

Pillar 3 Annual Disclosure Report as at 31st December 2018

J.P. Morgan Bank Luxembourg S.A.

Table of Contents

1. Introduction.....	4
2. Risk Management and Objectives (Article 435)	5
3. Own Funds (Article 437)	20
4. Capital Requirements (Article 438)	23
5. Exposure to Counterparty Credit Risk (Article 439).....	24
6. Countercyclical Capital Buffers (Article 440)	25
7. Credit Risk Adjustments (Article 442).....	26
8. Encumbered Assets (Article 443).....	32
9. Use of External Credit Assessment Institutions (Article 444).....	33
10. Exposure to Market Risk (Article 445)	35
11. Operational Risk (Article 446)	36
12. Exposure to Interest Rate Risk on Positions Not Included In The Trading Book (Article 448).....	37
13. Remuneration (Article 450)	38
14. Leverage (Article 451)	41
15. Use of Credit Risk Mitigation Techniques (Article 453).....	42
16. Liquidity Risk (Article 435 (1) (f))	44
17. Bank Recovery and Resolution Directive	48
18. Disclosures Not Applicable as of 31 st December 2018	48
19. Glossary of Acronyms.....	49

List of Tables

Table 1: CRD IV Regulatory Capital.....	20
Table 2: Reconciliation of Regulatory Own Funds to Balance Sheet.....	21
Table 3: Main Features of Regulatory Capital Instruments.....	22
Table 4: EU OV1 - Overview of RWAs.....	23
Table 5: EU OV1 additional - Overview of RWAs by exposure class.....	23
Table 6: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer.....	25
Table 7: Amount of Institution-Specific Countercyclical Capital Buffer.....	25
Table 8: EU CRB-B - Total and average net amount of exposures.....	26
Table 9: EU CRB-C - Geographical breakdown of exposures.....	27
Table 10: EU CRB-D - Concentration of exposures by industry or counterparty types.....	27
Table 11: EU CRB-E - Geographical breakdown of exposures.....	28
Table 12: EU CR1-A – Credit quality of exposures by exposure class and instrument.....	28
Table 13: EU CR1-B – Credit quality of exposures by industry or counterparty types.....	29
Table 14: EU CR1-C - Credit quality of exposures by geography.....	29
Table 15: EU CR1-E – Non-performing and forborne exposures.....	30
Table 16: Encumbered assets.....	32
Table 17: Collateral received.....	32
Table 18: Encumbered assets/collateral received and associated liabilities.....	32
Table 19: EU CR4 - Standardised approach – Credit risk exposure and CRM effects.....	34
Table 20: EU CR5 – Standardised approach (Pre-CRM).....	34
Table 21: EU CR5 – Standardised approach (post-CRM).....	34
Table 22: EU MR1 – Market risk under the standardised approach.....	35
Table 23: Risk Weighted Assets for Operational Risk.....	36
Table 24: Interest Rate Risk in the Banking Book.....	37
Table 25: All staff.....	39
Table 26: Breakdown by Business Area.....	39
Table 27: Breakdown of Total Compensation.....	40
Table 28: Analysis of Deferred Compensation.....	40
Table 29: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures.....	41
Table 30: Leverage Ratio Common Disclosure.....	41
Table 31: EU CR3 - CRM techniques.....	43
Table 32: Items prone to rapid change as defined in EBA GL/2017/01.....	47

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

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 2018. All data is recorded as at 31st December 2018, consistent with Common Reporting (“CoRep”) reporting and produced on an audited basis. 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.

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 2018, JPMBL has six branches respectively located in:

- Amsterdam (J.P. Morgan Bank Luxembourg S.A., Amsterdam Branch),
- Oslo (J.P. Morgan Bank Luxembourg S.A., Oslo Branch),
- Copenhagen (J.P. Morgan Bank Luxembourg S.A., Copenhagen Branch),
- Helsinki (J.P. Morgan Bank Luxembourg S.A., Helsinki Branch),
- Stockholm (J.P. Morgan Bank Luxembourg S.A., Stockholm Branch),
- Dublin (J.P. Morgan Bank Luxembourg S.A., Dublin Branch).

