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# Pillar 3 Disclosure Report as at 31.12.2018

J.P. Morgan Bank (Ireland) plc

30th September 2019

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# Pillar 3 Disclosure Report 2018

## 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 RWA.
- **Pillar 2** requires banks to have an internal capital adequacy assessment process and requires that banking supervisors evaluate each bank’s overall risk profile as well as its risk management and internal control processes.
- **Pillar 3** encourages market discipline through 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/Regulation [EU] Nr. 575/2013). It was published in the Official Journal of the European Union on 27 June 2013. Part 8 of CRR includes additional provisions on regulatory disclosure for credit institutions. Both the Directive and the Regulation are applicable since 1 January 2014.

### Aim of the disclosure report

This report provides information on the capital structure, capital adequacy, risk exposures, and risk weighted assets of J.P. Morgan Bank (Ireland) plc and its subsidiaries, J.P. Morgan Administration Services (Ireland) Limited and J.P. Morgan Ireland (Nominees) Limited, hereafter referred to as JPMBI.

This disclosure fulfils the requirements as set out in Part Eight of the CRR, and in the supplementary Implementing Technical Standards and guidelines issued by the European Banking Authority (EBA).<sup>1</sup>

In accordance with Article 432 CRR and EBA guidelines in EBA/GL/2014/142 on material, proprietary or confidential information, the representations in this report are based on materiality as defined in EBA/GL/2014/14.

The Pillar 3 process outlines:

- The roles and responsibilities in the production of public disclosure
- The annual assessment process requirements for entity scope, disclosure frequency, accuracy and completeness of disclosure, process for omissions on the grounds of materiality, proprietary or confidentiality, and
- The overall governance requirements around disclosures and the processes to compile them.

These disclosures have been prepared in full accordance with the EMEA Pillar 3 Process Document<sup>3</sup>, which itself has been approved at Board level by JPMBI.

<sup>1</sup> Capital Requirements Regulation (CRR) / Regulation (EU) No. 575/2013

<sup>2</sup> EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23rd December 2014

<sup>3</sup> J.P.Morgan EMEA Pillar 3 Process Document – first published June 2016, latest update and approval April 2018

## Frequency and means of disclosure (Art. 433 and 434)

JPMBI publishes an annual report in accordance with Article 433 CRR.

The internal assessment process (under Title II of Guidelines) to determine which J.P. Morgan entities should disclose more frequently than annually concluded that, JPMBI does not meet the qualitative and quantitative thresholds to necessitate more frequent disclosure.

The disclosure report is made available according to Article 434 CRR on the website of JPMorgan Chase & Co. at: <https://investor.shareholder.com/jpmorganchase/basel.cfm>

## Scope of application (Art. 436)

These disclosures are made at the consolidated level of JPMBI with 2 subsidiaries: J.P.Morgan Administration Services (Ireland) (JPMAS) & J.P.Morgan Ireland (Nominees) Limited.

The main activities of the entities within JPMBI consist of the following:

- Corporate & Investment Bank –Global Treasury Services
- Investor Services –Trustee and Custody & Fund Services

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.

## Firmwide disclosure

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 available at the below link. Reference is made to this throughout the document:

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

The above 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>

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

‘JPMBI’ is used to refer interchangeably to J.P. Morgan Bank (Ireland) plc as stand-alone entity as well as the consolidated group.

## 2. Risk management and objectives (Art. 435)

### Risk Management Framework

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

The Firm believes that effective risk management requires:

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

The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight.

The Firm has an Independent Risk Management (IRM) function, which consists of the Risk Management and Compliance organizations. The CEO appoints, subject to the Board of Directors' Risk Policy Committee ("DRPC") approval, the Firm's CRO to lead the IRM organization and manage the risk governance framework of the Firm. The Firm places reliance on each of its LOBs and other functional areas giving rise to risk. Each LOB and other functional area giving rise to risk is expected to operate within the parameters identified by the IRM function, and within its own management-identified risk and control standards. The LOBs, inclusive of LOB aligned Operations, Technology and Oversight & Controls, are the "first line of defense" in identifying and managing the risk in their activities, including but not limited to applicable laws, rules and regulations.

The IRM function is independent of the businesses and forms "the second line of defense". The IRM function sets and oversees various standards for the risk governance framework, including risk policy, identification, measurement, assessment, testing, limit setting, monitoring and reporting, and conducts independent challenge of adherence to such standards.

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

In addition, there are other functions that contribute to the firmwide control environment including Finance, Human Resource, Legal and Corporate Oversight & Control.

### Risk Organization

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

Each of the LOBs is accountable for identifying and addressing the risks presented by their respective businesses and for operating within a sound control environment. They establish a committee structure as they deem necessary for their business/sub-business structure. These committees serve as an escalation point for issues relating to risk management governance. Each of the functions is also responsible for the identification and assessment of the risks they create, and escalation of issues as appropriate. The Firmwide Risk Committee ('FRC') is the firm's highest management-level risk committee, and is chaired by the CEO and the CRO. The FRC serves as an escalation point for topics and issues raised by its members or by the Chair(s) of a subordinate committee. The escalation channel is defined within each committee's or forum's governing documents.

In addition to the governance bodies described above, the firm has other forums in the Finance division and at the LOB, regional and local office levels, where risk-related topics are discussed and escalated, as necessary. The membership of these committees is comprised on senior management of the firm including representation from the LOB and various functions. These committees may have other sub-committees as deemed necessary to deliver against the escalation mandate.

In addition, there are other functions that contribute to the firmwide control environment including Finance, Human Resource, Legal and Corporate Oversight & Control.

## Global Legal Entity Risk Framework

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

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

### LE Risk Tiering

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

## Risk Governance and Oversight

As already discussed, J.P. Morgan's risk governance structure is based on the principle that each line of business is responsible for managing the risk inherent in its business, albeit with appropriate corporate oversight. Each LOB risk committee is responsible for decisions regarding the business risk strategy, policies (as appropriate) and controls. Therefore, each LOB within the regulated legal entities forms part of the Firmwide risk governance structure. To complement the global line of business structure, there is a regional governance construct as below:

- The ERC provides oversight of the risks inherent in the Firm's business conducted in EMEA or booked into EMEA entities and relevant branches as well as EMEA branches of ex-EMEA firms. In addition, to its regional responsibilities, the ERC has direct oversight of the risks in all EMEA Tier 1 entities. Tier 2 and 3 entities (including JPMBI) are overseen by the EMEA Risk Forum, a sub-forum of the ERC.
- The ERC is accountable to the EMC and the boards, DRPC and Oversight Committees of the relevant legal entities. In addition, it reports to the FRC and the HR Control Forum.
- The EMEA CRO leads the Risk Management function in the region and chairs the ERC and EMEA Risk Forum. The EMEA CRO is a member of the EMC.

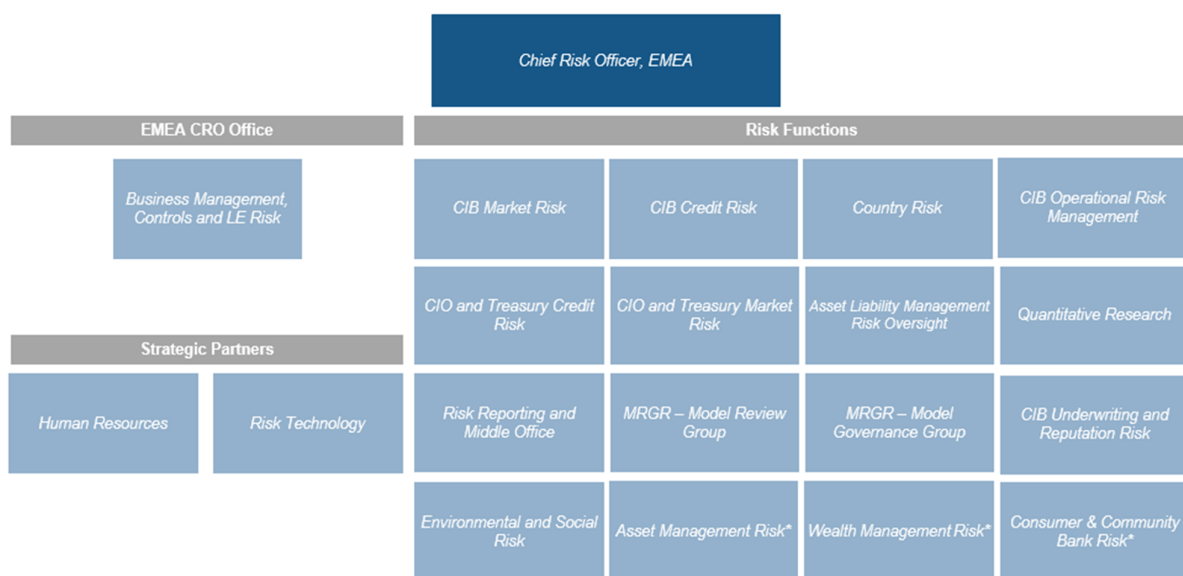
Whilst J.P. Morgan has established a comprehensive Firmwide risk policy framework, this is supplemented as required by legal entity-specific risk policies, which are approved by the relevant entity Boards and DRPCs.

