assets)	(113,878)	(113,878)	0	0	0	0
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	43,449	43,221	201	26	0	0
15	Agent transaction exposures	0	0	0	0	0	0
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	0	0	0	0	0	0
16	**Total securities financing transaction exposures**	**211,189**	**199,469**	**8,247**	**3,233**	**3,748**	**3,748**
Other Off-Balance Sheet Exposures							
17	Off-balance sheet exposures at gross notional amount	18,079	14,158	3,539	382	0	0
18	(Adjustments for conversion to credit equivalent amounts)	(8,572)	(6,942)	(1,548)	(83)	0	0
19	**Other off-balance sheet exposures**	**9,507**	**7,216**	**1,991**	**299**	**0**	**0**
	Exempted Exposures in Accordance With CRR Article 429(7) and (14) (On and Off-Balance Sheet)						
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	0	0	0	0	0	0
EU-19b	(Exposures exempted in accordance with Article 429(14) of Regulation (EU) No 575/2013 (on and off-balance sheet)	0	0	0	0	0	0
Capital and Total Exposure							
20	Tier 1 capital	41,965	30,214	3,650	1,213	438	4,068
21	Total leverage ratio exposures (3 + 11 + 16 + 19 + EU19a + EU19b)	496,327	476,772	13,469	19,141	4,005	4,408
22	**Leverage ratio**	**8.46%**	**6.34%**	**27.10%**	**6.34%**	**10.95%**	**92.28%**
EU-23	Choice on transitional arrangements and amount of derecognised fiduciary items	Fully phased-in	Fully phased-in	Fully phased-in	Fully phased-in	Fully phased-in	Fully phased-in

17. Use of Credit Risk Mitigation Techniques (Art. 453)

Collateral Valuation and Management

The Firm's policies for collateral valuation and management are representative of industry standards and best practices. The fair value of the collateral is monitored daily. Full market value is not given to marketable assets accepted as collateral (apart from cash) in recognition of the fact that collateral is subject to price volatility and liquidity. A standard valuation reduction percentage (haircut) is applied to each asset class to mitigate the potential price decline of the collateral.

The Firm has internal policies in place relating to the type of acceptable collateral. These policies apply to the business which is booked in applicable UK legal entities. Cash and high quality bonds are generally considered acceptable collateral.

Main Types of Collateral

As at 31st December 2016, circa 80% of the collateral which JPMS plc held was in cash while the rest was in high quality bonds.

Table 95: Credit Risk Mitigation Use by Exposure Type as at 31st December 2016

Exposure Class ($'m)	JPMCHL	JPMS plc	JPMEL	JPMIB
Central Governments or Central Banks	14,148	14,148	0	0
Regional Governments or Local Authorities	134	134	0	0
Public Sector Entities	122	122	0	0
Multilateral Development Banks	2	2	0	0
Institutions	46,544	46,272	94	206
Corporates	24,497	24,497	0	0
Items Associated With Particularly High Risk	3,148	3,148	0	0
Claims on Institutions and Corporates With a Short-Term Credit Assessment	439	439	0	0
Total Credit Risk Mitigation	**89,034**	**88,762**	**94**	**206**

Exposures Covered by Credit Derivatives and Guarantees

JPMS plc has a significant volume of credit derivatives in its trading portfolio. These are held for trading intent and are treated under the market risk framework rather than as credit risk mitigation. The credit risks of the JPMS plc derivative portfolio are generally mitigated by arrangements provided to the firm by JPMorgan Chase Bank N.A. There are a small number of Credit Default Swap trades in JPMIB, representing client-driven trading activity, and which are deemed to be immaterial under the definitions in EBA GL2014/14.

Balance Sheet Netting

The Firms' financial statements are prepared under FRS 101 with the exception of JPMCHL consolidated financial statements which are prepared under FRS 102. FRS 101 applies the recognition and measurement requirements of International Financial Reporting Standards ("IFRS") as adopted by the European Union, with reduced disclosures. Under IFRS financial assets and financial liabilities are offset and the net amount reported in the balance sheet when the requirements of IAS 32 'Financial Instruments: Presentation' are met; (i) there is currently a legally enforceable right to offset the recognised amounts and (ii) 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 firm or the counterparty. The same offsetting criterion is applied under FRS 102.