Means of Disclosure (Article 434)

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

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

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

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

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

⁵Capital Requirements Directive

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. When the Firm extends a consumer or wholesale loan, advises customers on their investment decisions, makes markets in securities, or offers other products or services, the Firm takes on some degree of risk. The Firm's overall objective is to manage its 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 strives for continual improvement through efforts to enhance controls, ongoing employee training and development, talent retention, and other measures. The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight. The impact of risk and control issues are carefully considered in the Firm's performance evaluation and incentive compensation processes.

Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management involves understanding drivers of risks, risk types, and impacts of risks.

Drivers of risk include, but are not limited to, the economic environment, regulatory or government policy, competitor or market evolution, business decisions, process or judgment error, deliberate wrongdoing, dysfunctional markets, and natural disasters.

The Firm's risks are generally categorized in the following four risk types:

- **Strategic risk** is the risk associated with the Firm's current and future business plans and objectives, including capital risk, liquidity risk, business risk, excessive leverage risk and the impact to the Firm's reputation.
- **Credit and investment risk** is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk, wholesale credit risk, and investment portfolio 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.
- **Operational risk** is the risk associated with inadequate or failed internal processes, people and systems, or from external events and includes compliance risk, conduct risk, legal risk, and estimations and model risk.

There may be many consequences of risks manifesting, including quantitative impacts such as reduction in earnings and capital, liquidity outflows, and fines or penalties, or qualitative impacts, such as reputation damage, loss of clients, and regulatory and enforcement actions.

The Firm's overall appetite for risk is governed by a "Risk Appetite" framework. The framework and the Firm's risk appetite are set and approved by the Firm's Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO") and Chief Risk Officer ("CRO"). LOB-level risk appetite is set by the respective LOB CEO, CFO and CRO and is approved by the Firm's CEO, CFO and CRO. Quantitative parameters and qualitative factors are used to monitor and measure the Firm's capacity to take risk consistent with its stated risk appetite. Quantitative parameters have been established to assess select strategic risks, credit risks and market risks. Qualitative factors have been established for select operational risks, and for reputation risks. Risk Appetite results are reported quarterly to the Board of Directors' Risk Policy Committee ("DRPC").

JPMBL Risk Management Framework

JPMBL has established an end-to-end risk management framework and governance structure to support effective risk management in line with supervisory expectations. The JPMBL Risk Management Framework leverages the Firmwide approach whilst also capturing Legal Entity

specific considerations. The framework is documented in policies and procedures and is reviewed and enhanced on a regular basis to reflect changes in JPMBL strategy, changes to the Firm's risk management framework and new or enhanced regulatory requirements.

JPMBL maintains a philosophy of strong corporate governance. Key participants include:

- JPMBL Board of Directors who own the risk appetite of the Bank;
- JPMBL Authorized Management delegated by the Board to perform the day-to-day management of the Bank;
- JPMBL Internal Control functions.

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. Each LOB is represented by a member of the JPMBL Authorized Management.

Exhibit 1: JPMBL Three Line of Defence

<u>First Line of Defence</u>	<u>Second Line of Defence</u>	<u>Third Line of Defence</u>
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 Bank uses a Risk & Control Self-Assessment ("RCSA") process to achieve this. 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. Additional meetings are arranged if deemed necessary by the Committee. The BRC is now 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 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 (“ICAAP”) 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.