## Regional Governance

Whilst J.P. Morgan has established a comprehensive Firmwide risk policy framework, this is supplemented as required by legal entity-specific risk policies, which are approved by the relevant entity Boards and DRPCs.

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 EMEA Management Committee (“EMC”), the Regional Management Meeting, the EMEA Risk Committee (“ERC”) and the EMEA Operating Committee (“EOC”):

- The EMC provides oversight for any business conducted in EMEA or booked into EMEA entities (excluding Asset Management entities). The EMC ensures that any significant decisions are aligned to the Firm’s strategy in light of any relevant EMEA regulatory requirements, considers the material risks and issues that are escalated to the EMC, and provides the necessary oversight and challenge for any proposed mitigation/remediation activities. The EMC is accountable to the Boards of the individual legal entities.
- The ERC provides oversight of the risks inherent in the Firm’s business conducted in EMEA or booked into EMEA entities and EMEA branches of ex-EMEA firms. In addition to its regional responsibilities, the ERC has direct oversight of the risks in all EMEA Tier 1 entities. Tier 2 and 3 entities are overseen by the EMEA CRO Forum (established May 2018), a sub-forum of the ERC, where the JPMBI CRO is a member. The ERC is accountable to the EMC and the Firmwide Risk Committee (“FRC”) and the Boards or Directors’ Risk Policy Committees of the individual legal entities. The ERC met 22 times during 2017.
- 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 EMC and the Boards of the individual legal entities.





## JPMBI Risk Governance and Oversight

### JPMBI Risk Committee

JPMBI's Risk Committee convenes and reports to JPMBI's Board of Directors on a quarterly basis. The membership of the Risk Committee is composed of a majority of non-executive directors and is chaired by a non-executive director in accordance with the CBI's Corporate Governance Requirements. The role and responsibilities of the Risk Committee are set out in its Terms of Reference which are reviewed by the Committee on at least an annual basis.

The main responsibility of the Risk Committee is to assist the Board of Directors in its mission to assess the adequacy of the risks that are assessed and the institution's ability to manage these risks; the internal and regulatory own funds and liquidity reserves. The proceedings of the Risk Committee are documented in meeting minutes and approved by the Risk Committee. In addition, the minutes are provided to JPMBI's Board of Directors.

### JPMBI Securities Services Executive Meeting - Senior Management Team (SMT)

The Securities Services Executive meeting (also referred to as SMT) is in charge of the effective, sound and prudent day-to-day business and risk management. Responsibility is delegated by the JPMBI Board of Directors to the SMT to implement the strategies and guiding principles laid down by the JPMBI Board of Directors in addition to the day to day running of the institution. Members of the SMT rely upon, and escalate into, an EMEA governance structure as illustrated at Appendix 2a. In addition, the JPMBI Board of Directors relies on the three internal control functions to maintain the legal entity control environment. In accordance with the CBI's Corporate Governance Requirements, the internal control functions are the risk function, the compliance function and the internal audit function. These functions are headed by the Chief Risk Officer, the Head of Compliance and the Head of Internal Audit respectively.

### JPMBI Outsourcing Governance Forum

The JPM Ireland Outsourcing Governance Forum is a forum established on behalf of the Board of Directors. It convenes on a monthly basis and on an ad hoc basis as required. The forum is responsible for the governance and oversight of inter-affiliate operations outsourcing on behalf of the Irish Legal entities. The objectives of the forum are governance and oversight of inter-affiliate outsourcing of operational activity.

### JPMBI Location Operational Risk & Control Committee (LORCC)

The role of the LORCC is to act as a cross line of business & functions committee for any business conducted in the location or booked into the location. The LORCC has responsibility for the review of operational risk control themes and issues in the location and for the escalation to the Local Infrastructure Operating Committee (LIOC), as well as holding members accountable for remediating such themes and issues.

## Identification and measurement of key risks

JPMBI completes the ICAAP annually, 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.

JPMBI's ability to properly measure, monitor and report risk is critical to both its soundness and profitability.

## Credit Risk

Credit risk is the risk associated with the default or change in credit profile of a customer, client or counterparty. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. In its consumer businesses, the Firm is exposed to credit risk primarily through its home lending, credit card, auto, and business banking businesses. In its wholesale businesses, the Firm is exposed to credit risk through its underwriting, lending, market-making and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as cash management and clearing activities), securities financing activities, investment securities portfolio, and cash placed with banks.

### Credit Risk Organization

Credit risk management is an independent risk management function that monitors, measures and manages credit risk throughout the Firm and defines credit risk policies and procedures. The credit risk function reports to the Firm's CRO. The Firm's credit risk management governance includes the following activities:

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

The Firm has developed policies and practices that are designed to preserve the independence and integrity of decision-making and ensure credit risks are assessed accurately, approved appropriately, monitored regularly and managed actively at both the transaction and portfolio levels. The Firmwide policy framework establishes credit approval authorities, concentration limits, risk-taking methodologies, portfolio review parameters and problem loan management protocols.

### Concentration Risk

Concentrations of credit risk arise when a number of clients, counterparties or customers are engaged in similar business activities or activities in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions. The Firm regularly monitors various segments of its credit portfolios to assess potential credit risk concentrations and to obtain additional collateral when deemed necessary and permitted under the Firm's agreements. Senior management is significantly involved in the credit approval and review process, and risk levels are adjusted as needed to reflect the Firm's risk appetite. Credit risk concentrations are evaluated primarily by industry, geography and credit family, and monitored regularly on both an aggregate portfolio level and on an individual client or counterparty basis. Credit concentration risk is managed at the firm-wide level through a matrix of credit family exposure thresholds, industry limits and country risk limits. The concentration risk framework complements but does not replace credit approval and review requirements.

### Risk Measurement

Methodologies for measuring credit risk vary depending on several factors, including type of asset, risk measurement parameters and risk management and collection processes. Credit risk measurement is based on the probability of default of an obligor or counterparty, the loss severity given a default event and the exposure at default.

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 realised 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 Management and revised as needed to reflect the borrower's current financial position, risk profile and related collateral. The calculations and assumptions are based on both internal and external historical experience and management judgment and are reviewed regularly. For portfolios that fluctuate based upon an underlying reference asset or index, potential future exposure is measured using probable and unexpected loss calculations based upon estimates of probability of default and loss severity given a default.

### Stress Testing

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

### Credit Risk Approval and Control

**Approval of clients:** All clients are subject to credit analysis and financial review by Credit Risk Management before new business is accepted.

**Establishment of credit lines:** All credit exposure must be approved in advance by a Credit Officer(s) with the level of credit authority required by the applicable credit authority grid unless qualifying for rules-based policies, described separately below. The approval is recorded in the Integrated Credit Risk Desktop ('ICRD'). Proposals and credit lines are recorded on the Credit Risk Infrastructure System (CRI). Credit Officers approve intraday, advised and unadvised overdraft lines for clients based on analysis undertaken by Credit Risk Management.

In some instances, credit lines can be approved according to predetermined rules that are subject to annual review by the appropriate Credit Officers. The policy framework governing this provides a single, consistent global approach while allowing the application of differing local requirements.

**Intraday exposure control:** Intraday credit risk exposure arising from cash payments is captured by the Firm's intraday exposure control system and requires approval of the payment by a Credit Officer. The Intraday Exposure Transaction Approval Group ('TAG') monitors intraday exposure excesses within the Intraday Facility Monitor ('IFM') for breach workflow management, Global Funds Control ('GFC') for payment breaches and Exposure Control Module ('ECM') for Custody trades breaches. Officers within TAG can either i) release items - within a tolerance rule - according to a matrix based on the risk grade of the client and the value of the overall exposure to that client; iii) gain Credit Officer's approval to release funds; or iii) contact the client via Client Services/custody Middle Office and wait for confirmed receipt of funds. Breach approvals are executed on a time-critical basis. All payments are referred for approval to TAG prior to currency cut-off times rather than immediately after they are received.

### 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 line of businesses.

### Risk Reporting

To enable monitoring of credit risk and effective decision-making, aggregate credit exposure, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management.. 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.

## Operational Risk

### 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 has four main components: Governance, Operational Risk Identification and Assessment, Operational Risk Measurement, and Operational Risk Monitoring and Reporting.

