

Pillar 3 Annual Disclosure Report as at 31st December 2019

J.P. Morgan Bank Luxembourg S.A.

Table of Contents

1. Introduction.....	4
2. Risk Management and Objectives (Article 435)	5
3. Difference between accounting and regulatory scope (Article 436)	20
4. Own Funds (Article 437)	22
5. Capital Requirements (Article 438)	25
6. Exposure to Counterparty Credit Risk (Article 439).....	26
7. Countercyclical Capital Buffers (Article 440)	29
8. Credit Risk Adjustments (Article 442).....	30
9. Encumbered Assets (Article 443).....	37
10. Use of External Credit Assessment Institutions (Article 444).....	38
11. Exposure to Market Risk (Article 445)	41
12. Operational Risk (Article 446).....	42
13. Exposure to Interest Rate Risk on Positions Not Included In The Trading Book (Article 448).....	43
14. Remuneration (Article 450)	44
15. Leverage (Article 451)	47
16. Use of Credit Risk Mitigation Techniques (Article 453).....	48
17. Liquidity Risk (Article 435 (1) (f))	50
18. Bank Recovery and Resolution Directive	54
19. Disclosures Not Applicable as of 31 st December 2019	54
20. Glossary of Acronyms.....	55

List of Tables

Table 1: EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories.....	20
Table 2: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements.....	21
Table 3: EU LIA - Explanations of differences between accounting and regulatory exposure amounts	21
Table 4: CRD IV Regulatory Capital	22
Table 5: Reconciliation of Regulatory Own Funds to Balance Sheet	23
Table 6: Main Features of Regulatory Capital Instruments	24
Table 7: EU OV1 - Overview of RWAs	25
Table 8: EU OV1 additional - Overview of RWAs by exposure class	26
Table 9: EU CCR1 – Analysis of CRR exposure by approach.....	26
Table 10: EU CCR5-A – Impact of netting and collateral held on exposure values	27
Table 11: EU CCR5-B – Composition of collateral for exposures to CCR	27
Table 12: EU CCR2 – CVA capital charge	28
Table 13: EU CCR6 – Credit derivatives exposures	28
Table 14: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer	29
Table 15: Amount of Institution-Specific Countercyclical Capital Buffer	29
Table 16: EU CRB-B - Total and average net amount of exposures	30
Table 17: EU CRB-C - Geographical breakdown of exposures.....	31
Table 18: EU CRB-D - Concentration of exposures by industry or counterparty types.....	32
Table 19: EU CRB-E – Maturity of exposures	32
Table 20: EU CR1-A – Credit quality of exposures by exposure class and instrument.....	33
Table 21: EU CR1-B – Credit quality of exposures by industry or counterparty types	34
Table 22: EU CR1-C - Credit quality of exposures by geography.....	34
Table 23: EU CR1-E – Non-performing and forborne exposures.....	35
Table 24: Encumbered and unencumbered assets	37
Table 25: Collateral received	37
Table 26: Sources of encumbrance.....	38
Table 27: EU CR4 - Standardised approach – Credit risk exposure and CRM effects.....	39
Table 28: EU CR5 – Standardised approach (Pre-CRM)	39
Table 29: EU CR5 – Standardised approach (post-CRM).....	40
Table 30: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (Pre-CRM)	40
Table 31: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (Post-CRM)	40
Table 32: EU MR1 – Market risk under the standardised approach	41
Table 33: Risk Weighted Assets for Operational Risk.....	42
Table 34: Interest Rate Risk in the Banking Book.....	43
Table 35: All staff	45
Table 36: Breakdown by Business Area	45
Table 37: Breakdown of Total Compensation	46
Table 38: Analysis of Deferred Compensation	46
Table 39: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures	47
Table 40: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	47
Table 41: Leverage Ratio Common Disclosure	48
Table 42: EU CR3 - CRM techniques.....	49
Table 43: EU LIQ1 – Quantitative information of LCR for JPMBL.....	52

1. Introduction

Background

The need to assess whether an institution should disclose some information more frequently than annually, under Part Eight of the Capital Requirements Regulation (“CRR”)¹, originates in Article 433 and the requirements are further articulated in the European Banking Authority (“EBA”) Guidelines² (“GL1”), which were adopted by the Commission de Surveillance du Secteur Financier (“CSSF”)³ from 15th November 2017.

In addition, the requirements of EBA Final Report on Guidelines for Disclosure under Part Eight of the CRR⁴ (“EBA GL2”) have been incorporated into J.P. Morgan Chase & Co. (“JPMC”) disclosure process from 1st January 2018, and are followed for this document.

Production of all Pillar 3 disclosure for J.P. Morgan entities in the EMEA region is governed by the JPMC EMEA Pillar 3 Policy Addendum which outlines scope, review and approval governance process requirements, including annual review on frequency and omissions policies.

All J.P. Morgan Chase entities regulated under the Capital Requirements Directive IV (“CRD IV”)⁵ have applied the Guidelines by:

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

Scope (Article 431)

All J.P. Morgan European regulated entities have been considered in the assessment, under the JPMC EMEA Pillar 3 Policy, for inclusion for disclosure, and then for more frequent than annual disclosure.

J.P. Morgan Bank Luxembourg S.A. (“JPMBL”) is defined as an Other Systemically Important Institution (“O-SII”) and is therefore included for disclosure under the requirements of EBA GL².

The internal assessment process to determine which J.P. Morgan entities should disclose more frequently than annually concluded that JPMBL is meeting the qualitative and quantitative thresholds to necessitate more frequent disclosure.

The data disclosed in this document represents disclosure for the financial year of 2019. All data is recorded as at 31st December 2019, consistent with Common Reporting (“CoRep”) reporting and produced on an audited basis.

All information in this report is disclosed in millions of United States Dollars (US\$m), unless otherwise specified.

JPMBL is presenting its disclosures on an individual basis (including foreign branches) as there are no subsidiaries to be consolidated.

As at 31st December 2019, JPMBL has 11 branches respectively located in:

- Amsterdam (J.P. Morgan Bank Luxembourg S.A., Amsterdam Branch),
- Brussels (J.P. Morgan Bank Luxembourg S.A., Brussels Branch),
- Copenhagen (J.P. Morgan Bank Luxembourg S.A., Copenhagen Branch),
- Dublin (J.P. Morgan Bank Luxembourg S.A., Dublin Branch),
- Frankfurt (J.P. Morgan Bank Luxembourg S.A., Frankfurt Branch),
- Helsinki (J.P. Morgan Bank Luxembourg S.A., Helsinki Branch),
- London (J.P. Morgan Bank Luxembourg S.A., London Branch),
- Madrid (J.P. Morgan Bank Luxembourg S.A., Madrid Branch)
- Milan (J.P. Morgan Bank Luxembourg S.A., Milan Branch)
- Oslo (J.P. Morgan Bank Luxembourg S.A., Oslo Branch),
- Stockholm (J.P. Morgan Bank Luxembourg S.A., Stockholm Branch),

The disclosure report is made available on the website of JPMorgan Chase & Co. (“JPMC”) at:

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

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

² EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014

³ CSSF expectation of firms’ compliance with EBA/GL/2016/11: http://www.cssf.lu/fileadmin/files/Lois_reglements/Circulaires/Hors_blanchiment_terrorisme/cssf17_673.pdf

⁴ EBA Final Report on Guidelines for Disclosure under Part Eight of Regulation (EU) No 575/2013 Version 2 published 16th December 2016

⁵ Capital Requirements Directive

Non-material, proprietary of confidential information (Article 432)

No items have been omitted due to confidentiality, materiality or for proprietary reasons under Titles III and IV of the Guidelines. Any line items that are not applicable have been hidden for presentation purposes.

Frequency of disclosure (Article 433)

The Pillar 3 disclosure report is published on a quarterly basis, the month after the release of the financial statements which is FinRep on a quarterly basis and the Financial Statements on an annual basis.

Therefore the disclosure report is published for 2019 and the upcoming year as per the following:

Annual Disclosure 2019: June 2020

Quarterly Disclosure Q1: June 2020

Semi-Annual H1: September 2020

Quarterly Disclosure Q3: December 2020

Means of Disclosure (Article 434)

JPMBL leverages dedicated local and firmwide teams responsible to interpret the regulation, stay up to date on the latest development as a mean of verification to comply with the disclosure requirements.

In addition, all disclosure are made available in one single location:

<https://jpmorganchaseco.gcs-web.com/financial-information/basel-pillar-and-lcr-disclosures/pillar-luxembourg>.

Firmwide Disclosure

The ultimate parent of the entity in scope of this disclosure is JPMorgan Chase & Co., which is incorporated in the United States of America. Firmwide disclosure is made under the Basel III requirement available at the below link. In addition, the U.S. Securities and Exchange Commission filings made at the firmwide level, 10K and 10Q, provide further information at the following link: <http://investor.shareholder.com/jpmorganchase/basel.cfm>.

2. Risk Management and Objectives (Article 435)

Firmwide Risk Management Framework

Risk is an inherent part of JPMorgan Chase's ("the Firm") 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.

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 LOB and corporate functions; and
- Firmwide structures for risk governance.

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

Risk Organization

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

The Firm relies upon each of its LOBs and Corporate areas giving rise to risk to operate within the parameters identified by the IRM function, and within its own management-identified risk and control standards. Each LOB and Treasury and CIO, inclusive of their aligned Operations, Technology and Control Management are considered the "first line of defense" and own the identification of risks, as well as the design and execution of controls, inclusive of IRM-specified controls, to manage those risks. The first line of defense is responsible for adherence.

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

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

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

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.

Firmwide Risk Governance Structure

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

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

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

In addition to the governance bodies described above, the firm has other forums in the Finance division and at the LOB, regional and local office levels, where risk-related topics are discussed and escalated, as necessary. The membership of these committees is comprised 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.

Regional LE Risk 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 Board Risk Committees. To complement the global line of business structure, there is a regional governance construct as below:

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

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

JPMBL Risk Management Framework

JPMBL has a robust Risk Management Framework which supports the business activities undertaken by the Bank. Across JPMorgan Chase, firmwide policies support activity within regions and at legal entities. JPMBL leverages this framework but ensures JPMBL legal entity responsibilities and accountability are adequately and pro-actively assumed.

The JPMBL Board of Directors and Authorised Management ensures that proper governance and control exists for all activities conducted, booked and supported in JPMBL in accordance with the firmwide and local governance practices and regulatory requirements.

JPMBL adopts a three lines of defence approach to risk management, consistent with the principles established within CSSF Circular 12/552. Each LOB is responsible for managing the risk inherent in its business with appropriate oversight from the Independent Risk Management function.

Exhibit 1: JPMBL Three Line of Defence

First Line of Defence	Second Line of Defence	Third Line of Defence
Business Executives	Risk Management	Internal Audit
Client Servicing	Compliance	
Business Operations	Financial Control	
Product	IT Governance and Controls	
Business Control Office		

- The First Line of Defence is represented by the business units that take or acquire risks and are responsible for monitoring, assessing and improving the operational control environment on a continuous basis.
- The Second Line of Defence is represented by the four distinct risk and controls functions – the Risk Management, Compliance, Financial Control and Information Technology Governance and Controls – that act as advisories to the business on a day to day basis but have the power and independence to report and escalate risks or business issues directly to JPMBL Authorized Management and ultimately the Directors of the Board.
- The Third Line of Defence is represented by Internal Audit who provides JPMBL Authorized Management and the Directors of the Board with independent assessment on the effectiveness of the internal controls established.

The Board of Directors completes its supervisory role by reviewing the summary reports prepared by the internal control functions at least once a year. The Bank’s policies set standards of control and conduct for which responsibility is given to Management for ensuring compliance.

The JPMBL Authorized Management defines the control environment in the form of a detailed risk and control framework of the Bank and its activities. The controls and risks identified are subject to validation and review, both on a continuous basis and on a periodic review cycle by Management, the Internal Audit & Compliance departments and other members of the internal and external controls community.

The JPMBL Authorized Management monitors the effectiveness of the control environment through periodic self-assessments, the review of key performance and risk indicators and through detailed analysis of management information. In accordance with its regulatory duties, the JPMBL Authorized Management also sponsors ad-hoc reviews that are generally performed by members of the internal and external control’s community.