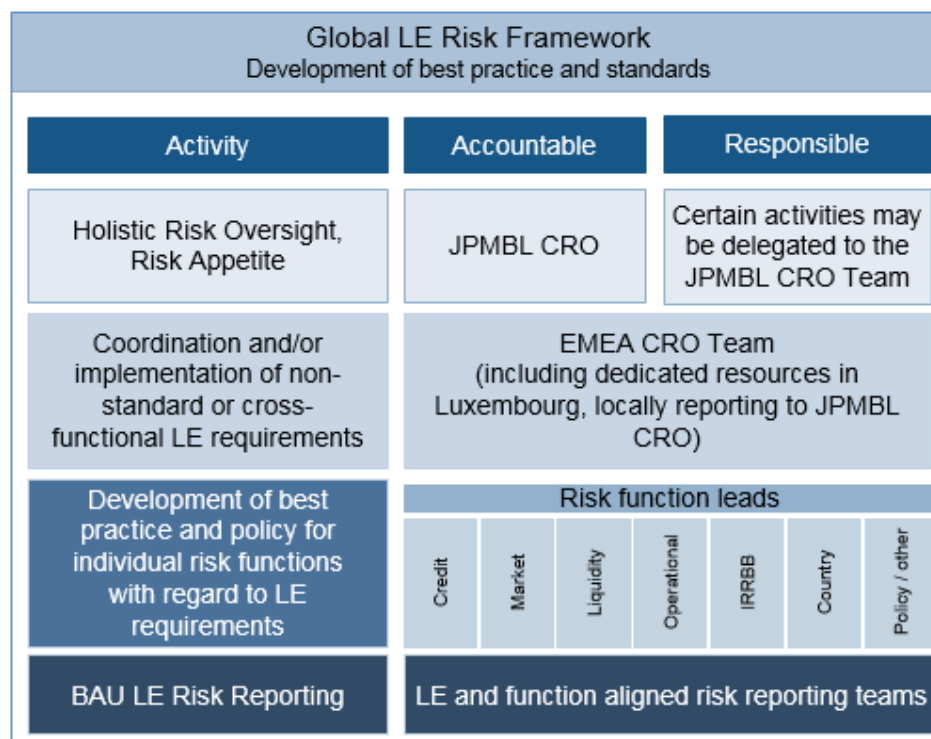
The JPMBL CRO, an Authorized Manager and member of the JPMBL MC, is a permanent attendee of the JPMBL BRC and is accountable for the oversight of risk within JPMBL. The JPMBL CRO chairs the JPMBL ROC, a second line of defence risk committee responsible for overseeing all risks impacting JPMBL and its branches. The JPMBL ROC is a dedicated forum for in-depth discussion of risks facing the entity, including monitoring of JPMBL risk indicators against risk appetite parameters. The JPMBL ROC can escalate any issues directly to the JPMBL MC, to the JPMBL BRC and to the regional EMEA Risk Committee via the JPMBL CRO.

Links to regional and firm-wide risk governance

J.P. Morgan’s risk governance structure is based on the principle that each LOB is responsible for managing the risk inherent in its business, albeit with appropriate corporate oversight. Each LOB risk committee is responsible for decisions regarding the business risk strategy, policies (as appropriate) and controls. Therefore, each LOB within JPMBL forms part of the Firmwide risk governance structure. To complement the global LOB 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 EMEA branches of ex-EMEA firms.
- The ERC is accountable to the EMEA Management Committee (“EMC”). It reports to the Firmwide Risk Committee (“FRC”) and the HR Control Forum, in addition to the EMC.
- 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.

In addition to regional Risk Governance, JPMBL leverages the Global Legal Entity Risk Framework, as described below:



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 (incl. Credit Concentration Risk and Intraday Credit Risk), Operational Risk, Interest Rate Risk in the Banking Book (“IRRBB”), Business and Strategic Risk (incl. Group Risk) and Reputation 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. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. In its consumer businesses, the Firm is exposed to credit risk primarily through its home lending, credit card, auto, and business banking businesses. In its wholesale businesses, the Firm is exposed to credit risk through its underwriting, lending, market-making and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as cash management and clearing activities), securities financing activities, investment securities portfolio, and cash placed with banks.

Credit Risk Organization

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

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

The Firm has developed policies and practices that are designed to preserve the independence and integrity of 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.

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. The approval is recorded in the interactive Credit Risk Dashboard (“iCRD”) Proposals tool along with details of individual credit limits. 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, 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

The following sections detail the market risk management framework at both the Firmwide and JPMBL level.

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

Risk Governance & Policy Framework

The 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 the Company's market risk limit framework (limit levels, limit signatories, limit reviews and escalation)

The JPMBL BoD via the JPMBL MC approves non-substantive changes in this Framework. The BoD approves this Framework annually.

Risk Measurement

There is no single measure to capture market risk and therefore the Firm uses various metrics both statistical and non-statistical to assess risk. As the appropriate set of risk measures utilized for a given business activity depends on business mandate, risk horizon, materiality, market volatility and other factors, not all measures are used in all cases.