#### Governance

The lines of business and Corporate are responsible for applying the ORMF in order to manage the operational risk that arises from their activities. The Control Management organization, which consists of control managers within each line of business and Corporate, is responsible for the day-to-day execution of the ORMF. Line of business and Corporate control committees are responsible for reviewing data that indicates the quality and stability of processes, addressing key operational risk issues, focusing on processes with control concerns, and overseeing control remediation. These committees escalate operational risk issues to the Firmwide Control Committee ('FCC'), as appropriate. The Firmwide Risk Executive for Operational Risk Management ('ORM'), a direct report to the Chief Risk Officer ('CRO'), is responsible for defining the ORMF and establishing minimum standards for its execution. Operational Risk Officers report to both the line of business CROs and to the Firmwide Risk Executive for ORM, and are independent of the respective businesses or corporate functions they oversee. The Firm's Operational Risk Management Policy is approved by the Directors' Risk Policy Committee ('DRPC'). This policy establishes the Operational Risk Management Framework for the Firm.

#### Operational Risk identification and assessment

The Firm utilizes a structured risk and control self-assessment process which is executed by the lines of business and Corporate in accordance with the minimum standards established by ORM, to identify, assess, mitigate and manage its operational risk. As part of this process, lines of business and Corporate identify key operational risks inherent in their activities, address gaps or deficiencies identified, and define actions to reduce residual risk. Action plans are developed for identified control issues and lines of business and Corporate are held accountable for tracking and resolving issues in a timely manner. Operational Risk Officers independently challenge the execution of the self-assessment and evaluate the appropriateness of the residual risk results. In addition to the self-assessment process, the Firm tracks and monitors events that have led to or could lead to actual operational risk losses, including litigation-related events. Responsible lines of business and Corporate analyse their losses to evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where targeted remediation efforts may be required. ORM provides oversight of these activities and may also perform independent assessments of significant operational risk events and areas of concentrated or emerging risk.

#### Operational Risk Measurement

In addition to the level of actual operational risk losses, operational risk measurement includes operational risk-based capital and operational risk loss projections 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 ('AMA'), 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 does

not reflect the impact of insurance in its AMA estimate of operational risk capital. 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 and Review ('CCAR') and Internal Capital Adequacy Assessment Processes ('ICAAP').

### Operational Risk Monitoring and reporting

ORM has established standards for consistent operational risk monitoring and reporting. Operational risk reports are produced on a firmwide basis as well as by line of business and Corporate. Reporting includes the evaluation of key risk indicators against established thresholds as well as the assessment of different types of operational risk against stated risk appetite. The standards reinforce escalation protocols to senior management and to the Board of Directors.

### Liquidity Risk

For Liquidity Risk please refer to Section 17.

### Structural Interest Rate Risk ('Interest Rate Risk')

Structural Interest Rate Risk, also known as Interest Rate Risk ('IRR'), is defined as Interest Rate Risk resulting from the Company'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 Treasury and Chief Investment Office ('T/CIO') investment portfolio and other related T/CIO activities. IRR from non-trading activities can occur due to a variety of factors, including but not limited to:

- Difference in the timing among the maturity or 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 maturity 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 the DRPC. The CIO, Treasury and 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;
- Provides Governance on legal entity related exposures; and
- Reviews significant changes to IRR models and/or model assumptions including the changes related to IRR management.

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

In addition, oversight of structural interest rate risk is managed through IRR Management, a dedicated risk function reporting to the CTC CRO. IRR Management is responsible for, but not limited to:

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

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

## Risk Identification and Measurement

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

Measures to manage IRR include:

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

## Reputational Risk

Reputation Risk is the potential that an action or inaction will reduce trust in the Firm's integrity or competence by its various constituents, including clients, counterparties, customers, investors, regulators, employees, communities or the broader public.

### Governance and Policy Framework

Reputation risk is the responsibility of each Line of Business ('LOB'), function, and employee within the firm. Reputation of the firm, and not just business benefits and regulatory requirements, should be considered when deciding whether to pursue any new product, transaction, client relationship, jurisdiction, business process or any other matter. Any employee may refer a matter for review to any member of a Reputation Risk Office ('RRO'). The RRO is the conduit through which transactions or matters are raised to the relevant Reputation Risk Committee ('RRC') or other forum for the appropriate escalation and determination of reputation risk.

J.P. Morgan ('JPM') has an established risk management governance framework, including a policy and standards, for managing reputation risk. The requirements of the reputation risk governance framework as described in the Firmwide Reputation Risk Governance policy are executed by each of JPM's LOBs through adherence to the Firmwide Reputation Risk Standards.

The governance framework includes the following:

- Governance - The Firmwide Risk Executive ('FRE') Reputation Risk and Firmwide Reputation Risk Governance ('FRRG') establishes the reputation risk framework for the firm. FRRG provides oversight of governance infrastructure and process to support the consistent identification, escalation, management and monitoring of reputation risk issues firmwide.
- Lines of Business - The firm establishes the specific manner in which we identify, control and manage reputation risk as set forth in the Firmwide Reputation Risk Governance policy and in the Firmwide Reputation Risk Standards, which apply to all LOBs, and are designed to assist with identifying and escalating any potential reputation risk. Each LOB, including the functions aligned to an LOB, is responsible for following the Firmwide Reputation Risk Governance policy and the Firmwide Reputation Risk Standards.
- Functions - It is the responsibility of each function to consider the reputation of the firm by reference to the Firmwide Reputation Risk Governance policy. They are expected to apply the appropriate level of due diligence to reputation risks in their respective areas, and adapt as appropriate the range of control capabilities and processes needed to minimize the risk. Matters may be escalated per the Firmwide Reputation Risk Standards or to FRRG.
- Escalation - Should the Committee or any member consider that the inherent reputation risk is of such a degree to warrant it, or if the Committee does not reach consensus for a particular matter, the matter may be escalated to the FRE for Reputation Risk and/or the LOB CRO. The LOB Risk Committee should be the initial point of escalation prior to an escalation to the Board.
- Cross LOB Coordination - Any review involving a client or transaction shared with more than one LOB may be discussed at an ad hoc RRC consisting of attendees from each of the relevant LOB RRCs. A decision as to which LOB RRC(s) should review a shared client will be made by the LOB RRC's leadership in consultation with the FRE Reputation Risk.

Consistent with regulatory guidance, the firm's Board Risk Committee ('RC') Charter requires approval of primary risk policies of the firm. The following JPMC policies and associated documents comprise key components of the policy framework:

- Risk Governance Policy - a BRC primary risk policy
- Firmwide Reputation Risk Governance Policy - a BRC primary risk policy
- Firmwide Reputation Risk Standards
- LOB Reputation Risk Committees Charters, as applicable

## Approach to Risk Management

The Firmwide Reputation Risk Governance policy is executed by each LOB through adherence to the Firmwide Reputation Risk Standards, which provide guidance and details on the following:

- Scope and role of the RRCs, as applicable
- Membership, administration, reporting and the role of the RRO
- Criteria for escalation to RRC, as applicable
- Processes for escalation referral, approval and post approval requirements

Any employee may refer a matter for review. However, the relevant business or function is responsible for performing its own due diligence, and considering and escalating potential reputation risk within its own management structure before significant progress is made on any transaction or activity.

## Business Risk

Business risk is the risk associated with the Firm's current and future business plans and objectives. Business risk includes the risk to current or anticipated earnings, capital, liquidity, enterprise value, or the Firm's reputation arising from adverse business decisions, poor implementation of business decisions, or lack of responsiveness to changes in the industry or external environment.

Due to the nature of JPMBI profile, business risk is inherent as there is a heavy concentration and dependence on a small number of clients. The business related concentration risk of JPMBI is its dependency on its top 5 clients.

## 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 and in certain cases extra capital is set aside in the form of Pillar 2. 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.

## Governance Risk

Governance Risk is the risk that JPMBI does not have appropriate personnel, structures or procedures in place to ensure sound and prudent management of the firm. This may include the risk of deviation from regulations designed to achieve good governance in credit institutions such as the Central Bank of Ireland's Corporate Governance Code or a deviation from tax transfer pricing which could adversely impact on the long-term viability of the company.

## Governance and Policy Framework

As a subsidiary of a highly regulated global financial group it is firmly rooted in group risk governance structures, processes and methodologies. The governance structures that are adopted by JPMBI follow best group practice and have been adjudged by the board and management to be appropriately designed so as to materially comply with the Irish Central Bank's governance requirements. Core governance risk is managed locally.

## Market Risk

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

The firm, through its lines of business ('LOBs'), may be exposed to market risk as a result of various financial activities, including trading, funding, underwriting and investing.

## Firmwide Market Risk Governance

Market Risk Management monitors market risks throughout the Firm and defines market risk policies, procedures and frameworks. The Market Risk Management function reports to the Firm's CRO, and seeks to manage risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the firm's market risk profile.

The Firmwide Risk Executive ('FRE') Market Risk and Line of Business Chief Risk Officers ('LOB CROs') are responsible for establishing an effective market risk organization. The FRE Market Risk and LOB Heads of Market Risk establish the framework to measure, monitor and control market risk.