JPMBL Risk Governance

The JPMBL Board of Directors (“BoD”) is accountable for overall oversight of and risk management within the entity, and has established a JPMBL Board Risk Committee (“BRC”) to support its management and oversight of JPMBL’s risks.

The JPMBL BRC reports to the JPMBL BoD and convenes on a quarterly basis at least. Additional meetings are arranged if deemed necessary by the Committee. In 2019 the BRC met 5 times. The BRC is currently comprised of one Independent Non-Executive Director (who is the Chairman) and two Non-Executive Directors.

The main responsibility of the BRC is to assist the JPMBL BoD in its mission to assess the adequacy of the risks incurred versus JPMBL’s Risk Appetite. The BRC in carrying out its responsibilities deliberates on a regular basis on the adequacy of the risks incurred with the current and future Company’s entity’s ability to manage these risks and the internal and regulatory own funds and liquidity reserves, taking into account the results of the stress tests related to the Company’s Internal Capital Adequacy Assessment Process (“ICAAP”) and Internal Liquidity Adequacy Assessment Process (“ILAAP”). The BRC is actively involved in the identification and review of JPMBL’s risk profile, scenario analysis, stress testing calculations and capital allocation and determination of appropriate liquidity measures.

The JPMBL BRC also reviews the risk assessment in case of new products and services and on a regular basis the Risk Control Self-Assessment results.

The JPMBL Management Committee (“MC”) is established as the formal governing body of JPMBL where the Authorized Managers collectively carry out the responsibilities delegated to them by the Board. The JPMBL MC delegates the more detailed oversight of all risks to the JPMBL Risk Oversight Committee (“ROC”). Furthermore, the JPMBL MC has delegated the oversight of the review of operational risk and control items across all lines of business and functions to the Location Operational Risk and Control Committee.

The JPMBL Chief Risk Officer (“CRO”) is the head of the JPMBL IRM function and a member of the JPMBL Authorized Management. The JPMBL CRO along with the CEO co-chair the JPMBL ROC, which provides oversight of the risks inherent in JPMBL’s businesses. The JPMBL CRO is a permanent attendee of JPMBL Board Risk Committee as well a core member of the EMEA Risk Committee.

Identification and measurement of key risks

JPMBL completes the Internal Capital Adequacy Assessment Process (“ICAAP”) periodically, which forms part of management and decision-making processes such as JPMBL’s risk appetite, strategy, capital and risk management frameworks, and stress testing. The ICAAP is used to assess the key risks to which JPMBL is exposed; how these risks are measured, managed, monitored and mitigated; and how much capital JPMBL should hold to reflect these risks now, in the future and under stressed conditions. The risks identified as material include Credit Risk, Operational Risk, Interest Rate Risk in the Banking Book (“IRRBB”), and Strategic Risk (incl. Business Risk and Liquidity Risk).

Risk Appetite

JPMBL’s Risk Appetite framework is documented in the JPMBL Risk Appetite policy and a supporting Risk Appetite Parameters and Guidelines document, approved at least annually by the JPMBL Board of Directors. JPMBL’s Risk Appetite is expressed in quantitative and qualitative parameters, as appropriate, leveraging the Firm’s framework.

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.

Credit Risk

Credit risk is the risk associated with the default or change in credit profile of a customer, client or counterparty. JPMBL extends credit, where necessary, to support the overall Business Strategy. JPMBL is primarily exposed to credit risk through its underwriting and lending activities in Wealth Management as well as through its operating services activities (i.e. overnight and intraday credit extension to Securities Services, Wholesale Payments and Commercial Banking Clients), derivatives to Wealth Management and Securities Services clients and Nostro facilities

to custody clients and agent bank network, its securities financing activities as agent (i.e. Agency Securities Lending business) and cash placed with banks. JPMBL also places vast amount of its liquidity with its parent via placements and reverse repos.

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 and geographic concentration limits, as appropriate, and establishing underwriting guidelines
- Assigning and managing credit authorities in connection with the approval of all credit exposure;
- Ensuring compliance with banking regulatory requirements and corresponding implementation within credit risk management;
- Managing criticized exposures and delinquent loans;
- 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 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.

For JPMBL, the Credit Risk Management Framework is governed by the JPMBL Credit Risk policies and procedures, approved by the JPMBL Board. The JPMBL Framework is based on the global wholesale credit risk policies and procedures, supplemented by LOB specific policies, and reflects local governance.

Risk Identification and Measurement

The Credit Risk Management function monitors, measures and limits credit risk across the Firm's businesses. To measure credit risk, the Firm employs methodologies for estimating the likelihood of obligor or counterparty default and the loss severity given a default event and the exposure at default. Methodologies for measuring credit risk vary depending on several factors, including type of asset (e.g., consumer versus wholesale), risk measurement parameters (e.g., delinquency status and borrower's credit score versus wholesale risk-rating) and risk management and collection processes (e.g., retail collection centre versus centrally managed workout groups). Credit risk measurement is based on the probability of default of an obligor or counterparty, the loss severity given a default event and the exposure at default.

Based on these factors and related market-based inputs, the Firm estimates credit losses for its exposures. Probable credit losses inherent in the wholesale loan portfolios are reflected in the provision for loan losses and probable credit losses inherent in lending-related commitments are reflected in the provision for lending related commitments. These losses are estimated using statistical analyses and other factors. In addition, potential and unexpected credit losses are reflected in the allocation of credit risk capital and represent the potential volatility of actual losses relative to the established allowances for loan losses and lending related commitments. The analyses for these losses include stress testing that considers alternative economic scenarios and are described in the stress testing section below.

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

calculations and assumptions are based on both internal and external historical experience and management judgment and are reviewed regularly.

To capture the potential future variability of credit exposure, the Firm calculates, on a client-by-client basis, three measures of potential derivatives-related credit loss: Peak, Derivative Risk Equivalent (“DRE”), and Average exposure (“AVG”). These measures all incorporate netting and collateral benefits, where applicable. Peak represents a conservative measure of potential exposure to a counterparty calculated in a manner that is broadly equivalent to a 97.5% confidence level over the life of the transaction. Peak is the primary measure used by the Firm for setting of credit limits for derivative contracts, senior management reporting and derivatives exposure management. DRE exposure is a measure that expresses the risk of derivative exposure on a basis intended to be equivalent to the risk of loan exposures. DRE is a less extreme measure of potential credit loss than Peak and is used as an input for aggregating derivative credit risk exposures with loans and other credit risk. Where possible, the Firm seeks to mitigate its credit risk exposures arising from derivative transactions through the use of legally enforceable master netting arrangements and collateral agreements.

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. The stress test results may indicate credit migration, changes in delinquency trends and potential losses in the credit portfolio. 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 limits: 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. Such approval, together with details of the credit limits are recorded in the Credit systems. Credit Officers approve intraday, advised and unadvised overdraft lines for clients based on analysis undertaken by Credit Risk Management.

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

In addition to the Credit Officer approval, a Legal Entity approval, known as Booking Office Country Approval (“BOCA”) has been established to trigger formal notification and approval by a designated JPMBL BOCA approver for changes to non-rules based facilities. The JPMBL CRO (and delegates) are designated as BOCA approvers for JPMBL for Legal Entity approval.

Intraday exposure control: Intraday credit limits are approved, prior to credit extension, by a Credit Officer with the level of credit authority as set forth in the Bank’s Credit Approval Principles. Intraday credit limits are assigned to individual client legal entities. Intraday limits are sized based on overall credit appetite for the client and credit family and take into consideration factors including (but not limited to):

- Financial profile of client (including size, liquidity, credit metrics)
- Client obligor credit ratings
- Strength of lien
- Quality and quantity of collateral
- Client need/ historical usage (to ensure facilities are not oversized)

Intraday credit limits exceptions and breaches may occur if there is insufficient availability of cash and/or credit. Exceptions are reviewed and monitored by the Transaction Approval Group (TAG). TAG actively monitors these breaches to intraday limits through Global Funds Control (GFC) for payments and Exposure Control Module (ECM) for trades. Breaches are reviewed by TAG officers, who may reach out to the supporting service teams to have them contact the client for more information on the nature of the payment, specific cutoff times, and source and timing of covering funds (i.e. pending receipts). Pending inflows may be considered for decision making purposes, but are not considered or reported as client cash (i.e. money good) and do not offset credit exposure. TAG will conduct due diligence and review the following information including, but not limited to:

- Transaction level details
- Account linkages
- Current balances

- Collateral
- Pending inflows (e.g. sweeps, MT103s, ATRs)
- Future dated exposure
- Excess exposure to be approved

Release of breaching transactions is governed by LOB credit authority grids. TAG will not release the transaction if it is not within their authority; the transaction is then escalated to the Credit Executive with appropriate credit authority for their approval. If approved, TAG will release the transaction. If not approved, the payment will be held until appropriate funding is received or cancelled.

Risk Monitoring and Management

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

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

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

In addition to Risk Management, an independent Credit Review function is responsible for: Independently validating or changing the risk grades assigned to exposures in the Firm's wholesale and commercial-oriented retail credit portfolios, and assessing the timeliness of risk grade changes initiated by responsible business units; and Evaluating the effectiveness of business units' credit management processes, including the adequacy of credit analyses and risk grading/LGD rationales, proper monitoring and management of credit exposures, and compliance with applicable grading policies and underwriting guidelines.

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, clients, counterparties and customers, product and geographic concentrations occurs monthly. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with, risk committees and JPMBL senior management as appropriate.

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

Risk Governance & Policy Framework

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

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

The JPMBL's Management Committee ('MC') approves JPMBL's Market Risk Management Framework annually.

Risk Measurement

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

VaR

JPMBL utilises Value-at risk ("VaR"), a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment.

The VaR framework is employed across the Firm using historical simulation based on data for the previous 12 months. VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level.

Stress Testing

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

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

JPMBL uses a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios.

Stress testing complements VaR by allowing risk managers to shock current market prices to more extreme levels relative to those historically realized, and to stress test the relationships between market prices under extreme scenarios.

Stress-test results, trends and qualitative explanations based on current market risk positions are reported to JPMBL's senior management to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency.

Other Non-statistical measures

Aside from VaR and stress testing, other specific risk measures, such as but not limited to F/X Delta and IRBPV, are also utilized within specific market context and aggregated across businesses as required.

Risk Monitoring and Control

Limits

Market risk limits are employed as the primary control to align JPMBL's market risk with certain quantitative parameters within JPMBL's Risk Appetite framework.

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

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

JPMBL's limits include VaR, Stress and Non- statistical limits established for the legal entity, in aggregate, and for individual businesses operating out of the legal entity:

- JPMBL's Chief Executive Officer ('CEO'), JPMBL's Chief Risk Officer ('CRO') and JPMBL's Market Risk Officer (MRO) are approvers of limits for the legal entity in aggregate

- Appropriate business area representatives and Market Risk Management representatives are approvers of business area specific limits

Risk Reporting

JPMBL has its own set of regular market risk reports, which include daily notifications of limit utilizations and limit breaches and where applicable, granular market risk metrics which provide transparency into potential risk concentrations.

Operational Risk

Operational risk is the risk associated with an adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting the Firm's processes or systems; it includes compliance, conduct, legal, and estimations and model risk. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, cybersecurity attacks, inappropriate employee behaviour, failure to comply with applicable laws and regulations or failure of vendors to perform in accordance with their agreements. Operational Risk Management attempts to manage operational risk at appropriate levels in light of the Firm's financial position, the characteristics of its businesses, and the markets and regulatory environment in which it operates.

Firmwide Compliance, Conduct, and Operational Risk Management Framework

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

Operational Risk Governance

The LOBs and Corporate hold ownership, responsibility and accountability for the management of operational risk. The Control Management Organization, which consists of control managers within each LOB and Corporate, is responsible for the day-to-day execution of the CCOR Framework and the evaluation of the effectiveness of their control environments to determine where targeted remediation efforts may be required.

LOBs 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.

The Firm's Global Chief Compliance Officer ("CCO") and FRE for Operational Risk is responsible for defining the CCOR Management Framework and establishing minimum standards for its execution. Operational Risk Officers ("OROs") report to both the LOB CROs and to the FRE for Operational Risk, and are independent of the respective businesses or functions they oversee.