Credit Risk Netting

In most jurisdictions in which the Firms operate, credit risk exposures can be reduced by applying netting. The Firms' normal practice is to enter into standard master agreements with counterparties (e.g. International Swaps and Derivatives Association, Global Master Repurchase Agreement, Global Master Stock Lending Agreement. These master agreements allow for netting of credit risk exposure to a counterparty resulting from transactions against the Group's obligations to the counterparty in the event of default, to produce lower net credit exposure. These agreements may also reduce settlement exposure (e.g. for foreign exchange transactions) by allowing for payments on the same day in the same currency to be set-off against one another. The firms apply the requirements as set out in the CRR with regards to application of netting from a regulatory capital perspective.

18. Bank Recovery and Resolution Directive

Article 26 of the Bank Recovery and Resolution Directive ("BRRD") states that member States shall ensure that group entities make public whether or not they have entered into a group financial support agreement pursuant to Article 19 of the BRRD and make public a description of the general terms of any such agreement and the names of the group entities that are party to it and update that information at least annually. Articles 431 to 434 of Regulation (EU) No 575/2013 shall apply.

Pursuant to the disclosure requirements under the PRA's Group Financial Support Instrument 2015, the BRRD undertakings within the scope of the disclosure have not entered into any group financial support agreement.

Pursuant to the disclosure requirements under the FCA handbook section IFPRU 11.5, no firm or qualifying parent undertaking within the scope of the disclosure has entered into any group financial support agreement.

19. Disclosures Not Applicable to the UK Entities

The following Articles of CRR are not applicable as at December 31, 2016:

- Indicators of global systemic importance (Art. 441);
- Use of the IRB Approach to credit risk (Art. 452);
- Use of the Advanced Measurement Approaches to operational risk (Art. 454); and
- Use of Internal Market Risk Models (Art. 455).

20. Glossary of Acronyms

ALCO	Asset and Liability Committee	LCR	Liquidity Coverage Ratio
ALMM	Additional Liquidity Monitoring Metrics	LDA	Loss Distribution Approach
APAC	Asia Pacific	LGD	Loss given default
AT	Additional Tier	LOB	Line of Business
BIA	Basic Indicator Approach	NBIA	New Business Initiative Approval
BRRD	Bank Recovery and Resolution Directive	NSFR	Net Stable Funding Ratio
BSUKHL	Bear Stearns United Kingdom Holdings Limited	ORC	Operational Risk Regulatory Capital
CCP	Central Counterparty Clearing House	ORG	Operational Risk Governance
CEO	Chief Executive officer	ORMF	Operational Risk Management Framework
CET	Common Equity Tier	OTC	Over the Counter
CFO	Chief Finance Office	PD	Probability of Default
CIB	Corporate and Investment Bank	PRA	Prudential Regulation Authority
CIO	Chief Investment Office	RCSA	Risk and Control Self-Assessment
CMDC	Compensation and Management Development Committee	RWA	Risk Weighted Assets
CQS	Credit Quality Step	S&P	Standard & Poor’s
CRD	Capital Requirements Directive	SFT	Securities Financing Transactions
CRO	Chief Risk Officer	SNPR	Single Name Position Risk
CRR	Capital Requirements Regulation	UKMC	UK Management Committee
CTC	CIO, Treasury and Corporate	VaR	Value-at-Risk
CTC RC	The CIO, Treasury and Other Corporate Risk Committee		
CVA	Credit Valuation Adjustment		
DRE	Derivative Risk Equivalent		
DRPC	Directors’ Risk Policy Committee		
EBA	European Banking Authority		
ECAI	External Credit Assessment Institutions		
EMEA	Europe, Middle East and Africa		
EOC	EMEA Operating Committee		
ERC	EMEA Risk Committee		
FCCM	Financial Collateral Comprehensive Method		
FRC	Firmwide Risk Committee		
FRS	Financial Reporting Standard		
IAS	International Accounting Standards		
ICAAP	Internal Capital Adequacy Assessment Process		
IFRS	International Financial Reporting Standards		
ILAAP	Internal Liquidity Adequacy Assessment Process		
IRM	Independent Risk Management		
IRR	Interest Rate Risk		
IRRBB	Interest Rate Risk in the Banking Book		
ITS	Implementing Technical Standards		
JPMAME	JPMorgan Asset Management (Europe) Sarl		
JPMC	J.P. Morgan Chase and Company		
JPMCHL	J.P. Morgan Capital Holdings Limited		
JPMEL	J.P. Morgan Europe Limited		
JPMFIL	J.P. Morgan Financial Investments Limited		
JPMIB	J.P. Morgan International Bank Limited		
JPML	J.P. Morgan Limited		
JPMML	J.P. Morgan Markets Limited		
JPMMML	J.P. Morgan Mansart Management Limited		
JPMS PLC	J.P. Morgan Securities PLC		