## JPMBI Market Risk Governance

JPMBI's market risk approach is no less conservative than the approach outlined by the firmwide Market Risk Management policy.

- If applicable, the JPMBI Board is responsible for the application of the firmwide market risk management processes to JPMBI with additional oversight by the EMEA CRO Forum.
- The JPMBI SFO is responsible for overseeing the monitoring of the foreign exchange mismatches in the LE. The JPMBI SFO reports to both the JPMBI Risk Committee and the Board of Directors on a regular basis. JPMBI will, if required, notify the EMEA CRO Forum of any material events.

The JPMBI Board is kept apprised of any foreign exchange mismatches by the JPMBI SFO at JPMBI Risk Committee and EMEA ALCO meetings.

The finance department follows the global rules on foreign exchange trade outs and does not allow the build-up of open unmatched foreign exchange positions.

## 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.

JPMBI's risk appetite framework is derived from the Entity's role in supporting execution of firmwide strategy, whilst simultaneously meeting minimum regulatory requirements and serving clients through severe but plausible financial stresses. The framework focuses on key binding constraints for a regulated subsidiary operation, including regulatory capital and liquidity requirements. The most likely trigger mechanism for a collapse of the subsidiary would be regulatory action after breaches of capital or liquidity requirements and inability of the parent companies to inject further resources. This has therefore been used to help define the maximum risk appetite for the entity, while the corresponding risk appetite is set below this upper boundary.

JPMBI's Risk Appetite framework is documented in a Risk Appetite Statement and a supporting Risk Appetite Parameters and Guidelines document. The framework has several components including roles and responsibilities, a risk appetite statement, quantitative measures of risk appetite, and monitoring mechanism through risk appetites, policies, procedures and governance.

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. The management body will keep this under review.

## Board Declaration – Adequacy of Risk Management Arrangements

The Board of JPMBI is satisfied that Management has taken reasonable care to establish and maintain risk systems and controls as appropriate to its business.

## Members of the Board of Directors J.P. Morgan Bank (Ireland) plc

The J.P. Morgan Bank (Ireland) plc Board is comprised of 5 non-executive directors and three executive directors. The directors during 2018 were:

### **Christopher Rowland**

Mr. Rowland joined the Board of J.P. Morgan Bank (Ireland) Plc in October 2014. He is currently Global Head of Custody based in London. He is responsible for setting the strategy and managing the P&L for the Global Custody, Direct Custody, FX, Cash and Liquidity products provided to institutional investor clients of the firm. He is also a board member of the J.P. Morgan Luxembourg and Irish Banks. Mr. Rowland has worked at J.P. Morgan twice, most recently joining the firm in 2006 to establish the EMEA product management group for Global Custody followed by running the product development strategy for the Custody business, establishing Corporate and Investment Bank securities processing utilities and running the Global Fund Services business. Previously at J.P. Morgan, Mr. Rowland performed operations, project management and operational outsourcing sales roles covering derivative products in the Investment Bank. Mr. Rowland spent 4 years at BNP Paribas Securities Services where he led the sales and relationship management team for the Direct Custody and Clearing business in the UK. He holds a Bachelor of Arts in history and politics from Swansea University.

### **Declan Breslin**

Declan Breslin is a Managing Director and Global Head of Client Service and Solutions for Securities Services at J.P. Morgan. His team is responsible for the day-to-day client service and onboarding for clients on the firm's Securities Services platform, with over \$24 trillion in assets under custody. Declan began his career in London with Deutsche Bank before moving to Lehman Brothers in 2003, where he ran Client Service and Transition across all products both pre- and post- bankruptcy. He worked closely with the administrator post-bankruptcy before transferring to Nomura International to build out their global Prime Brokerage platform. Declan graduated from the Queen's University of Belfast in 1998 with a Bachelor of Science in Finance and holds a Master of Science in Finance from the University of London.

### **Ed Neeck**

Mr. Neeck joined the Board of J.P. Morgan Bank (Ireland) Plc in September 2015. a Managing Director and head of Operational Risk Management for J.P. Morgan Corporate & Investment Bank – Securities Services. He is responsible for risk management related activities for all Securities Services products including: Custody, Fund Accounting, Fund Administration, Agency Lending, Depository Receipts, Transfer Agency, Investment Operations Services, Hedge Fund Services and Private Equity and Real Estate Services. In addition to holding several senior Risk Management positions in J.P. Morgan, Mr. Neeck has also held many other key positions since he joined the firm over 25 years ago. He served as head of Network Management and oversaw the management of the firm's relationships with cash correspondent and sub-custodian banks. He started his career at J.P. Morgan in Internal Auditing and moved on to senior roles in operations, product management, finance and risk management in the Corporate & Investment Bank and other parts of the firm. He is past chairman and a current member of the Association of Global Custodians. He has also served as a member of both the Securities Services Committee of SWIFT and the International Securities Services Association (ISSA) Operating Committee. A graduate of J.P. Morgan's Corporate Finance Program, he also holds a BA in Economics and Politics from Fairfield University and a M.B.A. in Financial Management from the Hagan School of Business at Iona College.

### **Carin Bryans**

Ms. Bryans joined the Board of J.P. Morgan Bank (Ireland) plc in July 2002. She is currently responsible for J.P. Morgan's Corporate & Investment Bank business in Ireland and the Channel Islands. Ms. Bryans joined Chase Manhattan Bank in 1990 and has held a wide range of positions including head of Operations and Head of Client Services. Ms Bryans holds an undergraduate degree in Finance and International Business from The University of Texas in Austin, and an MBA from The Michael Smurfit Graduate School of Business in Dublin. Ms Bryans currently chairs the IFSC Funds Group, is the Vice President of the American Chamber of Commerce in Ireland, was the Chairman of the Irish Funds Industry Association for 2010/2011, and is a founding member of Women in Banking and Finance Ireland. She also holds a non-executive director position at the Irish Society for the Prevention of Cruelty to Animals (ISPCA), the largest animal welfare society in Ireland.

**Eilish Finan**

Ms. Finan is a Chartered Accountant & a Chartered Director with 25 years' experience in financial services. She is a seasoned Board Director & Chairman who has served as Chairman of Audit, Investment & Remuneration Committees & as member of Risk Committees. Her work across the financial services sector includes Asset Management, Insurance & Banking. She is an expert in Corporate Governance. Her executive experience is across large global businesses over multiple asset classes and multiple jurisdictions and Regulators. Ms Finan is an authorised PCF with the Central Bank of Ireland. She is a Non-Executive Director of JP Morgan Bank Ireland, New Ireland Assurance Co, MetLife Europe D.A.C. & MetLife Europe Insurance D.A.C. She served a 4 year term on the Board of the National Asset Management Agency (NAMA) from 2009 to 2013. Her portfolio of Directorships are held within the insurance, banking, asset management, private equity, social finance, & fund sectors. Ms Finan trained with KPMG as a Chartered Accountant. She worked for 17 years as CFO & Executive Director & Global VP of AIG Global Investments specialising in Global Asset Management & Fund Management, Trust & Custody, Securities Lending, Alternative Investments and Property Development. She is a fellow of Chartered Accountants Ireland. She carries a BA in Mathematics & a degree in Electronic Engineering from Trinity College Dublin. She holds a Professional Diploma in Corporate Governance from the UCD Smurfit Business School. She holds a Diploma in Company Direction from the Institute of Directors (UK) and was awarded the designation of Chartered Director from the IoD (UK). She is a Certified Bank Director, designated by the Institute of Banking in Ireland.

**Stephen Herbert**

Mr. Herbert joined the Board of J.P. Morgan Bank (Ireland) Plc in September 2011. He is currently an independent non-Executive director. Mr. Herbert is a US Certified Public Accountant with over thirty years of experience in public accounting in the United States and Japan, including twenty two years auditing and consulting in the financial services industry, primarily in banking and securities. Mr. Herbert formerly worked in Deloitte & Touche in the US as a partner in the national and New York office banking and securities practices and Senior Partner in Japan responsible for providing accounting and regulatory consulting services to major international Companies. Mr. Herbert holds a Bachelor of Arts in English and a Master of Science in Accountancy.

**Evelyn Herlihy**

Ms. Herlihy joined the Board of J.P. Morgan Bank (Ireland) Plc in December 2007. She is currently the Chief Risk Officer of the company. Ms. Herlihy joined J.P. Morgan in 1995. She has previously held roles in Fund Services Operations. Previously Ms. Herlihy trained and worked with KPMG as a Chartered Accountant. Ms. Herlihy holds a Bachelor of Commerce from University College Dublin, a post graduate Diploma in Professional Accounting and is a Fellow of the Institute of Chartered Accountants in Ireland.