The Firm's CCOR Management policy establishes the CCOR Management Framework for the Firm. The CCOR Management Framework is articulated in the Risk Governance and Oversight Policy which is reviewed and approved by the Board Risk Committee periodically.

Operational Risk Identification

The Firm utilizes a structured risk and control self-assessment process that is executed by the LOBs and Corporate. As part of this process, the LOBs and Corporate evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. CCOR Management provides oversight of these activities and may also perform independent assessments of significant operational risk events and area of concentrated or emerging risk.

Operational Risk Measurement

CCOR Management performs independent risk assessments of the Firm's operational risks, which includes assessing the effectiveness of the control environment and reporting the results to senior management. In addition, 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 CCAR and other stress testing processes.

Operational Risk Monitoring and Testing

The results of risk assessments performed by CCOR Management are leveraged as one of the key criteria in the independent monitoring and testing of the LOBs and Corporate's compliance with laws and regulation. Through monitoring and testing, CCOR Management independently identifies areas of operational risk and tests the effectiveness of controls within the LOBs and corporate.

Management of Operational Risk

The operational risk areas or issues identified through monitoring and testing are escalated to the LOBs and Corporate to be remediated through action plans, as needed, to mitigate operational risk. CCOR Management may advise the LOBs and Corporate in the development and implementation of action plans.

Operational Risk Reporting

Escalation of risks is a fundamental expectation for employees at the Firm. Risks identified by CCOR Management are escalated to the appropriate LOB and Corporate Control Committees, as needed. CCOR Management has established standards to ensure that consistent operational risk reporting and operational risk reports are produced on a Firmwide basis as well as by LOBs and Corporate. Reporting includes the evaluation of key risk indicators and key performance 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.

Fiduciary Risk

Fiduciary risk is the failure to exercise the applicable standard of care, failure to act in the best interests of clients or treat clients fairly as required under applicable law or regulation, potentially resulting in regulatory risk, reputation risk and financial liability.

Depending on the fiduciary activity and capacity in which the Firm is acting, common law and regulation require adherence to specific duties in which the Firm must always place the client's interest above its own. As an example, common law requires that fiduciaries act in accordance with the duties of loyalty and care:

- Duty of Loyalty: Act in the best interest of their clients, refrain from impermissible self-dealing, avoid or manage conflicts of interest; and,
- Duty of Care: Manage client assets with reasonable care, skill, and prudence in context of whole portfolio and individual securities.

Risk Profile

Typically the Corporate Investment Bank (CIB) has less exposure to products which convey fiduciary duties although the private banking Wealth Management (WM) activities do more extensively assume elements of fiduciary obligations. There are specific situations and services that the CIB provides that are deemed fiduciary and require adherence to specific duties in which J.P. Morgan must always place the client's interest above its own. CIB also carries out fiduciary activities in a number of Securities Services product areas, although most notably within the Custody and Depository functions, Transfer Agency and Agency Securities Lending products.. WM is exposed to fiduciary risk through its discretionary and brokerage businesses. As an Investment Manager JPMBL has a Fiduciary Obligation to ensure clients' assets are managed in-line with the agreed upon mandate with reasonable care, skill and prudence.

Risk Management Objectives

JPMBL has adopted a disciplined and structured, end-to-end approach to ongoing oversight of its Fiduciary Activities, which is captured in relevant firm policies and procedures within the Fiduciary Management and Control Framework (Framework). CIB and WM are responsible

for understanding and complying with laws, regulations, and other obligations arising from their Fiduciary Activities in their respective businesses and functions. This includes adhering to such laws, regulations, obligations and other policies for maintaining appropriate controls.

Risk Governance structure

JPMBL implements its governance structure in line with the Luxembourg regulatory requirements and in so doing in line with the three lines of defence. The obligations and responsibilities of the control functions within the second and third line of defence are documented as a part of the JPMBL governance framework. JPMBL maintains policies and procedures designed to drive a culture of escalation as well as the requirement to raise issues of concern at different points within the entity's governance structure. The responsibility for the escalation and reporting of relevant matters starts with the relevant businesses and proceeds into the JPMBL Risk Oversight Committee (ROC) which provides oversight of the risks inherent in JPMBL's businesses. The JPMBL ROC escalates significant Fiduciary Risk issues to the appropriate EMEA Risk, Line of Business or Firm Committees as well as the relevant Board sub-committee or main Board of Directors where necessary.

The Firm has a comprehensive Fiduciary Management and Control Policy as well as Fiduciary Standards.

Liquidity Risk

Please refer to section 17.

Interest Rate Risk in the Banking Book ("IRRBB")

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

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

Oversight and Governance

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

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

- 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.

Independent oversight of IRRBB within JPMBL is delegated to the JPMBL Risk Oversight Committee (ROC).

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

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 CIO investment portfolio's positions. Execution by T/CIO will be based on parameters established by senior management, per the CIO Investment Policy. In certain Legal entities, Treasury manages IRR in partnership with T/CIO, and the legal entity risk oversight committee has responsibility for independent risk oversight of IRRBB. LOBs are responsible for developing and reviewing specific LOB IRR modelling assumptions.

Measures to manage IRR include the following:

- **Earnings-at-Risk (EaR)** estimates the extent to which changes in interest rates will affect the Firm's net interest income and interest rate-sensitive fees over the following 12 months utilizing multiple assumptions; deposit assumptions are a material driver of EaR - the pricing sensitivity of deposits use assumed rates paid which may differ from actual rates paid due to timing lags and other factors
- **Economic Value Sensitivity** is an additional Firmwide metric utilized to determine changes in asset/liability values due to changes in interest rates.

Within JPMBL, these metrics are reported to the Risk Oversight Committee on a periodic basis.

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.

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 Firm 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 NBIA's 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 NBIA's with the strategy for relevant entities. A thorough risk review is also required with LOB and cross functional participation to address all potential risks including any heightened risk due to complexity, valuation and a less favourable economic environment.

Risk Reporting and Measurement

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

Risk Mitigation

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

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

Reputation Risk

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

Reputation risk is the responsibility of each Lines 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.

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 Bank aims to reduce its reputation risk by fostering a culture of identification and escalation as highlighted in the Firmwide Reputation Risk Standards. JPM takes a qualitative approach to assessing Reputation Risk given the nature of the risk.

Leverage Risk

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

Risk Management

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

Risk Reporting and Measurement

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

JPMBL completes the ICAAP on a quarterly basis, which provides management with a view of the impact of severe and unexpected events on earnings, capital resources, risk-weighted assets and balance sheet. The Firm’s ICAAP integrates stress testing protocols with capital and leverage planning. More detail on the ICAAP is included in Section 4. Capital Requirements. Leverage ratio is calculated on a monthly basis and reported under CoRep to the regulator on a quarterly basis.

Risk Mitigation

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

Board Declaration - Adequacy of Risk Management Arrangements

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

Members of the Board of Directors

In selecting candidates for the Board, JPMBL looks for individuals with strong personal attributes, diverse backgrounds and demonstrated expertise and success in one or more disciplines relevant to the business and commensurate with its size, complexity and risk profile and who are collectively suitable and equipped to carry out the Board’s overall responsibility for JPMBL. The goal is to have a Board of Directors consisting of individuals with a combination of skills, experience and personal qualities that will well serve it, its committees, the Firm and the shareholders. Candidates for directorship may be recommended by current Board members or management.

As at 31st December 2019, the JPMBL Board was comprised of six directors:

Frédéric Mouchel (Executive Director) (resigned on 20 June 2019)

Frédéric Mouchel was a Managing Director in JPMorgan Chase's Corporate & Investment Bank and led the Treasury Services Business. Over the last 30 years, Mr Mouchel has held various management roles in the firm's Treasury function in the Investment Bank as well as in Finance and Corporate, including branch treasurer in Paris in 1995 and EMEA Treasurer in London from 2007. He graduated from Ecole Supérieure des Sciences Commerciales d'Angers – France (ESSCA) in 1986 and joined the firm in 1987.

Pablo Garnica (Executive Director) – appointed on 14 March 2019

Pablo Garnica is CEO of J.P. Morgan Private Bank in Europe, Middle East and Africa (EMEA). Based in Luxembourg, Mr Garnica oversees the activities across the EMEA Private Banking business. He is a Board Member of J.P. Morgan (Suisse) SA and is CEO and Board Member of J.P. Morgan Bank Luxembourg S.A. Additionally, Mr Garnica serves on several other firmwide governance forums within EMEA. Mr Garnica has worked in the bank for over 20 years. After joining as a banker in the Madrid office, Mr Garnica became Head of J.P. Morgan's Private Banking business in Spain and Portugal, leading a significant growth in the firm's presence in these markets. In his current role as CEO he has led J.P. Morgan's private banking growth in both onshore and offshore markets. Prior to J.P. Morgan, Mr Garnica spent several years at Banesto in both Mexico and the U.S.A. serving Latin American private clients and family businesses. Mr Garnica holds a degree in Economics and Business from CUNEF.

Mark Garvin (Chairman – Non Executive Director)

Mark Garvin is Vice Chairman for the Corporate & Investment Bank at J.P. Morgan. He is also Chairman of J.P. Morgan Europe Ltd and Chairman of the Supervisory Board of J.P. Morgan AG. Mr Garvin has worked for J.P. Morgan and its predecessor banks since 1978. After serving in various capacities in the Latin American division he became credit officer in Paris in 1982. He transferred to London in 1985 where he assumed responsibility for UK client coverage. In 1988 he was appointed deputy general manager of the London branch and in 1992 became UK Senior Country Officer. In 1997 he was appointed Chief Operating Officer – Europe, Middle East & Africa, and in 2004 became Chairman, Treasury & Securities Services International, a position he held until assuming his current role in 2012. He is Senior Independent Director of Euroclear Plc and Director of BritishAmerican Business. Mr Garvin holds a BS from Georgetown University as well as an MBA from the American University.

Christopher Rowland (Non-Executive Director)

Christopher Rowland is the Product Executive for J.P. Morgan's Custody business and head of Securities Services EMEA. In his role, Mr Rowland is responsible for setting the strategy and managing the P&L for the Global Custody, Direct Custody, and Depositary Services products provided to institutional investor clients of the firm with asset under custody of \$21trillion. As head of Securities Services EMEA Mr Rowland has responsibility for the governance of the business regionally. Additionally Mr Rowland of J.P. Morgan Bank Ireland.

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 EMEA 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. Mr Rowland took his current role in Q4 2014. Previously at J.P. Morgan (1994-2001) Mr Rowland performed operations 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.

Mr Rowland holds a B.A. in history and politics from Swansea University.

Juerg Brun (Independent Non-Executive Director) (resigned on 25 January 2019)

Juerg Brun was an Independent Non-Executive Director of the Bank since July 2016 and chairs the Audit Committee. Mr. Brun is the managing owner of Brun Advisory GmbH, which is active in management consulting focusing on Board functions and project management. Mr. Brun has extensive experience in audit and consulting, with a special focus on technology-related matters, and has held various senior management positions in EMEA and the US as a partner of one of the Big4 accounting firms. He has served several global clients, mainly in the financial services sector, assuming in particular the global lead technology audit partner role for one of the

world's largest wealth management and retail banks during many years before establishing his consultancy firm. Beside his consulting mandates, Mr. Brun currently holds two directorship positions.

Ignace Combes (Independent Non-Executive Director)

Ignace Combes is an Independent Non-Executive Director of the Bank and Chairman of the Risk Committee since the middle of 2016. Mr. Combes has a Masters in Civil Engineering from Gent University in Belgium together with an MBA from Vlerick Management School in Belgium. After several years as a project manager for JPMorgan Mr. Combes joined Euroclear where he progressed to being Head of Operations for Belgium. Mr. Combes then returned to J.P. Morgan in NY where he was Worldwide Head of Marketing for 5 years. Mr. Combes re-joined Euroclear and had risen to the position of Deputy CEO for Euroclear Belgium when he left. Mr Combes is currently also an Independent Non-Executive Director of Partena Professional. Mr Combes, in his executive career, has also been a Board Member of other major financial institutions.

Alison Livesey (Non-Executive Director)

Alison Livesey is a London based Managing Director in Wholesale Payments and is responsible for Business Transformation alongside her role as the European Location Head. She is currently focused on the Legal Entity Strategy for Wholesale Payments, encapsulating Brexit and firm-wide strategies, accelerating the value from the regional businesses that make up Wholesale Payments and driving the business growth across the European franchise.