**Tim Markham**

Mr. Markham joined the Board of J.P. Morgan Bank (Ireland) Plc in February 2017. He is the regional manager for J.P. Morgan's Depositary Services business in Ireland and the Channel Islands which includes independent oversight, cash monitoring and safe-keeping functions. Prior to joining J.P. Morgan in 2005, Mr. Markham was a directors in Ernst & Young, Dublin with 15 years audit and financial services experience. Mr. Markham holds a Bachelor of Business degree from Trinity College Dublin and is a fellow of the Institute of Chartered Accountants in Ireland.

**Michael Davies**

Mike Davies joined the Board of J.P. Morgan Bank (Ireland) plc in September 2017. He is Head of Depositary Services for Northern Europe and Nordics branch manager for JPMorgan Bank Luxembourg SA. Prior to this he was a Managing Director and Senior Country Business Manager for Nordics and Ireland, based in Oslo. He managed the Senior Country Business Managers for Luxembourg, Channel Islands, Central & Eastern Europe and Spain as well as the Senior Financial Officers for Benelux, France, Italy, Israel and Sub Sahara Africa. Mike's team was responsible for supporting the Senior Country Officer and senior business resources in his locations as well as core Financial Reporting tasks including reporting to local regulators. Mike is a Fellow of the Chartered Institute of Management Accountants.

Members of the Board of Directors have held other internal and/or external directorships at the year ended December 31, 2018 as follows:

Name	Internal Directorships	External Directorships
<b>Carin Bryans</b>	1	1
<b>Ellish Finan</b>	1	7
<b>Evelyn Herlihy</b>	1	0
<b>Stephen Herbert</b>	1	0
<b>Christopher Rowland</b>	1	0
<b>Declan Breslin</b>	1	0
<b>Ed Neeck</b>	1	0
Tim Markham	1	0
Michael Davies	1	0

Exhibit 1: Member of the Board of Directors

Directorships held within the same group are counted as one directorship, and those in organisations with non-commercial objectives are not counted.

## Diversity & Inclusion

JPMBI has a disciplined focus on our workforce, workplace and marketplace – with management accountability as the foundation and element most critical to the ability to hire, train and retain great and diverse employees whose unique perspectives help realise the business objectives. JPMBI is 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.

In 2014 JPMC set an internal target to achieve 30% representation of women on certain key boards in EMEA. JPMC continue to make progress towards achieving this target across those boards and conduct a review on an annual basis.

Further information on the Firm's global Diversity and Inclusion strategy is available at:

<https://www.jpmmorgan.com/country/GB/en/emea/crd4>

### 3. Own funds (Art. 437)

This table shows the components of regulatory capital presented on a transitional and fully loaded basis as at 31 December 2018. This disclosure has been prepared using the format set out in Annex IV and Annex VI of the final 'implementing technical standards with regard to disclosure of own funds requirements for institution' (Commission implementing regulation - EU 1423/2013).

	JPMBI		
	31 December 2018 Transitional Position	Transitional Impacts	31 December 2018 Fully Loaded Position
	\$m	\$m	\$m
<b><u>Common Equity Tier 1 capital: instruments and reserves</u></b>			
Capital instruments and the related share premium accounts	57	-	57
Retained earnings	382	-	382
Accumulated other comprehensive income (and other reserves)	-	-	-
<b>Common Equity Tier 1 capital before regulatory adjustments</b>	<b>439</b>	<b>-</b>	<b>439</b>
<b><u>Common Equity Tier 1 capital: regulatory adjustments</u></b>			
Additional Value Adjustments	(2)	-	(2)
<b>Total regulatory adjustments to Common Equity Tier 1</b>	<b>(2)</b>	<b>-</b>	<b>(2)</b>
<b>Common Equity Tier 1 capital</b>	<b>437</b>	<b>-</b>	<b>437</b>
<b><u>Additional Tier 1 (AT1) capital</u></b>			
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	-	-	-
<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>435</b>	<b>-</b>	<b>435</b>
<b><u>Tier 2 capital: instruments and provisions</u></b>			
Capital instruments and the related share premium accounts	-	-	-
<b>Tier 2 capital</b>	<b>0</b>	<b>-</b>	<b>0</b>
<b>Total capital (TC = T1 + T2)</b>	<b>435</b>	<b>-</b>	<b>435</b>
<b>Total risk weighted assets</b>	<b>649</b>	<b>-</b>	<b>649</b>
<b><u>Capital ratios</u></b>			
Common Equity Tier 1 (as a percentage of risk exposure amount)	67.11%	-	67.11%
Tier 1 (as a percentage of risk exposure amount)	67.11%	-	67.11%
Total capital (as a percentage of risk exposure amount)	67.12%	-	67.12%
Common Equity Tier 1 available to meet buffers	67.12%	-	67.12%

Exhibit 2: CRD IV Regulatory Capital for JPMBI

## Capital Instruments

JPMBI does not hold any capital instruments.

This table breaks down the capital issued by instrument and provides selected main features. Regulatory capital might differ from the amounts recorded under IFRS due to PRA/FCA requirements. The full terms and conditions of instruments can be found as registered at Companies House. A link to this location is provided on the Basel 3 page of the company website, adjacent to this document. <http://investor.shareholder.com/jpmorganchase/basel.cfm>

Capital Instruments Main Features All amounts in \$		CET1	TIER 2
1	Issuer	JPMBI	JPMBI
3	Governing law(s) of the instrument	Irish	Irish
<b>Regulatory treatment</b>			
4	Transitional CRR rules	Common Equity Tier 1	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Consolidated	Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Redeemable Shares
8	Amount recognised in regulatory capital (Currency, as of most recent reporting date)	\$56,500,000	\$56,075
9	Nominal amount of instrument	\$1	1.27
9a	Issue price	\$1	1.27
9b	Redemption price	N/A	1.27
10	Accounting classification	Shareholders' equity	Shareholders' equity
11	Original date of issuance	January 1, 1994	January 1, 2002
12	Perpetual or dated	Perpetual	Perpetual
13	Original maturity date	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	No	No
<b>Coupons / dividends</b>			
19	Existence of a dividend stopper	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary
21	Existence of step up or other incentive to redeem	No	No
22	Noncumulative or cumulative	Noncumulative	Noncumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	One class of share & same rights attached to all shares
36	Non-compliant transitioned features	No	No

Exhibit 3: Summary of main features of capital resources <sup>3</sup>

<sup>3</sup> 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

## 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

JPMBI completes an Internal Capital Adequacy Assessment Process (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 and capital. 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 Board of Directors.

The key risk types JPMBI is exposed to for Capital allocation purposes are Operational risk and Credit risk.

### Operational Risk capital measurement

#### Firmwide approach

In addition to the level of actual operational risk losses, operational risk measurement includes operational risk based capital and operational risk loss projections 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 and Review ("CCAR") framework and the Internal Capital Adequacy Assessment Process ("ICAAP").

#### JPMBI assessment

JPMBI calculates the Operational Risk Capital Requirement for Pillar 1 using the Basic Indicator Approach (BIA) as set out under Basel 3. The BIA sets the required level of operational risk capital as 15% of the bank's annual positive gross income averaged over the previous 3 years.

In addition to the Pillar 1 assessment, JPMBI adopted an internal approach to calculate operational risk capital under Pillar 2 based on Scenario Analysis. The primary objective of Scenario Analysis is to provide the senior management with a forward-looking view of exceptional but plausible operational risk events and to assess their potential outcome. JPMBI has used Scenario Analysis to facilitate the assessment of operational risk capital and to project future expected losses under various economic conditions. Scenarios reflect risks that could materialize within the foreseeable future and may or may not have previously impacted JPMBI.

## Credit Risk and Concentration risk capital measurement

JPMBI calculates the Credit Risk Capital Requirement for Pillar 1 using the Standardised Approach (SA).

For JPMBI's Pillar 2 Credit and Concentration Risk assessment, JPMBI has leveraged the firm's Economic Credit Capital (ECC) model, in the economic internal perspective, to calculate an estimate of concentration risk by constructing a proxy, fully-diversified portfolio (using the existing portfolio and applying the same, single-factor loading to all names) and comparing this to the baseline ECC portfolio measure.

Credit Risk Economic Capital is defined as the cushion against unexpected losses at a 99.9% confidence level based on maintaining a targeted "AA" rating standard for JPMorgan Chase & Co. The firm's economic capital model measures default losses, changes in accounting reserves and mark-to-market losses. To compute economic capital, the loss distribution for the wholesale credit portfolio is calculated by running Monte-Carlo simulations using J.P. Morgan's Proprietary Capital Model with a one-year horizon.

At December 31st, 2018, the capital amount and the concentration risk add-on recommended by the above models for CCR for JPMBI are lower than the ones calculated by the above model or requested by CBI (\$2mm). Hence the ECC model results have not been applied.

## Minimum capital requirement

Tables 4 and 5 present minimum capital requirements for JPMBI. The standardized approach has been used for the calculation of Credit Risk and Market Risk Capital Requirements.

The basic indicator approach has been used for the calculation of Operational Risk Capital Requirements. The Large Exposures Capital Requirement is entirely due to exposures to other JPMorgan group entities.

Own funds credit exposure class	JPMBI
As at 31 December 2018	\$m
Institutions	12
Corporates	4
Other items	15
<b>Total Capital Requirements</b>	<b>31</b>

Exhibit 4: Minimum Capital Requirements for Credit Risk (Banking Book) under the Standardised Approach

Own funds	JPMBI
As at 31 December 2018	\$m
Foreign-Exchange Risk	0
Operational Risk	22

Exhibit 5: Minimum capital requirement for market risk, settlement risk, large exposures and operational risk



## 5. Capital Planning Buffer

The ICAAP analyses JPMBI's capital adequacy at the assessment date and projected forward over a three-year planning horizon, including the effects of severe but plausible stress scenarios, to ensure that it maintains an appropriate Capital Planning Buffer over internal and external capital minimum standards.

The Capital Planning Buffer is described as the quantum of capital the Bank should hold now, to absorb losses and/or cover increased capital requirements in adverse circumstances that are outside of its normal and direct control. This buffer can be released/used in such stressed circumstances, allowing the Bank to continue to meet its minimum regulatory capital requirements.

In addition to Pillar 1, JPMBI adopted an internal approach to assess its capital adequacy under Pillar 2 add-on. This involves using its Pillar 1 capital requirements as a starting point and then using its internal capital adequacy assessment to apply any Pillar 2 add-ons (to the Pillar 1 minimum) that are required to adequately capture the risks to which the Bank is exposed. The second component is known as "Pillar 2 Buffer", and considers what additional capital buffer is required to maintain that capitalization over the economic cycle, including a severe stress.

Based on the analysis undertaken, JPMBI's capital resources remain adequate to support the Bank's underlying risk profile and strategic growth objectives.

JPMBI maintains a substantial capital surplus throughout the scenarios considered. JPMBI's total capital ratio remains well above the required minimum level of 8% (excluding the Capital Conservation Buffer) at all times and under all scenarios.

Therefore, at this stage, the Bank believes that continuing to monitor the impact of the stress scenarios is the most appropriate course of action—since the impact is both within the capital currently available, and within the 2.5% of RWAs or greater which the firm must hold as an equivalent buffer under CRD IV (Capital Conservation Buffer). In addition, JPMBI capital forecasting is based on a combination of factors including potential new business, forecasted market conditions, forecasted business activity, etc.

Our conclusion based on the Risk Assessment and Quantification and the capital position analysis above is that JPMBI is adequately capitalized relative to the risks it is running, and relative to the projected business in JPMBI. This assessment will be kept under review as the business profile of JPMBI changes, and in any event at least annually.

## 6. Credit risk adjustments (Art. 442)

JPMBI did not have any credit risk adjustments for the year end 31st December 2018.

### Definition

**Impairment loss:** Amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount (IAS 36).

**Past due:** A financial asset is past due when a counterparty has failed to make a payment when contractually due (IFRS 7).

### Credit risk adjustments for derivatives

JPMBI did not hold any derivatives for the period ended 31st December 2018.

### Credit Risk Exposures before credit risk mitigation

Primary responsibility for determining impairment provisions is managed according to the Firm's Credit Policy. J.P. Morgan's methodology for determining impairment provisions and the establishment of impairment provisions are managed centrally.

The following tables show the credit risk exposures before the application of credit risk mitigation.

EAD pre-CRM credit exposure class	JPMBI	
	Exposure Pre CRM	Average Exposure Pre CRM over the Year
As at 31 Dec 18	\$m	\$m
Central governments or central banks	229	220
Institutions	689	1256
Corporates	47	68
Other items	186	136
<b>Total Standardised Approach Credit Risk Exposure</b>	<b>1,151</b>	<b>1,680</b>

Exhibit 6: Credit Risk Exposures before Credit Risk Mitigation (CRM) for JPMBI

## Geographical location of exposures

These tables show exposure at default pre-CRM (credit risk mitigation), broken down by credit exposure class and geographic location of the counterparty. In regards to the geographical analysis, the exposures relate to the location in which the customer is based.

EAD pre-CRM credit exposure class	JPMBI						Total
	United Kingdom	Europe	United States	Africa	Asia	Rest of the world	
As at 31 Dec 18	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Central governments or central banks	-	229	-	-	-	-	229
Institutions	645	40	4	-	-	-	688
Corporates	10	28	7	-	-	2	48
Other items	-	186	-	-	-	-	186
<b>Total Standardised Approach Credit Risk Exposure</b>	<b>655</b>	<b>483</b>	<b>11</b>			<b>2</b>	<b>1,151</b>

Exhibit 7: Geographic analysis of credit exposure for JPMBI

## Industry analysis of credit exposures

These tables show exposure at default pre-CRM (credit risk mitigation), broken down by credit exposure class and the industrial sector associated with the obligor or counterparty.

EAD pre-CRM credit exposure class	JPMBI				Total
	Banks	Non-Bank Financial Institutions	Non-Financial Corporations	Other	
As at 31 Dec 18	\$m	\$m	\$m	\$m	\$m
Central governments or central banks	229	-	-	-	229
Institutions	688	-	-	-	688
Corporates	-	48	-	-	48
Other items	-	-	-	186	186
<b>Total Standardised Approach Credit Risk Exposure</b>	<b>918</b>	<b>48</b>	<b>-</b>	<b>186</b>	<b>1,151</b>

Exhibit 8: Industry analysis of credit exposure for JPMBI

## Residual maturity analysis of credit exposures

These tables show exposure at default pre-CRM (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.

EAD pre-CRM credit exposure class	JPMBI						Total
	On demand and qualifying revolving	Under one year	Over one year but not more than three years	Over three years but not more than five years	Over Five years but not more than ten years	Over ten years or undated	
As at 31 Dec 18	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Central governments or central banks	229	-	-	-	-	-	229
Institutions	688	-	-	-	-	-	688
Corporates	48	-	-	-	-	-	48
Other items	-	-	-	-	186	-	186
<b>Total Standardised Approach Credit Risk Exposure</b>	<b>965</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>186</b>	<b>-</b>	<b>1,151</b>

Exhibit 9: Residual maturity analysis of credit exposures for JPMBI

## Past due and impaired loans

JPMBI did not hold any past due and impaired loans for the period ended 31st December 2018.

## 7. Intra Group Financial Support Disclosure

JPMBI has not entered into any group financial support arrangements pursuant to Article 19 of Directive 2014/59/EU”.

## 8. Unencumbered assets (Art. 443)

As at December 31, 2018 the encumbrance of assets was calculated according to Article 443 CRR and Regulation (EU) 2015/79.

JPMBI does not have any encumbered assets. The carrying amount of unencumbered assets was USD 1.2 billion as at 31 December 2018.

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

### ECAIs and exposure classes

Under the Standardised approach, risk weighted assets (RWAs) are calculated using credit ratings assigned by External Credit Assessment Institutions (ECAIs).

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

- Moody's
- Standard & Poor's (S&P)
- 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
- Short-term claims on institutions and corporates

All other exposure classes are assigned risk weightings described in the Standard approach for RWA calculation.

### CQS and Risk Weight Mapping for Rated and Unrated Counterparties

J. P. Morgan uses the credit rating to CQS (credit quality step) mapping tables (Table 1 and 2) provided by EBA<sup>4</sup> to determine appropriate CQS for counterparties and securities. Exposures cannot be assigned a risk weight lower than sovereign risk weight. Long-term and short-term risk weight percentages are then determined using exposure class and maturity in compliance with CRR<sup>5</sup>.

Credit Quality Step	Fitch's assessments	Moody's assessments	S&P's assessments	Corporate and CIUs	Institution			Sovereign	Securitisation (Standardised Approach)
					Sovereign method	Credit Assessment method			
						Maturity	Maturity 3 months or less		
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%	20%	20%	20%	0%	20%
2	A+ to A-	A1 to A3	A+ to A-	50%	50%	50%	20%	20%	50%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	100%	100%	50%	20%	50%	100%
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	100%	100%	100%	50%	100%	350%
5	B+ to B-	B1 to B-	B+ to B-	150%	100%	100%	50%	100%	1250%
6	CCC+ and below	Caa1 and below	CCC+ and below	150%	150%	150%	150%	150%	1250%

Exhibit 10: Standardised approach: mapping of ECAIs' credit assessments to credit quality steps. Long term mapping

<sup>4</sup> [http://www.eba.europa.eu/documents/10180/16166/4+Ausust+2006\\_Mapping.pdf](http://www.eba.europa.eu/documents/10180/16166/4+Ausust+2006_Mapping.pdf)

<sup>5</sup> PART THREE, Title III, Chapter II, Section 2, CRR: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0575&from=EN>

Credit Quality Step	Fitch	Moody's	S&P	Risk weight	Securitisation (Standardised approach)
1	F1+, F1	P-1	A-1+, A-1	20%	20%
2	F2	P-2	A-2	50%	50%
3	F3	P-3	A-3	100%	100%
4	Below F3	NP	All short-term ratings below A-3	150%	1250%
5				150%	1250%
6				150%	1250%

Exhibit 11: Standardised approach: mapping of ECAIs' credit assessments to credit quality steps. Short term mapping

If institution is unrated, central government CQS rating is used (or 20% risk weight if maturity is less than 3 months). If corporate is unrated, higher of 100% and central government risk weight is assigned. For an exposure to a regional government or local authority, the risk weight is determined based on the CQS setting applicable to the central government. Unrated central governments and banks are assigned 100% risk weight.