Ms Livesey has been featured in a number of industry publications and newspaper articles including a 2018 article on The Women Driving J.P. Morgan's EMEA Push – Transaction Banking featured in The Banker Magazine.

Prior to her current role, Ms Livesey was part of the global strategic execution team within Treasury Services focused, from a business perspective, on its operating framework and building and maintaining a robust control environment. Before joining Treasury Services in 2014, Ms Livesey spent 15 years in a variety of different Compliance roles in London, New York and Frankfurt. In her last role she was the Chief Compliance Officer for Treasury Services, based in New York.

Ms Livesey is a member of the Board of J.P. Morgan Bank Luxembourg S.A. and the EMEA Diversity Council.

Ms Livesey has an LLB Law degree from The University of Hull and is a qualified barrister in the UK and a member of Lincoln's Inn.

Elizabeth Munro (Non-Executive Director)

Elizabeth Munro is the Senior Business Manager of J.P. Morgan Wealth Management for Europe, Middle East and Africa; she is responsible for maintaining an efficient and effective operating environment across eight markets and ten locations in the region. During her five years in the role, Ms. Munro has lead the implementation and/or enhancement of a number of regulatory and control initiatives including the build out of a first line of defense framework. Ms. Munro has been with JPM for 25 years in Finance and Operational roles within WM and the Investment Bank, based in London, Paris and New York. Ms. Munro received her MBA from New York University and undergraduate degree from Hamilton College.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended 31st December 2019 as follows:

Name	Internal Directorships	External directorships
Mark Garvin	1	3
Alison Livesey	1	0
Elizabeth Munro	1	0
Ignace Combes	1	1
Christopher Rowland	1	0
Pablo Garnica	1	0

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

Diversity & Inclusion

In 2014, we set an internal target to achieve 30% representation of women on certain key boards in EMEA including JPMBL. Since then, we have made progress across the EMEA region, and have met our goal for representation of women on the JPMBL board. We will continue to monitor this annually.

3. Difference between accounting and regulatory scope (Article 436)

The tables below are showing a reconciliation and the differences between the values reported in the published financial statement as at the 31st December 2019 (LUX GAAP) and the values under scope of regulatory consolidation (IFRS) as per Guidelines on disclosure requirements in Part Eight of Regulation (EU) No 575/2013 Article 436.

Table 1: EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

\$'m	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items				
			Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
ASSETS							
Cash in hand, balances with central banks and post office banks	8,182	8,188	8,188	-	-	-	-
Loans and advances to credit institutions	33,359	33,212	31,593	1,618	-	-	-
Loans and advances to customers	13,111	13,355	13,355	-	-	-	-
Bonds and other fixed-income transferable securities	149	149	149	-	-	-	-
Intangible Assets	27	27	27	-	-	-	-
Tangible assets	17	17	17	-	-	-	-
Prepayments and accrued income	749	583	583	-	-	-	-
Total assets	55,595	55,532	53,913	1,618	-	-	-
LIABILITIES							
Amounts owed to credit institutions	730.00	-	-	-	-	-	-
Amounts owed to customers	48,310	-	-	-	-	-	-
Other liabilities	19	-	-	-	-	-	-
Accruals and deferred income	1,177	-	-	-	-	-	-
Provisions	209	-	-	-	-	-	-
Fund for general banking risks	20	-	-	-	-	-	-

Subscribed capital	21	-	-	-	-	-	-
Share Premium	3,234	-	-	-	-	-	-
Reserves	1,539	-	-	-	-	-	-
Profit or loss brought forward	0	-	-	-	-	-	-
Profit or loss for the financial year	335	-	-	-	-	-	-
Total liabilities	55,595	-	-	-	-	-	-

Table 2: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements

	\$'m	Total	Items subject to			
			Credit risk framework	CCR framework	Securitisation framework	Market risk framework
1	Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	55,532	53,913	1,618	-	-
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	-	-	-	-	-
3	Total net amount under the regulatory scope of consolidation	55,532	53,913	1,618	-	-
4	Off balance sheet	11,688	11,688	-	-	-
5	Derivatives (LUX GAAP vs IFRS rules)	648	-	648	-	9
6	Exposure amounts considered for regulatory purposes	67,867	65,601	2,266	-	9

Table 3: EU LIA - Explanations of differences between accounting and regulatory exposure amounts

Item	Article	
	436(b)	455(c), 34, 105, 435(a) and 436(b)
Derivatives	As per LUX GAAP accounting rules derivatives are not being disclosed compared to IFRS rules for COREP	As per LUX GAAP accounting rules derivatives are not being disclosed compared to IFRS rules for COREP

4. Own Funds (Article 437)

Own Funds Disclosures

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

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

The final column represents the capital position on a fully-phased in basis after all CRR transitional provisions have expired and phase-out of grandfathered capital instruments under pre-CRR national transposition measures is complete. Other capital impacts including instrument maturity or behavioral changes are not considered for the fully-phased in position.

Table 4: CRD IV Regulatory Capital

Own Funds Disclosure Template (\$'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	Capital instruments and the related share premium accounts	3,250	26 (1), 27, 28, 29, EBA list 26 (3)	3,250
	<i>of which: Ordinary Shares</i>	21	EBA list 26 (3)	21
	<i>of which: Share premium</i>	3,229	EBA list 26 (3)	3,229
2	Retained earnings	1,574	26 (1) (c)	1,574
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	(2)	26 (1)	(2)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	4,822		4,822
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments				
7	Additional value adjustments (negative amount)	(0)	34, 105	(0)
8	Intangible assets (net of related tax liability) (negative amount)	(27)	36 (1) (b), 37, 472 (4)	(27)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(28)		(28)
29	Common Equity Tier 1 (CET1) capital	4,794		4,794
Additional Tier (AT1) Capital: Instruments				
36	Additional Tier 1 (AT1) capital before regulatory adjustments	-		-
Additional Tier 1 (AT1) capital before regulatory adjustments				
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	-		-
44	Additional Tier 1 (AT1) capital	-		-
45	Tier 1 capital (T1 = CET1 + AT1)	4,794		4,794
Tier 2 (T2) Capital: Instruments and Provisions				

51	Tier 2 (T2) capital before regulatory adjustments	-		-
Tier 2 (T2) Capital: Regulatory Adjustments				
57	Total regulatory adjustments to Tier 2 (T2) capital	-		-
58	Tier 2 (T2) capital	-		-
59	Total capital (TC = T1 + T2)	4,794		4,794
60	Total risk weighted assets	24,642		24,642
Capital Ratios and Buffers				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	19.45%	92 (2) (a), 465	19.45%
62	Tier 1 (as a percentage of total risk exposure amount)	19.45%	92 (2) (b), 465	19.45%
63	Total capital (as a percentage of total risk exposure amount)	19.45%	92 (2) (c)	19.45%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer (G-SII or O-SII buffer) expressed as a percentage of risk exposure amount)	7.65%	CRD 128, 129, 130	7.65%
65	<i>of which: capital conservation buffer requirement</i>	2.50%		2.50%
66	<i>of which: countercyclical buffer requirement</i>	0.15%		0.15%
67a	<i>of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer</i>	0.50%	CRD 131	0.50%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	11.45%	CRD 128	11.45%

Own Funds Reconciliation

The tables below present a reconciliation between audited balance sheet own funds and regulatory own funds as at 31st December 2019 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 5: Reconciliation of Regulatory Own Funds to Balance Sheet

Regulatory Own Funds Reconciliation to Balance Sheet	\$'m
193,884 Ordinary Shares of \$110 each	21
Pension Reserve	-
Share Premium Account	3,229
Retained Earnings	1,870
Other Reserves	19
CET1 Capital - Balance Sheet Own Funds	5,139
Less Regulatory Adjustments	(344)
(-) Unaudited Profit	(317)
(-) Intangible Assets: Goodwill	-
(-) Available for Sale Financial Asset Reserve	-
(-) Intangible Assets	(27)
(-) Additional Valuation Adjustments	(0)
CET1 Capital - Regulatory Own Funds After Adjustments	4,794
Total Regulatory Own Funds	4,794

Main Features of Capital Instruments

The table below presents the main features of regulatory capital instruments for JPMBL as at 31st December 2019 and as required by Commission Implementing Regulation (EU) No 1423/2013. The terms and conditions for these instruments can be found on the Luxembourg business registers website.

1423/2013. The terms and conditions for these instruments can be found on the Luxembourg business registers website.

Table 6: Main Features of Regulatory Capital Instruments

Capital Instruments Main Features (\$'m)		JPMBL CET1 \$110 ordinary shares
1	Issuer	J.P. Morgan Bank Luxembourg S.A.
3	Governing law(s) of the instrument	Article 37 et seq. of "Luxembourg Company Law: Law of 10th August 1915 on commercial companies" (Loi du 10 août 1915 concernant les sociétés commerciales)
4	Transitional CRR rules	Common Equity Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Solo
7	Instrument type (types to be specified by each jurisdiction)	Shares of a public limited liability company (Actions d'une société anonyme)
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	USD 21
9	Nominal amount of instrument	USD 110
9a	Issue price	USD 110
10	Accounting classification	Shareholders' equity
11	Original date of issuance	\$11m May 16th, 1973 \$6m September 3rd, 2018 \$4m January 29th, 2019
12	Perpetual or dated	Perpetual
17	Fixed or floating dividend/coupon	Floating
19	Existence of a dividend stopper	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary
22	Noncumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Equity is the lowest level in the hierarchy
36	Non-compliant transitioned features	No

5. Capital Requirements (Article 438)

A strong capital position is essential to the Firm's business strategy and competitive position. The Firm's capital strategy focuses on long-term stability, which enables the Firm to build and invest in market-leading businesses, even in a highly stressed environment.

Internal Capital Adequacy Assessment Process

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

Minimum Capital Requirements

The tables below show a breakdown of the risk weighted assets and associated Minimum Capital Requirements for JPMBL.

The standardised approach has been used for the calculation of Credit Capital Requirements. The Basic Indicator Approach ("BIA") has been used for the calculation of Operational Risk Capital Requirements using projected revenues to calculate the relevant indicator. The minimum capital requirements below represent the Pillar 1 requirements as per the CRR to be maintained at all times. JPMBL Total Capital Resources must be greater than its Minimum Capital Requirement, allowing for a capital excess to cover any additional obligations, for example, Pillar 2. The below requirements do not include additional minimum requirements set out by the ECB as part of the Supervisory Review and Evaluation Process ("SREP").

The key risk types JPMBL is exposed to for Capital allocation purposes are Credit risk and Operational risk. The basic indicator approach has been used for the calculation of Operational Risk Capital Requirements. The standardized approach has been used for the calculation of Credit Risk.

Table 7: EU OV1 - Overview of RWAs

	\$'m	RWA		Minimum capital requirements
		Q4 2019	Q3 2019	
1	Credit risk (excluding counterparty credit risk) (CCR)	21,455	21,768	1,716
2	Of which the standardised approach	21,455	21,768	1,716
3	Of which the foundation IRB (FIRB) approach	-	-	-
4	Of which the advanced IRB (AIRB) approach	-	-	-
5	Of which equity IRB under the simple risk-weighted approach or the IMA	-	-	-
6	CCR	659	695	53
7	Of which marked to market	528	559	42
8	Of which original exposure	2,266	1,806	n/a
9	Of which the standardised approach	1	1	42
10	Of which internal model method (IMM)	-	-	-
11	Of which risk exposure amount for contributions to the default fund of a CCP	-	-	-
12	Of which CVA	131	135	10
13	Settlement risk	-	-	-
14	Securitisation exposures in banking book (after cap)	-	-	-
15	Of which IRB approach	-	-	-
16	Of which IRB supervisory formula approach (SFA)	-	-	-
17	Of which internal assessment approach (IAA)	-	-	-
18	Of which standardised approach	-	-	-
19	Market Risk	9	10	1
20	Of which the standardised approach	9	10	1
21	Of which IMA	-	-	-
22	Large exposures	-	-	-

23	Operational Risk	2,513	2,513	201
24	Of which basic indicator approach	2,513	2,513	201
25	Of which standardised approach	-	-	-
26	Of which AMA Of which advanced measurement approach	-	-	-
27	Amounts below the thresholds for deduction (subject to 250% risk weight)	6	4	0
28	Floor adjustment	-	-	-
29	Total	24,642	24,990	1,971

Variance vs. last quarter:

Quarter to quarter decrease in Credit Risk under the standardised approach (row 2) primarily driven by decrease in on balance sheet exposure. Increase in Credit and Counterparty Risk (row 8) primarily driven by the increase of Securities Financing Transactions.

Table 8: EU OV1 additional - Overview of RWAs by exposure class

Exposure classes \$'m		RWA	Overall capital requirements
1	Central Governments or central banks	14	2
3	Public sector entities	-	-
6	Institutions	6,965	916
7	Corporates	14,382	1,891
8	Retail	-	-
16	Other exposures	628	83
17	Total	21,989	2,891

6. Exposure to Counterparty Credit Risk (Article 439)

At the end of 2019, JPMBL is exposed to Counterparty Credit Risk (CCR) via Securities Financing activities (Reverse Repos) and Derivatives transactions. Following the incorporation of the Wealth Management business into JPMBL, a derivatives book has been transferred. The derivatives transaction are traded on a back to back basis with the group.

Counterparty Credit Risk Analysis

The table below shows counterparty credit risk exposures (excluding trades cleared through a CCP) by methods used to calculate CRR regulatory requirements for JPMBL. Derivative exposures are calculated using the MtM method (CRR Article 274). SFTs use the Financial Collateral Comprehensive Method ("FCCM") (CRR Articles 223-224). Long settlement transactions are treated under the FCCM method.

Table 9: EU CCR1 – Analysis of CRR exposure by approach

	\$m	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		167	481			648	528
2	Original exposure							
3	Standardised approach							
4	IMM (for derivatives and SFTs)							

5	Of which securities financing transactions							
6	Of which derivatives and long settlement transactions							
7	Of which from contractual cross-product netting							
8	Financial collateral simple method (for SFTs)							
9	Financial collateral comprehensive method (for SFTs)						3	1
10	VaR for SFTs							
11	Total							529

The following table represents an overview of the impact of netting and collateral held on exposures for derivatives (including long settlement transactions) and SFTs.

Table 10: EU CCR5-A – Impact of netting and collateral held on exposure values

\$'m	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	324	(133)	191	(10)	201
SFTs not subject to a netting agreement	1,618	0	1,618	(1,616)	3
Non Eligible collateral under CRR				(4,136)	
Total	1,942	(133)	1,809	(1,605)	204

Underlying exposures have been deemed significant (and shown separate) when following materiality threshold has been met: Exposure \geq 3% of total net exposure. Underlying exposures which have not met the materiality condition will therefore not be disclosed separately. As at 31st December 2019 the underlying exposures are lower than 3%.

Collateral Used in Counterparty Credit Risk

The breakdown of all types of collateral posted or received by JPMBL to mitigate CCR exposure to derivatives and SFTs is shown in the table below. As at 30th June 2019, the majority of collateral used which JPMBL held was in debt securities.

Table 11: EU CCR5-B – Composition of collateral for exposures to CCR

\$'m	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of Collateral received		Fair value of collateral posted		Fair value of collateral received	Fair value of collateral posted
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	-	341	-	4	-	-
Debt securities (Other)	-	3,796	-	-	-	-
Debt securities (Central Governments)	-	-	150	-	1,622	-
Total	-	4,136	150	4	1,622	-

4th Quarter 2019 compared to 2nd Quarter 2019: Increase Debt securities (Other) / Unsegregated (row 2) primarily driven by business activity.

CVA Capital Charge

The exposure value and associated RWAs subject to CVA capital charges are calculated according to both the Advanced method as set in CRR Article 383 and the Standardised method as prescribed in CRR Article 384.

Table 12: EU CCR2 – CVA capital charge

	\$'m	Exposure value	RWAs
4	All portfolios subject to the standardised method	398	131
5	Total subject to the CVA capital charge	398	131

No significant changes compared to the latest reported number (Q2-2019 : RWA : \$131m)

Credit Derivatives Breakdown

The table below presents a breakdown of credit derivatives notionals for JPMBL by product type and whether they are held for client intermediation (other credit derivatives) or for the firm's own portfolio (credit derivative hedges). The firm does not use credit derivatives hedges for the purpose of credit risk mitigation as at 31st December 2019.

Table 13: EU CCR6 – Credit derivatives exposures

\$'m	Other credit derivatives
Notionals	
Credit Default Swaps	537
Total notionals	537
Fair values	
Positive fair value (asset)	54
Negative fair value (liability)	(54)

7. Countercyclical Capital Buffers (Article 440)

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

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

Table 14: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer

Breakdown by country (\$'mm)	General credit exposures	Trading book exposure	Own funds requirements			Own funds requirement weights	Countercyclical capital buffer rate
	Exposure value for SA	Sum of long and short position of trading book	Of which: General credit exposures	Of which: Trading book exposures	Total		
France	1,625	0.00	130	0.00	130	11.5%	0.25%
United Kingdom	1,359	0.00	109	0.00	109	9.7%	1.00%
Denmark	69	0.00	6	0.00	6	0.5%	1.00%
Sweden	66	0.00	5	0.00	5	0.5%	2.50%
Ireland	51	0.00	4	0.00	4	0.4%	1.00%
Norway	21	0.00	2	0.00	2	0.1%	2.50%
Other Countries	10,885	0.00	871	0.00	871	77.3%	0.00%
Total	14,076	0.00	1,126	0.00	1,126	100%	

Table 15: Amount of Institution-Specific Countercyclical Capital Buffer

	\$'mm
Total Risk Exposure Amount	24,642
Institution Specific Countercyclical Buffer Requirement	36.79
Institution Specific Countercyclical Buffer Rate	0.15%

8. Credit Risk Adjustments (Article 442)

Definitions

The following definitions are used for accounting purposes:

- **Impairment of financial assets:** Impairment losses on loans and receivables are measured as the difference between the financial assets carrying amount and the present value of the estimated future cash flows discounted at the financial asset's effective interest rate.
- **Impairment of non-financial assets:** An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units).
- **Past due:** A financial asset is past due when a counterparty has failed to make a payment when contractually due.

Net and Average Exposures

Net values of on-balance sheet and off-balance exposures are depicted in the tables below. The net value is gross carrying value of exposure less impairments or provisions. The firm has calculated average exposure based on the average of the four quarter end points during the year.

Table 16: EU CRB-B - Total and average net amount of exposures

Exposure Class (\$'m)		Net exposure at the end of the period	Average net exposure over the period *
1	Central governments or central banks	8,337	7,886
2	Institutions	41,288	39,038
3	Corporates	15,338	14,909
4	Other residual exposures	628	833
5	Total standardised approach	65,591	62,666

* The firm has calculated average exposure based on the average of the four quarter end points during the year of 2019.

Increase in 2019 vs 2018 is driven by incorporation of the Wealth Management Business and business growth in the existing Line of Businesses.

Exposure Class Analysis by Geographical Areas

The tables below provide a breakdown of net credit risk exposures (i.e. net values of on-balance sheet and off-balance sheet exposures before credit risk mitigation) by country. Other geographical areas includes multilateral development banks and international organisations which operate across multiple regions. The analysis is provided for countries exceeding 2.5% of the total net value.

Table 17: EU CRB-C - Geographical breakdown of exposures

Exposure Class		Net Values \$'m												
		North America	US	Other North America	Europe	LU	GB	DE	IT	CH	FR	Other Europe	Other Areas	Total
7	Central Governments or central banks	150	150	-	8,187	5,704	4	2,434	10	-	-	35	-	8,337
9	Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Institutions	31,958	31,561	397	8,988	3	5,483	341	0	2,119	544	498	342	41,288
13	Corporates	2,841	163	2,678	11,784	1,961	1,538	231	2,578	227	1,647	3,602	713	15,338
14	Retails	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Other exposures	27	24	3	600	260	10	2	37	0	2	289	1	628
23	Total Standardised Approach	34,976	31,898	3,078	29,559	7,928	7,035	3,008	2,625	2,346	2,193	4,424	1,056	65,591
24	Total	34,976	31,898	3,078	29,559	7,928	7,035	3,008	2,625	2,346	2,193	4,424	1,056	65,591

Geographical areas and countries have been deemed significant (and shown separate) when following materiality thresholds have been met: Area - Exposure in area \geq 10% of total exposure; Country - Exposure in country \geq 3% of total exposure. Countries which have not met the materiality condition however are located in a geographical area deemed being significant have been grouped under "Other" in the respective geographical area. All remaining countries deemed non significant located in non-significant geographical areas have been grouped under "Other Areas". Following countries were below the materiality thresholds and have been grouped as described above:

Other North America: Anguilla, Bermuda, Bahamas, Belize, Canada, Curaçao, Cayman Islands, Mexico, Panama, Saint Vincent and the Grenadines, British Virgin Islands.

Other Europe: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Spain, Finland, Guernsey, Gibraltar, Greece, Croatia, Hungary, Ireland, Isle of Man, Iceland, Jersey, Liechtenstein, Lithuania,, Monaco, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Russian Federation, Sweden, Slovenia, Slovakia, Ukraine, Vatican City State.

Other Areas: United Arab Emirates, Argentina, Australia, Bahrain, Brazil, Botswana, Côte d'Ivoire, Chile, China, Colombia, Egypt, Ghana, Hong Kong, Israel, India, Japan, Kenya, Kuwait, Kazakhstan, Liberia, Morocco, Marshall Islands, Mauritius, Malaysia, Nigeria, New Zealand, Oman, Peru, Qatar, Saudi Arabia, Singapore, Thailand, Tunisia, Turkey, Uganda, Venezuela, South Africa, Zambia, Zimbabwe.

The year over year increase of exposure cross regions and countries primarily is driven by the business expansion Wealth Management (JPMIB merger) end of January 2019 and the Corporate Investment Bank business migrations due to Brexit during 2019.

Concentration Analysis of Credit Risk Exposures

As it is depicted in tables below the majority of credit risk exposures is concentrated in the finance industry.

Table 18: EU CRB-D - Concentration of exposures by industry or counterparty types

Exposure class (\$'mm)		Finance Industry	Manufacturing	Others (Residual Exposure)	Total
1	Central Governments or central banks	8,180	-	-	8,180
2	Institutions	41,454	-	-	41,454
3	Corporates	9,761	133	604	10,498
4	Households	-	-	4,830	4,830
5	Other Residual Exposure	-	-	628	628
6	Total SA approach	59,396	133	6,062	65,591
7	Total	59,396	133	6,062	65,591

The year over year increase of exposure is driven by the business expansion Wealth Management (JPMIB merger) end of January 2019 and the Corporate Investment Bank business migrations due to Brexit during 2019.

Residual Maturity Analysis of Credit Risk Exposures

The tables below show net values of on-balance sheet exposures without taking into account the effects of credit risk mitigation broken down by exposure class and residual maturity. Residual maturity is the remaining number of years before an obligation becomes due according to the existing terms of agreement.

Table 19: EU CRB-E – Maturity of exposures

Exposure Class		Net Exposure Value \$'m					Total
		On Demand	<= 1 Year	> 1 year <= 5 years	> 5 years	No stated maturity	
7	Central governments or central banks	8,337	-	-	-	-	8,337
9	Public sector entities	-	-	-	-	-	-
12	Institutions	16,278	11,712	2,000	1,600	-	31,590
13	Corporates	3,443	7,728	1,958	219	-	13,348
14	Retail	-	-	-	-	-	-
22	Other items	-	-	-	-	628	628
23	Total standardised approach	28,058	19,440	3,958	1,819	628	53,903
24	Total	28,058	19,440	3,958	1,819	628	53,903

The year over year increase of exposure and maturity structure primarily is driven by the business expansion Wealth Management (JPMIB merger) end of January 2019 and the Corporate Investment Bank business integration due to Brexit during 2019.

Analysis of Credit Exposures

The tables below show defaulted and non-defaulted exposures before credit risk mitigation broken down by exposure class and associated credit risk adjustments. Credit risk adjustments arising from loan loss provisions which are individually immaterial are not used to reduce the exposure value. This is consistent with the CoRep submission.