In accordance with Article 139 of the CRR, to determine the risk weight assigned to the issue, the issue credit assessment is used. When no directly applicable credit assessment exists for the issue, the general credit assessment for the issuer is used, provided the criteria stated in CRR6 are satisfied. Otherwise the issue exposure is treated as unrated.

JP Morgan applies risk weights as prescribed in the CRR7.

## Exposures at default pre-, and post-, credit risk mitigation by credit quality step

The following tables show exposures at default pre-CRM (credit risk mitigation), and then at default post-CRM, broken down by credit exposure class and credit quality step. The tables include exposures subject to the Standardised approach.

This table shows exposure at default pre-CRM (credit risk mitigation), broken down by credit exposure class and credit quality step. This table includes exposures subject to the Standardised approach.

EAD pre-CRM credit exposure class	JPMBI							Total
	Credit Quality Step 1	Credit Quality Step 2	Credit Quality Step 3	Credit Quality Step 4	Credit Quality Step 5	Credit Quality Step 6	Unrated (7)	
As at 31 Dec 18	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Central governments or central banks	-	-	-	-	-	-	229	229
Institutions	686	-	2	-	-	-	-	688
Corporates	-	-	48	-	-	-	-	48
Other items	-	-	186	-	-	-	-	186
<b>Total Standardised Approach Credit Risk Exposure/Capital</b>	<b>686</b>	<b>-</b>	<b>236</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>229</b>	<b>1,151</b>

Exhibit 12: Credit quality step analysis of Pre CRM exposure and capital deductions under the Standardised Approach for JPMBI

<sup>6</sup> PART THREE, Title III, Chapter II, Section 2, Article 139 (2), CRR: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0575&from=EN>

<sup>7</sup> PART THREE, Title III, Chapter II, Section 2, CRR: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0575&from=EN>

This table shows exposure at default post-CRM (credit risk mitigation), broken down by credit exposure class and credit quality step. This table includes exposures subject to the Standardised approach.

EAD post-CRM credit exposure class	JPMBI							Total
	Credit Quality Step 1	Credit Quality Step 2	Credit Quality Step 3	Credit Quality Step 4	Credit Quality Step 5	Credit Quality Step 6	Unrated (7)	
As at 31 Dec 18	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Central governments or central banks	-	-	-	-	-	-	229	229
Institutions	689	-	2	-	-	-	-	691
Corporates	-	-	45	-	-	-	-	45
Other items	-	-	186	-	-	-	-	186
<b>Total Standardised Approach Credit Risk Exposure/ Capital</b>	<b>689</b>	<b>-</b>	<b>233</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>229</b>	<b>1,151</b>

Exhibit 13: Credit quality step analysis of Post -CRM exposure and capital deductions under the Standardised Approach for JPMBI

## 10. Operational Risk (Art. 446)

### Pillar 1

The Pillar 1 assessment of Operational risk is calculated in accordance with the Basel III Basic Indicator Approach (BIA). For information related to operational risk measurement refer to Section 4 Capital Requirements.

The following tables detail the operational risk RWAs reported in 2018 (Table 14) split by the method used to calculate operational risk capital requirement for each entity.

Calculation Method	JPMBI \$m
Basic Indicator Approach	274
<b>TOTAL RWA</b>	<b>274</b>

Exhibit 14: Risk weighted assets for operational risk in 2018



## 11. Exposure to interest rate risk on positions not included in the trading book (Art. 448)

JPMBI's IRR risk profile is driven by the non-maturity client deposits that are managed by T/CIO. JPMBI receives deposits from Custody clients, i.e. investment funds. The deposits are DDA (Demand Deposit Accounts). Deposit Liabilities total, as at December 31 2018, US\$0.6Bn. JPMBI has price setting ability for the deposits.

### Sensitivity of the Banking Book to interest rate changes

The impact of 200bps parallel rates increase and decrease on the economic value (EVS) of JPMBI has been estimated as at December 31, 2018; the results are in the tables below:

Scenario	EVS (US\$m)
+200bps	16
-200bps	-16

Exhibit 15: Sensitivity of the Banking Book to interest rate changes

## 12. Non Trading Book Equity Investments

On a standalone basis the non-trading book equity positions within JPMBI is related to the holding of an investment in its subsidiary. As these disclosures are made on a consolidated basis there are no non trading equity positions on the balance sheet.

## 13. Remuneration policy (Art. 450)

### Background

This section sets out the remuneration disclosures required under Article 450 of the Capital Requirements Regulation (the “**CRR**”)<sup>8</sup> in relation to JPMBI, and in respect of the remuneration period (“Performance Year”) ending 31 December 2018.

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, JPMBI applies J.P. Morgan’s global compensation philosophy and pay practices, which are reflected in the Remuneration Policy applicable to JPMBI. The qualitative remuneration disclosures required under Paragraphs 1(a) – (f) of Article 450 CRR for all employees of the Firm’s subsidiaries and branches located in EMEA, including staff of JPMBI, is available in the most recent EMEA Remuneration Policy Disclosure at:

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

#### *Additional qualitative disclosures specific to JPMBI*

JPMBI complied with the applicable remuneration requirements of the Capital Requirements Directive (“**CRD IV**”)<sup>9</sup>, as implemented in Ireland by the European Union (Capital Requirements) Regulations 2014 (the “**Remuneration Rules**”). The following additional disclosures should therefore be read in conjunction with the EMEA Remuneration Policy Disclosure:

- The JPMBI Board is responsible for overseeing the development and implementation of the remuneration policies and practices applicable to JPMBI, in conjunction with the Firm’s Compensation and Management Development Committee (“**CMDC**”).
- The JPMBI Board reviews the Company’s Remuneration Policy on an annual basis, and oversees its implementation. The Board last reviewed and adopted the Remuneration Policy that applied for the 2018 Performance Year in February 2019 – which included changes to apply the rules on retained shares, deferral and performance adjustment – and was satisfied with its implementation.
- JPMBI undertakes an annual review of its staff against the qualitative and quantitative criteria set out in the European Banking Authority’s relevant Regulatory Technical Standard to identify those roles which could potentially have a material impact on the risk profile of JPMBI (“**CRD IV Identified Staff**”). A description of the types of employees considered as material risk takers is set out in the EMEA Remuneration Policy Disclosure. This CRD IV Identified Staff group is reviewed on an ongoing basis and Identified Staff are notified of their status and the impact on their remuneration structure.

JPMBI’s Risk and Compliance functions are involved in the review of the Remuneration Policy, including reviewing the Company’s approach to the designation of its CRD IV Identified Staff. The Internal Audit function performs a central and independent review of the implementation of the Remuneration Policy on an annual basis, and relevant findings are reported to the JPMBI Board.

<sup>8</sup> Regulation (EU) No. 575 / 2013

<sup>9</sup> Directive 2013/36/EU

## Quantitative disclosures

The following aggregate quantitative disclosures relate to JPMBI's 17 CRD IV Identified Staff, being those staff whose professional activities have a material impact on the Company's risk profile, as described above.

In preparation of these disclosures, JPMBI has taken into account its size, internal organisation and the nature, scope and complexity of its activities.

In EUR thousands	Total Compensation 2018
Management Body <sup>10]</sup> and Senior Management	2,353
Other CRD IV Identified Staff	484
<b>Total</b>	<b>2,837</b>

Exhibit 16: Total Compensation by Business Area

<sup>10</sup> Includes both Executive and Non-Executive members of the Board

## 14. 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.

Periodically, the Firm completes the Internal Capital Adequacy Assessment Process (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 and capital. 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 Firm. 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 Boards of Directors.