Table 20: EU CR1-A – Credit quality of exposures by exposure class and instrument

Exposure class \$'m		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
16	Central governments or central banks	-	8,337	-	-	-	-	8,337
18	Public sector entities	-	-	-	-	-	-	-
21	Institutions	-	41,288	-	-	-	3	41,288
22	Corporates	-	15,338	-	-	26	7	15,338
24	Retail	-	-	-	-	-	-	-
34	Other Exposure	-	628	-	-	-	-	628
35	Total standardised approach	-	65,591	-	-	26	11	65,591
36	Total	-	65,591	-	-	26	11	65,591
37	Of which: Loans	-	13,348	-	-	26	11	13,348
39	Of which: Off-balance-sheet exposures	-	11,688	-	-	-	-	11,688

The year over year increase of exposure primarily is driven by the business expansion Wealth Management (JPMIB merger) end of January 2019 and the Corporate Investment Bank business integration due to Brexit during 2019. In order to strengthen the JPMBL capital ratio the HQLA held with Deutsche Bundesbank and the Central Bank of Luxembourg has been increase by \$4,031mm.

Industry Analysis of Credit Exposures

The tables below present an analysis of credit quality of on-balance sheet and off-balance sheet exposures before credit risk mitigation by industry sector and associated credit risk adjustments.

Table 21: EU CR1-B – Credit quality of exposures by industry or counterparty types

Exposure class \$'m		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
1	Manufacturing	-	133	-	-	-	-	133
2	Financial and insurance activities	-	59,396	-	-	26	11	59,396
3	Other services	-	6,062	-	-	-	-	6,062
4	Total	-	65,591	-	-	26	11	65,591

Geographical Location of Exposures

The tables below show credit exposures before credit risk mitigation broken down by geographic location. Other geographical areas includes multilateral development banks and international organisations which operate across multiple regions. The analysis is provided for countries exceeding 2.5% of the total net value.

Table 22: EU CR1-C - Credit quality of exposures by geography

\$'m		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
1	North America	-	34,976	-	-	-	5	34,976
2	US	-	31,898	-	-	-	4	31,898
3	Other North America	-	3,078	-	-	-	1	3,078
4	Europe	-	29,559	-	-	26	3	29,559
5	LU	-	7,928	-	-	-	0	7,928
6	GB	-	7,035	-	-	26	1	7,035
7	DE	-	3,008	-	-	-	0	3,008
8	IT	-	2,625	-	-	-	1	2,625
9	CH	-	2,346	-	-	-	0	2,346
10	FR	-	2,193	-	-	-	0	2,193
11	Other Europe	-	4,424	-	-	-	1	4,424

Credit Risk Adjustments

No general or specific credit risk adjustment was made in the reporting period.

Defaulted and Impaired Exposures

Defaulted exposures

JPMBL has no defaulted exposures as of 31st December 2019.

Impaired exposures

Effective January 2018, allowances representing management's estimates of Expected Credit Losses have been made against some exposures in accordance with the applicable IFRS 9 accounting framework. These ECL are accounted for under the form of credit-impairments in the meaning of IFRS 9.

The impairment standard of IFRS9 requires legal entities to take ECL provisions upon initial recognition of some financial instruments and to update the amount of allowance for credit losses in subsequent reporting periods depending on the extent of credit deterioration since initial recognition.

In that context the Bank utilizes a three stage model for impairment assessments based on the changes in credit quality since initial recognition:

- Stage 1 – performing instruments that have not experienced a Significant Increase in Credit Risk since initial recognition.
- Stage 2 – performing instruments that have experienced a Significant Increase in Credit Risk since initial recognition.
- Stage 3 – nonperforming instruments that are determined to be credit impaired

As of 31st December 2019, Stage 1 ECL was USD 7,063,939 and Stage 2 ECL was USD 3,524,663 amounting to USD 10,588,602 in total. ECL are treated as Credit risk adjustment charges of the period to the Bank's related exposures as disclosed in "CR1" tables above.

JPMBL has no other impaired exposures than the ones determined under the above framework.

Past Due Exposures

As at 31st December 2019, there were no past due exposures reported in JPMBL.

9. Encumbered Assets (Article 443)

The disclosure on encumbrance of assets and its publication is made with respect to data for the reporting period, the year ending 31 December 2019, following the EBA guidelines.

Information on importance of encumbrance

The below disclosure represents the computed median values of the four quarters between 31 December 2018 and 31 December 2019, in accordance with the European Banking Authority Guidelines EBA/GL/2014/03 on the disclosure of encumbered and unencumbered assets.

Assets and collateral have been determined as encumbered or not consistent with the definition provided in the EBA Guidelines on the Disclosure of Encumbered assets (EBA GL/2014/03). Assets are considered encumbered when they have been pledged or used to secure, collateralise or credit enhance a transaction which impacts their transferability and free use.

Table 24: Encumbered and unencumbered assets

	\$'m	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets
10	Assets of the reporting institution	598	110	52,725
40	Debt securities	110	110	-
70	of which: issued by general governments	110	110	-
120	Other assets	487	-	52,725
121	of which: Loans on demand	61	-	11,162
122	of which: Loans and advances other than loans on demand	415	-	40,090

As at 31st December 2019, JPMBL has encumbered assets for the following purposes:

- Asset & Wealth Management maintains US Treasury bills for initial margin requirements and cash for variation margin requirements for non-cleared client derivatives,
- In order to support the intraday lines for client activity, Asset & Wealth Management keeps deposits with one of the top financial services company,
- Minimum reserves are maintained on the back of client activity at Central Bank of Luxembourg, Bank of Italy, Deutsche Bundesbank, National Bank of Belgium and Central Bank of Ireland.

Table 25: Collateral received

	\$'m	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
130	Collateral received by the reporting institution	-	1,119
160	Debt securities	-	1,119
190	Of which: issued by general governments	-	1,119

As at 31st December 2019, 100% of the collateral available for encumbrance which JPMBL held from JPMBC N.A. was in government bonds of which 100% from G6 countries.

Table 26: Sources of encumbrance

\$'m		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
10	Carrying amount of selected financial liabilities	146	146
120	Other sources of encumbrance	455	455

10. Use of External Credit Assessment Institutions (Article 444)

ECAIs and Exposure Classes

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

JPMBL uses the following ECAIs to determine risk weights for this purpose:

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

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

- General governments and central banks;
- Credit institutions.

All other exposure classes are assigned risk weightings described in the standardised approach as per the CRR (Article 113 to Article 134).

Credit Risk Exposures

Credit risk exposure and CRM effects

The following tables show exposures before and after application of credit risk mitigations and conversion factors as well as their related RWA broken down by credit exposure classes. Risk weights applied for EEA member states are applied under article 114 and hence bucketed under 0%.

Table 27: EU CR4 - Standardised approach – Credit risk exposure and CRM effects

Exposure classes \$'m		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWA	RWA density
1	Central governments or central banks	8,337	0	8,337	0	14	0%
6	Institutions	31,590	9,698	31,590	2,359	6,965	21%
7	Corporates	13,348	1,990	13,348	594	14,382	103%
16	Other items	628	0	628	0	628	100%
17	Total	53,903	11,688	53,903	2,953	21,989	38.68%

JPMBL's exposures before and post CCF and CRM as at 31st December 2019 have increased versus 31st December 2018 mainly due to the merger with JPMIB in January 2019, along with a significant growth in business activity over this period, and planned client migrations.

Credit Risk Exposure Pre-Credit Risk Mitigation

The following tables show exposures before credit risk mitigation broken down by credit exposure class and risk weights. Risk weights applied for EEA member states are applied under article 114 and hence bucketed under 0%.

Table 28: EU CR5 – Standardised approach (Pre-CRM)

Exposure classes \$'m		Risk weight (\$'m)						Total	Of which unrated
		0%	20%	50%	100%	150%	250%		
1	Central governments or central banks	8,331	0	0	0	0	6	8,337	8,337
6	Institutions	0	41,047	52	161	28	0	41,288	3,400
7	Corporates	986	0	0	14,351	0	0	15,338	15,338
16	Other items	0	0	0	628	0	0	628	628
17	Total	9,318	41,047	52	15,141	28	6	65,591	27,703

JPMBL's exposures before and post CRM as at 31st December 2019 have increased versus 31st December 2018 due to the merger between J.P. Morgan Bank Luxembourg S.A. ("JPMBL") and J.P. Morgan International Bank ("JPMIB") acted 25th January 2019, the balance sheet size and net income have gone through significant and exceptional changes.

Credit Risk Exposure Post-Credit Risk Mitigation

The breakdown of credit risk exposures (excluding counterparty credit risk) post conversion factor and post risk mitigation technique (including volatility adjustments) under the standardised approach, by exposure class, is presented in the tables below.

Table 29: EU CR5 – Standardised approach (post-CRM)

Exposure classes \$'m	Risk weight \$'m						Total	Of which unrated
	0%	20%	50%	100%	150%	250%		
1 Central governments or central banks	8,331	0	0	0	0	6	8,337	8,337
6 Institutions	0	33,826	51	43	28	0	33,949	2,874
7 Corporates	0	0	0	13,942	0	0	13,942	13,942
16 Other items	0	0	0	628	0	0	628	628
17 Total	8,331	33,826	51	14,614	28	6	56,856	25,781

JPMBL's exposures before and post CRM as at 31st December 2019 have increased versus 31st December 2018 due to the merger between J.P. Morgan Bank Luxembourg S.A. ("JPMBL") and J.P. Morgan International Bank ("JPMIB") acted 25th January 2019, the balance sheet size and net income have gone through significant and exceptional changes.

Counterparty Credit Risk Exposures

Counterparty Credit Risk Exposures Pre-Credit Risk Mitigation

The table below shows exposures at default pre credit risk mitigation technique for counterparty credit risk broken down by exposure class and risk weight.

Table 30: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (Pre-CRM)

Exposure classes	Risk weight \$'m							Total	Of which unrated
	0%	20%	50%	70%	75%	100%	Others		
1 Central governments or central banks	-	-	-	-	-	-	-	-	-
3 Public sector entities	-	-	-	-	-	-	-	-	-
6 Institutions	-	1,768	-	-	-	58	-	1,826	88
7 Corporates	-	0	-	-	-	440	-	440	440
8 Retail	-	-	-	-	-	-	-	-	-
10 Other items	-	-	-	-	-	-	-	-	-
11 Total	-	1,768	-	-	-	498	-	2,266	529

Counterparty Credit Risk Exposures Post-Credit Risk Mitigation

The table below shows exposures at default post credit risk mitigation technique (including volatility adjustments) for counterparty credit risk broken down by exposure class and risk weight.

Table 31: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (Post-CRM)

Exposure classes	Risk weight \$'m							Total	Of which unrated
	0%	20%	50%	70%	75%	100%	Others		
1 Central governments or central banks	-	-	-	-	-	-	-	-	-
3 Public sector entities	-	-	-	-	-	-	-	-	-
6 Institutions	-	152	-	-	-	58	-	210	88
7 Corporates	-	0	-	-	-	440	-	440	440
8 Retail	-	-	-	-	-	-	-	-	-
10 Other items	-	-	-	-	-	-	-	-	-
11 Total	-	152	-	-	-	498	-	650	529

11. Exposure to Market Risk (Article 445)

JPMBL's market risk profile is primarily driven by foreign-exchange risk arising from Treasury funding activities and exposure driven by the derivatives book for Wealth Management line of Business.

Table 32: EU MR1 – Market risk under the standardised approach

	\$'m	RWA's	Capital requirements
	Outright Products		
1	Interest rate risk (general and specific)	3.8	0.3
2	Equity risk (general and specific)	-	-
3	Foreign exchange risk	-	-
4	Commodity risk	5.6	0.5
	Options		
5	Simplified approach		
6	Delta-plus method	-	
7	Scenario approach	-	-
8	Securitisation (specific risk)	-	-
9	Total	9.4	0.8

As of 31st December 2019, Pillar 1 foreign exchange risk is below the reporting threshold of 2% of regulatory capital. Hence, no capital has been allocated against foreign exchange risk.

12. Operational Risk (Article 446)

Pillar 1

JPMBL calculates the operational risk capital requirement for Pillar 1 using the Basic Indicator Approach (“BIA”) as set out under Basel III. The BIA sets the required level of operational risk capital as 15% of the bank’s annual positive gross income averaged over the previous three years. In line with Article 315 of the CRR, and confirmation from the ECB in February 2020, JPMBL is using a three year projection to calculate the relevant indicator. The level applied in Pillar 1 in this ICAAP is in line with the decision from the ECB, which implies that the Pillar 1 operational risk is known in advance until 2022 and won’t be updated during this period with new revenues projection. It is matching the ECB decision in its February 2020 letter.

Table 33: Risk Weighted Assets for Operational Risk

Basic indicator Approach	\$'m
Total RWA	2,513

Pillar 2

JPMBL uses an internal approach to calculate operational risk capital under Pillar 2 leveraging an operational risk scenario analysis framework.

Operational risk scenarios focus on exceptional but plausible operational risk events which may or may not have previously impacted JPMBL. Such operational risk events result from inadequate or failed internal processes or systems, human factors, or due to external events. They include legal risk and regulatory fines and exclude business strategy and reputational risk. The scenario analysis process is an important tool for assessing the operational risk exposure, thereby providing a forward looking view to the Board and senior management of potential future losses based on the risk profile of JPMBL.

The outputs from the scenario analysis process is used as an input into the Capital Model to derive the Operational Risk Capital for JPMBL.

13. Exposure to Interest Rate Risk on Positions Not Included In The Trading Book (Article 448)

JPMBL's exposure to Interest Rate Risk on non-trading book positions is monitored through Economic and Earnings based measures and is in line with ECB guidance. In particular, the instantaneous impact of a +/- 200bp parallel shock in interest rates on the economic value of the non-trading books is estimated for JPMBL, as defined within the scope of the Interest Rate Management policy. Impact of the +/- 200bp shock on the economic value of JPMBL non-trading book and Net Interest Income is assessed on monthly basis.

The impact of 200bps parallel rates increase and decrease on the economic value and net interest income of JPMBL has been estimated at December 31, 2019; the results for Economic Value Sensitivity (EVS) and Earnings-at-Risk (EaR) are in the table below.

Table 34: Interest Rate Risk in the Banking Book

	Non Trading +200bp Economic Impact (\$'m)	Non Trading -200bp Economic Impact (\$'m)
USD	(58.363)	(132.966)
EUR	445.935	(99.796)
Other	(126.644)	(163.073)
Total*	260.927	(395.836)

* Includes EBA floor and 50% haircut on currencies with positive results

	Non Trading +200bp Earnings Impact (\$'m)	Non Trading -200bp Earnings Impact (\$'m)
USD	127.669	(189.491)
EUR	104.419	(20.739)
Other	21.091	4.879
Total	253.179	(205.351)

14. Remuneration (Article 450)

Background

This section sets out the remuneration disclosures required under Article 450 of CRR and clause 16 (1) of the Requirements for the Compensation in Financial Institutions in relation to JPMBL and in respect of the remuneration period (“Performance Year”) ending December 31, 2019.

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

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

Additional qualitative disclosures specific to the Company

The Bank complied with the applicable remuneration requirements of CRD IV, as implemented by the Amendments of 23 July 2015 to the Law of 5 April 1993 on the financial sector (“LFS”) and CSSF Circulars 17/658, 15/622 and 10/437 and (the “Remuneration Rules”). The following additional disclosures should therefore be read in conjunction with the EMEA Remuneration Policy Disclosure:

- In accordance with the Remuneration Rules, JPMBL has established a local Remuneration Committee (“the Committee”) formed of three non-executive members of the Board of Directors of the Bank.
- The Committee reviews the remuneration policy applicable to the Bank (the “Remuneration Policy”) on an annual basis, recommends it to the Board for adoption, and oversees its implementation. The Committee last reviewed the Remuneration Policy that applied for the 2019 Performance Year in June 2019 with no material changes and was satisfied with its implementation.
- The Committee held four meetings in respect of the 2019 Performance Year, including meeting in January 2020 to consider the outcomes of the 2019 Year-End compensation review in respect of its CRD IV Identified Staff (as defined below).
- The Bank 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 (Commission Delegated Regulation (EU) No 604/2014) to identify those roles which could potentially have a material impact on the risk profile of the Company (“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 CRD IV Identified Staff are notified of their status and the impact on their remuneration structure.
- JPMBL’s Risk and Compliance functions are involved in the review of the remuneration policy, including reviewing the Bank’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 Remuneration Committee.
- The Bank has obtained the relevant shareholder approval in accordance with Article 94(1)g of CRD IV (as implemented by CSSF Circular 15/662) to pay its CRD IV Identified Staff a maximum ratio of fixed to variable compensation of 1:2. This approval was last received on 18 September 2019 with 100% of shareholders represented and a unanimous vote in favour.
- The compensation structure that applied to relevant CRD IV Identified Staff was as follows:
 - At least 40% of IC is deferred, rising to a minimum of 60% where (i) IC is EUR 500,000 or more; or (ii) the individual is an executive member of the Board.

- The deferral period is at least three years, with vesting generally in three equal tranches on or around the anniversaries of the grant date.
- For CRD IV Identified Staff who are executive members of the Board or Senior Management, the deferral period is at least five years, with vesting in five equal tranches on or around the anniversaries of the grant date.
- At least 50% of IC (both deferred and non-deferred) is awarded as Retained Stock or Restricted Stock Units (“RSUs”).
- Retained Stock and relevant RSUs are subject to a twelve month, post-vesting retention period during which the underlying J.P. Morgan shares acquired may not be sold, pledged, assigned or transferred to a private brokerage account.
- For awards in respect of the 2017 Performance Year onwards, individuals are not entitled to receive or accrue dividend-equivalent payments on relevant RSUs until vesting.
- All IC is subject malus and clawback provisions which reflect the requirements of the Remuneration Rules, in addition to the firmwide recovery provisions and the Bonus Recoupment Policy.

Quantitative Disclosures

All staff

The table below shows the total compensation paid by JPMBL to its staff for the 2019 Performance Year.

Table 35: All staff

In EUR thousands	Fixed Compensation	Variable Compensation	Total Compensation
All staff	184,724	72,862	257,586

CRD IV Identified Staff

The following quantitative disclosures relate to the Bank’s “CRD IV Identified Staff” being those staff whose professional activities have a material impact on the Bank’s risk profile, as described above.

In preparation of these disclosures, JPMBL has taken into account its obligations to individuals under applicable EU and local data protection law. In light of these considerations, the Bank has concluded that it is appropriate to aggregate the compensation information in some areas.

Table 36: Breakdown by Business Area

In EUR thousands	Total Compensation 2019	Number of Identified Staff
Management Body and Senior Management ⁶	6,210	11
Wealth Management	44,708	38
Independent Control Functions	4,901	13
Other CRD IV Identified Staff	5,611	13
Total	61,431	75

⁶ Includes both Executive and Non-Executive members of the Board and JPMBL’s Authorised Managers.

Table 37: Breakdown of Total Compensation

In EUR thousands	Fixed Compensation 2019 (Cash)	Variable Compensation in respect of 2019			
		Upfront Cash	Upfront Equity	Deferred Cash	Deferred Equity
Management Body and Senior Management	3,273	449	364	109	2,017
Wealth Management	21,852	4,989	4,497	908	12,463
Independent Control Functions	3,056	871	285	152	538
Other CRD IV Identified Staff	3,429	957	441	80	704
Total	31,609	7,265	5,587	1,248	15,722

Table 38: Analysis of Deferred Compensation

In EUR thousands	Outstanding as at 1 January 2019 ⁷	Awarded during 2019	Paid out during 2019	Adjusted ex-post		Forfeited during 2019	Outstanding as at 31 December 2019	
				Explicit	Implicit ⁸		Unvested	Vested
Equity-based								
Management Body and Senior Management	5,821	2,160	(3,046)	-	2,365	-	7,299	-
Wealth Management	34,372	11,423	(15,141)	-	15,771	-	38,377	8,048
Independent Control Function	1,603	722	(956)	-	657	-	2,027	-
Other CRD IV Identified Staff:	889	826	(551)	-	513	-	1,676	-
Cash-based								
Management Body and Senior Management	108	135	(53)	-	3	-	193	-
Wealth Management	205	-	(159)	-	1	-	47	-
Independent Control Function	110	54	(47)	-	2	-	119	-
Other CRD IV Identified Staff:	2	25	(2)	-	-	-	25	-

Guarantees, Sign-on and Severance Payments

In EUR thousands	Severance		
	Number of Identified Staff	Made during the year	Highest award to a single person
Management Body and Senior Management	2	462	274
Other CRD IV Identified Staff	2	559	308
Total	4	1,021	308

No guaranteed variable remuneration payments were made to CRD IV Identified Staff for the 2019 Performance Year.

2019 Total Compensation for CRD IV Identified Staff Earning at least EUR 1 Million

2019 Total Compensation Bands	Number of Identified Staff
€1,000,000 to €1,500,000	11

⁷ All outstanding deferred awards are subject to malus and clawback provisions as set out in the most recent EMEA Remuneration Policy Disclosure

⁸ The value of RSUs fluctuates with the value of the Firm's stock; the value of Deferred Cash awards fluctuates with the applicable interest rate.

Over €1,500,001	7
Total	18

15. Leverage (Article 451)

The leverage ratio is a measure of Tier 1 capital as a percentage of exposure as defined under the CRR rules.

The requirement for the calculation and reporting of leverage ratios was introduced as part of CRD IV in 2014, and amended by the European Commission Delegated Act (EU) 2015/62 in 2015.

As a result of this, CRD IV legislation allows for the calculation of a transitional leverage ratio aligned to the phasing in of a number of capital deductions and the phasing out of grandfathered instruments as allowed for the calculation of own funds under the CRR. CRD IV does not currently include a minimum Leverage Ratio requirement; however, the Basel Committee on Banking Supervision (the 'Basel Committee') has indicatively proposed a minimum requirement of 3%.

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 deleveraging will be low.

The Firm has adopted a point-in-time calculation of the leverage ratio, as per Commission Delegated Regulation 2015/62.

The information represented in the tables below constitutes the key applicable data elements for leverage identified in Title VII of the EBA Guidelines.

Table 39: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

LRSum: Leverage Ratio Summary Reconciliation		\$'m
1	Total assets as per financial statements	55,800
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	-
4	Adjustments for derivative financial instruments	347
5	Adjustment for securities financing transactions (SFTs)	(0)
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	693
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	-
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	-
7	Other adjustments	3
8	Leverage ratio total exposure measure	56,843

Table 40: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

LRSpI: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)		\$'m
EU-1	Total on-balance sheet exposures (exc. Derivatives, SFTs and exempted exposures), of which:	53,903
EU-3	Banking book exposures, of which:	53,903
EU-5	Exposures treated as sovereigns	8,337
EU-7	Institutions	31,590
EU-10	Corporate	13,348
EU-12	Other exposures (e.g. equity, securitisations and other non-credit obligation assets)	628

Table 41: Leverage Ratio Common Disclosure

LRCom: Leverage Ratio Common Disclosure		\$'m
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	53,903
2	(Asset amounts deducted in determining Tier 1 capital)	(28)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	53,875
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	173
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	481
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(4)
9	Adjusted effective notional amount of written credit derivatives	537
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(537)
11	Total derivatives exposures (sum of lines 4 to 10)	649
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	1,622
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	1,622
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	1,990
18	(Adjustments for conversion to credit equivalent amounts)	(1,297)
19	Other off-balance sheet exposures (sum of lines 17 and 18)	693
Capital and total exposure measure		
20	Tier 1 capital	4,794
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	56,843
Leverage ratio		
22	Leverage ratio	8.43%

16. Use of Credit Risk Mitigation Techniques (Article 453)

Credit Risk Mitigation Techniques

To reduce capital requirements exposures can be secured by collateral, financial guarantees or credit derivatives. JPMBL has historically secured some of its exposures with the group by collateral in the context of secured lending transactions.

As of 31st December 2019 JPMBL uses collateral as credit risk mitigation for its on Balance-Sheet Reverse Repo exposures and on the guarantees provided to its clients in the context of Agency Lending transactions.

As part of its management of credit and counterparty 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 efficient use of capital in compliance with the applicable regulations. This is accomplished through a number of means including receipt of collateral, master netting agreements, guarantees and other risk-reduction techniques.