CRR Leverage Ratio		JPMBI \$m
Table LRCom: Leverage ratio common disclosure		leverage ratio exposures
<b>On-balance sheet exposures (excl. derivatives and SFTs)</b>		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	1,151
2	(Asset amounts deducted in determining Tier 1 capital)	(2)
3	<b>Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)</b>	-
<b>Derivative exposures</b>		<b>1,149</b>
<b>Capital and Total Exposure</b>		
20	Tier 1 capital	436
21	<b>Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)</b>	-
<b>Leverage ratio</b>		
22	Leverage ratio	37.94%
<b>Choice on transitional arrangements and amount of derecognised fiduciary items</b>		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased-in
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	-

Exhibit 17: Leverage ratio common disclosure

## 15. Use of Credit Risk Mitigation techniques (Art. 453)

As part of its management of credit exposures, the firm actively engages in credit risk mitigation techniques to reduce the amount of credit risk it is taking, to spread the concentration of risk across its portfolio and ultimately to ensure capital efficiency in compliance with the applicable regulations. This is carried out for JPMBI through accepting pledges over custody assets and receiving a guarantee from the parent company JPMCB N.A., London Branch. In specific, JPMBI custody clients - apart from Trustee clients - have signed a standard JPMBI Global Custody Agreement ('GCA'). This Agreement contains – in addition to rights of set off over cash balances (this excludes Pension Fund, Insurance and other clients) – a lien with right of sale over the clients' assets which JPMBI would exercise to repay any outstanding amounts in the event of client overdraft default. In addition, for clients where JPMBI has no legal rights to access their assets in the event of default, for the purposes of Large Exposure mitigation rules, JPMBI can use a standby letter of credit to the value of \$300m, issued by JPMCB N.A., London Branch.

## 16. Liquidity Coverage Ratio (LCR)

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

JPMBI's liquidity and funding management is integrated into JPMorgan Chase & Co.'s (the Firm's) liquidity management framework.

### Liquidity profile

JPMBI is a deposit taking entity and its primary business is driven by Securities Services – Custody and Fund services clients in the form of sight deposits. Based on their operational classifications, JPMBI client deposits are considered highly stable funding within a liquidity stress. In addition, JPMBI also holds a capital base. The combination of deposits and capital form a large natural excess liquidity position. Excess cash is predominantly placed with the group on an unsecured short-term basis and at the Central Bank.

### Liquidity management

Corporate 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 and meet contractual and contingent financial obligations through normal economic cycles as well as during stress events, and
- Manage an optimal funding mix and availability of liquidity sources.

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

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

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

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

### 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. Liquidity Risk Oversight's responsibilities include:

- Establishing and monitoring limits, indicators and thresholds, including liquidity risk appetite tolerances;
- Monitoring internal firmwide and material legal entity liquidity stress tests, and monitoring and reporting regulatory defined liquidity stress tests;
- Defining or escalating for review liquidity stress assumptions;
- Monitoring liquidity positions, balance sheet variances and funding activities; and,
- Conducting ad hoc analysis to identify potential emerging liquidity risks; and,

Performing independent review of liquidity risk management processes.

Corporate Treasury and the independent LRO function have established and implemented strategies, policies and procedures to effectively manage liquidity risk, which include the Liquidity Risk Oversight Policy, the Contingency Funding Plan and the Liquidity Risk Limits and Indicators Policy. These policies and frameworks apply on a firmwide basis, and are supplemented by legal entity approaches where appropriate. Policies and procedures are in place for the review of all liquidity stress testing practices, methodologies, and assumptions through the Firmwide Liquidity Stress Governance Forum; this includes application of legal entity specific assumptions where required.

### Risk Governance and Measurement

The specific committee responsible for JPMBI liquidity governance is the EU ALCO.

### Internal stress testing

Liquidity stress tests are intended to ensure that the Firm has sufficient liquidity under a variety of adverse scenarios, including scenarios analysed as part of the Firm's resolution and recovery planning. Stress scenarios are produced for the Firm 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 financial obligations are met and take into consideration:

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

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

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

### Contingency Funding Plan

The CFP and the addendum is a compilation of procedures and action plans for managing liquidity through stress events. The CFP incorporates the limits and indicators set by the Liquidity Risk Oversight group. These limits and indicators are reviewed regularly to identify the emergence of risks or vulnerabilities in the Firm's liquidity position. The CFP identifies the alternative contingent liquidity resources available to the Firm and its legal entities in a period of stress.

The Firm's contingency funding plan ("CFP") is maintained by JPM Group Corporate Treasury and reviewed by the Firmwide ALCO. In addition, the DRPC reviews and approves the CFP annually, and any material revisions to the plan. The JPMBI's addendum to the CFP is approved by the JPMBI Board.

### Internal Liquidity Adequacy Assessment Process

Annually, JPMBI completes the Internal Liquidity Adequacy Assessment Process ("ILAAP"), which provides management with an assessment of the adequacy of the 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 the entity measures its liquidity risk, the methodologies and assumptions used and JPMBI's Board determines if the size of the Liquid Asset Buffer is appropriate. If changes in the 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 JPMBI Board.

### Liquidity risk reporting and measurement system

JPMBI uses the firm's strategic liquidity risk technology platform (Liquidity Risk Infrastructure - LRI) to report and measure its liquidity risk position. LRI is the single global source for data consumption and reporting capabilities of the firm's liquidity reporting (both internal and external) and analytics as well as line of business, legal entity, currency and specific jurisdictional requirements and is also used to execute stress testing and associated limits and indicators.

### Liquidity Coverage ratio (LCR)

From 1 October 2015 JPMBI, was expected to comply with the liquidity coverage ratio ("LCR") guidance set out in the Delegated Act (Commission delegated regulation (EU) 2015/61). The LCR is intended to measure the amount of "high quality liquid assets ("HQLA") held by the Company in relation to estimated net liquidity outflows within a 30 calendar day stress period. From 1st January 2018 the LCR is required to be minimum of 100%.

The LCR disclosure in the table below has been assessed in accordance with the European Banking Authority (EBA) guidelines on LCR disclosure (EBA/GL/2017/01) applying the necessary considerations set out in the EBA guidelines on materiality, proprietary and confidentiality and on disclosure frequency (EBA/GL/2014/14) and consistent with the EBA guidelines on disclosure requirements (EBA/GL/2016/11):

Scope of consolidation:	JPMBI			
Currency and units:	(€'m)	(€'m)	(€'m)	(€'m)
Quarter ending on:	31-Dec-18	30-Sep-18	30-Jun-18	31-Mar-18
Number of data points used in the calculation of averages:	12	12	12	12
	Total weighted adjusted value (average)			
LIQUIDITY BUFFER	168	147	124	108
TOTAL NET CASH OUTFLOWS	63	60	55	52
LIQUIDITY COVERAGE RATIO (%)	286%	252%	234%	214%

Exhibit 18: LCR<sup>11</sup> disclosure template for JPMBI

The weighted adjusted value of the liquidity buffer is the value of the total high quality liquid assets after the application of both haircuts and any applicable cap. The weighted adjusted value of net cash outflows is calculated after the inflows and outflows rates are applied and after any applicable cap on inflows.

<sup>11</sup> In line with the EBA guidelines the average ratio disclosed in the table is calculated as an average over the 12 data points used for each item, and therefore the quoted ratio is not equal to the average 'Liquidity buffer' divided by average 'Total net cash outflows'.

## 17. Disclosures not applicable to JPMBI for the period ending 31 December 2018

The following Articles of CRR are not applicable as at December 31, 2017:

- Exposure to counterparty credit risk (Art. 439)
- Capital buffers (Art. 440)
- Indicators of global systemic importance (Art. 441)
- Unencumbered assets (Art. 443)
- Exposure to Securitisation Positions (Art. 449)
- Use of the IRB Approach to credit risk (Art. 452)
- Use of the Advanced Measurement Approaches to operational risk (Art. 454)
- Use of Internal Market Risk Models (Art. 455)



## 18. Glossary of Acronyms

ALCO	Assets and Liabilities Committee
AT1	Additional Tier 1
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CFP	Contingency Funding Plan
CFO	Chief Financial Officer
CRD IV	Capital Requirements Directive IV
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
DRPC	Boards or Directors' Risk Policy Committees
EaR	Earnings at Risk
EBA	European Banking Authority
EBA GL1	EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014
ECAIs	External Credit Assessment Institutions
EMC	EMEA Management Committee
EMEA	Europe Middle East and Africa
ERC	EMEA Risk Committee
EU	European Union
EVS	Economic Value Sensitivities
FCC	Firmwide Credit Committee
Firm	J.P. Morgan Chase & Co.
FRC	Firmwide Risk Committee
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IRM	Independent Risk Management
IRRB	Interest Rate Risk in the Banking Book
JPMBI	J.P. Morgan Bank Ireland plc
JPMCB N.A	JPMCB N.A, London Branch
LCR	Liquidity Coverage Ratio
LDA	Loss Distribution Approach
LIOC	Local Infrastructure Operating Committee
LOB	Line of Business
LORCC	Location Operational Risk and Control Committee
NBIA	New Business Initiatives Approvals
ORMF	Operational Risk Management Framework
ORG	Operational Risk Governance
RCSA	Risk & Control Self-Assessment
RWA	Risk Weighted Assets
SMT	Senior Management Team