Where possible, the Firm seeks to mitigate its credit risk exposures arising from derivative transactions through the use of legally enforceable master netting arrangements and collateral agreements.

The Firm seeks to mitigate its credit risk exposures through the use of legally enforceable master netting arrangements. These master agreements allow for netting of credit risk exposure to a counterparty resulting from transactions against the Group's obligations to the counterparty in the event of default, to produce lower net credit exposure. Similarly to CCF, Netting Confidence Factor (NCF) is assigned to each jurisdiction/institution type where the Firm has obtained a legal opinion on the enforceability of the master trading agreement to close-out all governed transactions on a net basis in the event of a default (i.e. at a single legal claim). If the NCF is lower than 100%, no netting benefit is given.

Collateral Valuation and Management

The Firm's policies for collateral valuation and management are representative of industry standards and best practices. The fair value of the collateral is monitored daily. Full market value is not given to marketable assets accepted as collateral (apart from cash) in recognition of the fact that collateral is subject to price volatility and liquidity. A standard valuation reduction percentage (haircut) is applied to each asset class to mitigate the potential price decline of the collateral thereby covering volatility during the cure period. In addition, a Collateral Confidence Factor ("CCF") is assigned to each jurisdiction where the Firm has obtained a legal opinion on collateral enforceability. Any changes to CCFs require approval by Legal department. If the CCF is lower than 95% then, although J. P. Morgan would strictly have legal rights to collateral, conservatively no benefit is given to collateral in the exposure calculation for the purposes of capital requirements.

The Firm has internal policies in place relating to the type of acceptable collateral. Cash and high quality bonds are generally considered acceptable collateral.

Main Types of Collateral

Securities Financing Transactions

JPMBL exposure to other JPM entities is subject to capital charges. To offset exposures generated JPMBL may periodically enter into reverse repo transactions with the group. As at 31st December 2019 there are reverse repo transactions in place with JPMBC N.A., London Branch for US\$1,614mm.

The reverse repo transactions is executed under a Global Master Repurchase Agreement ("GMRA"), with variation margin posted bilaterally where the remaining exposure, post collateral, exceeded a predetermined threshold. From a capital perspective, the credit exposure was calculated using the Financial Collateral Comprehensive Method under the CRR, applying regulatory volatility haircuts to the collateral market values.

As at 31st December 2019, 100% of the collateral which JPMBL held from JPMBC N.A., London Branch was in United States Treasury Securities.

Agency Securities Lending

JPMBL has credit risk exposure arising from its agency Securities Lending activities and is using client collateral as a CRM technique to reduce its exposure. Acting as an Agent Lender JPMBL is required to meet the obligations laid down in the Securities Lending Agreement: If a borrower or a repo counterparty default were to occur, JPMBL, will liquidate respectively the collateral held and buy the securities lent so that it can return them to the lender / the asset purchased as part of the repo transaction and return the cash to the lender. If the value received from the collateral/ purchased asset is not sufficient to cover the cost to buy the securities / the cash value, JPMBL through its indemnity to the lending client, is responsible for compensating the client for the shortfall.

From a capital perspective, the credit exposures are calculated using the Financial Collateral Comprehensive Method under the CRR, applying regulatory volatility haircuts to the collateral market values.

Table 42: EU CR3 - CRM techniques

\$'m		Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	58,902	9,530	9,530	-	-

2	Total exposures	58,902	9,530	9,530	-	-
---	-----------------	--------	-------	-------	---	---

Exposure secured by collateral represents an exposure to credit institutions only.

As of 31st December 2019 JPMBL has no financial guarantees or credit derivatives used as credit risk mitigation items for its exposures.

17. Liquidity Risk (Article 435 (1) (f))

Liquidity Risk is the risk that J.P. Morgan Bank Luxembourg S.A. 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.

The JPMBL Board has ultimate responsibility for liquidity risk within the entity. The Board reviews and establishes an appropriate level of liquidity risk appetite, and it also reviews and periodically approves relevant frameworks and policies that specify how liquidity risk is managed in relation to the entity.

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

Liquidity Risk Oversight

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

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

Liquidity management

Treasury and CIO is responsible for liquidity management. The primary objectives of effective liquidity management are to:

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

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

- Optimize 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, 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.

The JPMBL board has mandated the JPMBL Treasurer to manage the liquidity management and funding of JPMBL.

Risk Governance and Measurement

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

The specific committees responsible for JPMBL liquidity governance include the EU Asset Liability Committee ("EU ALCO") and the JPMBL Board Risk Committee.

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 JPMorgan Chase & Co. and the Firm's material legal entities on a regular basis, and other stress tests are performed in response to specific market events or concerns.

Liquidity stress tests assume all of the 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 stresses. 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 Firm's contingency funding plan ("CFP"), which is approved by the firmwide ALCO and the Board Risk Committee, 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 emerging risks or vulnerabilities in the Firm's liquidity position. The CFP identifies the alternative contingent funding and liquidity resources available to the Firm and its legal entities in a period of stress.

Internal Liquidity Adequacy Assessment Process

Annually, JPMBL completes the Internal Liquidity Adequacy Assessment Process ("ILAAP"), which provides management with an assessment of the adequacy of JPMBL liquidity resources to cover liabilities as they fall due in a range of stressed conditions. Stress scenarios cover both market and idiosyncratic events. The ILAAP details how JPMBL measures, manages and monitors its liquidity and funding risks against prescribed key liquidity risk drivers, the governance model employed and a forward looking liquidity and funding forecast consistent with the entity's business plan. 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 approved by the JPMBL Board.

Liquidity risk reporting and measurement system

JPMBL 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)

The Liquidity Coverage Ratio⁹ as per the Commission Delegated Regulation (EU) 2015/61 requires credit institutions to maintain an amount of unencumbered high quality liquid assets that is sufficient to meet their estimated total net cash outflows over a prospective 30 calendar-day period of significant stress.

The LCR disclosure in this document 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).

Table 43: EU LIQ1 – Quantitative information of LCR for JPMBL

Currency and units: \$'m		Total unweighted value (average)				Total weighted value (average)			
Reference date:		31-Dec-19	30-Sep-19	30-Jun-19	31-Mar-19	31-Dec-19	30-Sep-19	30-Jun-19	31-Mar-19
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS									
1	Total high-quality liquid assets (HQLA)					7,966	6,791	5,758	4,705
CASH-OUTFLOWS									
2	Retail deposits and deposits from small business customers, of which:	5,484	4,082	2,711	1,362	958	717	475	239
3	<i>Stable deposits</i>	67	50	35	17	3	3	2	1
4	<i>Less stable deposits</i>	5,417	4,032	2,676	1,345	955	714	474	238
5	Unsecured wholesale funding	38,511	33,566	28,104	22,506	17,502	15,651	13,419	11,029
6	<i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	22,950	20,067	16,681	13,523	5,738	5,017	4,170	3,381
7	<i>Non-operational deposits (all counterparties)</i>	15,561	13,499	11,423	8,983	11,764	10,635	9,248	7,648
8	<i>Unsecured debt</i>	-	-	-	-	-	-	-	-
9	Secured wholesale funding					4	3	0	0
10	Additional requirements	582	427	287	157	314	220	140	72
11	<i>Outflows related to derivative exposures and other collateral requirements</i>	283	197	124	63	283	197	124	63
12	<i>Outflows related to loss of funding on debt products</i>	-	-	-	-	-	-	-	-
13	<i>Credit and liquidity facilities</i>	298	230	164	93	30	23	16	9
14	Other contractual funding obligations	57	43	30	18	-	-	-	-
15	Other contingent funding obligations	10,306	7,749	5,459	3,265	369	1	1	1
16	TOTAL CASH OUTFLOWS					19,147	16,592	14,035	11,341
CASH-INFLOWS									
17	Secured lending (eg reverse repos)	1,159	925	643	364	13	10	4	1
18	Inflows from fully performing exposures	21,514	18,266	15,353	11,604	18,335	15,880	13,817	10,849
19	Other cash inflows	6,148	5,007	3,454	2,350	1,262	1,027	707	475
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					-	-	-	-
EU-19b	(Excess inflows from a related specialised credit institution)					-	-	-	-
20	TOTAL CASH INFLOWS	28,821	24,199	19,450	14,318	19,609	16,917	14,527	11,325

⁹ In line with the EBA guidelines the average ratio disclosed in Table 43 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'.

EU-20a	Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b	Inflows Subject to 90% Cap	-	-	-	-	-	-	-	-
EU-20c	Inflows Subject to 75% Cap	28,821	24,199	19,450	14,318	19,609	16,917	14,527	11,325

21	LIQUIDITY BUFFER					7,966	6,791	5,758	4,705
22	TOTAL NET CASH OUTFLOWS					4,787	4,148	3,509	2,835
23	LIQUIDITY COVERAGE RATIO (%)					166%	163%	165%	170%

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.

JPMBL's average LCR was 166% for the year ending on 31st December 2019.

Concentration of funding and liquidity sources

JPMBL's HQLA primarily consists of unencumbered cash and certain high quality liquid securities as defined in the LCR rule. JPMBL funds its balance sheet through capital and operational and non-operational deposits.

Currency mismatch in the LCR

The currency composition of JPMBL's liquidity buffer is broadly matched with that of its net outflows for potential short term stress periods. Stress results are monitored for each significant currency.

18. Bank Recovery and Resolution Directive

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

Pursuant to the disclosure requirements under Part Eight of the CRR as further articulated in the EBA Guidelines JPMBL has not entered into any group financial support agreement.

19. Disclosures Not Applicable as of 31st December 2019

The following Articles of CRR are not applicable to JPMBL as at December 31, 2019:

- Indicators of global systemic importance (Article 441);
- Exposure to equities not included in the trading book (Article 447);
- Exposure to securitization positions (Article 449);
- Use of the IRB Approach to credit risk (Article 452);
- Use of the Advanced Measurement Approaches to operational risk (Article 454);
- Use of Internal Market Risk Models (Article 455).

20. Glossary of Acronyms

ACL	Allowance for Credit Losses
ALCO	Assets and Liabilities Committee
AML	Anti Money Laundering
AT1	Additional Tier 1
BCBS	Basel Committee on Banking Supervision
BCL	Banque Centrale de Luxembourg
BOCA	Booking Office Country Approach
BoD	Board of Directors
BRC	Board Risk Committee
CCDR	Comprehensive Capital Analysis and Review
CCF	Credit Conversion Factor
CCOR	Compliance, Conduct, and Operational Risk
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CFP	Contingency Funding Plan
CFO	Chief Financial Officer
CoRep	Corporate Reporting
CRD IV	Capital Requirements Directive IV
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CSSF	Commission de Surveillance du Secteur Financier
CVA	Credit Valuation Adjustment
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
EBA GL2	EBA Final Report on Guidelines for Disclosure under Part Eight of Regulation (EU) No 575/2013 Version 2 published 16th December 2016
ECAI	External Credit Assessment Institutions
ECL	Expected Credit Losses
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
ICRD	Interactive Credit Risk Dashboard
ILAAP	Internal Liquidity Adequacy Assessment Process
IRR	Interest Rate Risk
IRRBB	Interest Rate Risk in the Banking Book
JPM	J.P. Morgan

JPMAG	J.P. Morgan AG
JPMBL	J.P. Morgan Bank Luxembourg S.A.
JPMBL MC	Management Committee
JPMC	J.P. Morgan Chase & Co.
JPMIG	J.P. Morgan International Bank
LCR	Liquidity Coverage Ratio
LDA	Loss Distribution Approach
LGD	Loss Given Default
LIOC	Local Infrastructure Operating Committee
LOB	Line of Business
LORCC	Location Operational Risk and Control Committee
LRF	Local Risk Forum
MRO	Market Risk Officer
NBDA	New Business Deal Approval
NBIA	New Business Initiatives Approvals
ORMF	Operational Risk Management Framework
O-SII	Other Systemically Important Institution
OTC	Over The Counter
PD	Probability of Default
RCSA	Risk & Control Self-Assessment
ROC	JPMBL Risk Oversight Committee
RWA	Risk Weighted Assets
TAG	Transaction Approval Group
TS	Treasury Services
VaR	Value at Risk
WM	Wealth Management