VaR

The Firm utilizes Value-at risk ("VaR"), a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment. The Firm has a single VaR framework used as a basis for calculating Risk Management VaR. The framework is employed across the Firm using historical simulation based on data for the previous 12 months. Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level.

Stress Testing

Along with VaR, stress testing is an important tool in measuring and controlling risk. While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behaviour as an indicator of losses, stress testing is intended to capture the Firm's exposure to unlikely but plausible events in abnormal markets. The Firm runs weekly stress tests on market-related risks across the lines of business using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates or commodity prices.

The Firm and JPMBL use a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. For example, certain scenarios assess the potential loss arising from current exposures held by the Firm due to a broad sell off in bond markets or an extreme widening in corporate credit spreads. The flexibility of the stress testing framework allows risk managers to construct new, specific scenarios that can be used to form decisions about future possible stress events.

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 and trends based on current market risk positions are included in the JPMBL Daily Legal Entity Market Risk Summary reported to the JPMBL's market risk 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.

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

Other Non-statistical measures

Aside from VaR and stress testing, other specific risk measures are also utilized within specific market context and aggregated across businesses as required.

JPMBL has risk monitoring capability across all the main benchmark market risk sensitivities (Equity, Credit, Rates, FX and Commodities).

Risk Monitoring and Control

Limits

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

JPMBL Senior management, including the CEO, CRO and Market Risk Management are responsible for reviewing and approving limits on an ongoing basis.

Limit breaches are required to be reported in a timely manner to limit signatories. Market Risk Management and senior management as appropriate determine the course of action required to return to compliance, such as a reduction in risk and in exceptional circumstances the granting of a temporary increase in limits. JPMBL aged and significant limit breaches are escalated to the JPMBL Management Committee and EMEA Risk Committee.

JPMBL limits include VaR, Stress and non-statistical limits defined both at the legal entity level and at the LOB/Business Area level. Market Risk reviews all JPMBL market risk limits at least semi-annually. Limit reviews appropriately consider the underlying trading, investing and hedging strategies of the business. Limits that have not been reviewed within a specified time period by Market Risk Management are escalated to senior management.

Risk Reporting

JPMBL has its own set of regular market risk reports and where applicable, comprises of granular market risk metrics which provide transparency into potential risk concentrations. Limit utilizations and notifications of market risk limit breaches are documented and sent to appropriate limit signatories daily.

Operational Risk

Operational risk is the risk associated with inadequate or failed internal processes, people and systems, or from external events and includes compliance risk, conduct risk, legal risk, 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. These events could result in financial losses, litigation and regulatory fines, as well as other damages to the Firm. The goal is to keep operational risk at appropriate levels in light of the Firm's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates.

Firmwide Operational Risk Management Framework

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

Governance

The lines of business and Corporate are responsible for applying the ORMF in order to manage the operational risk that arises from their activities. The Control Management organization, which consists of control managers within each line of business and Corporate, is responsible for the day-to-day execution of the ORMF.

Line of business and Corporate control committees are responsible for reviewing data that indicates the quality and stability of processes, addressing key operational risk issues, focusing on processes with control concerns, and overseeing control remediation. These committees escalate operational risk issues to the Firmwide Control Committee ("FCC"), as appropriate.

The Firmwide Risk Executive for Operational Risk Management ("ORM"), a direct report to the CRO, is responsible for defining the ORMF and establishing minimum standards for its execution. Operational Risk Officers report to both the line of business CROs and to the Firmwide Risk Executive for ORM, and are independent of the respective businesses or corporate functions they oversee.

The Firm's Operational Risk Management Policy is approved by the DRPC. This policy establishes the Operational Risk Management Framework for the Firm.

Operational Risk Identification and Assessment

The Firm utilizes a structured risk and control self-assessment process which is executed by the lines of business and Corporate in accordance with the minimum standards established by ORM, to identify, assess, mitigate and manage its operational risk. As part of this process, lines of business and Corporate identify key operational risks inherent in their activities, address gaps or deficiencies identified, and define actions to reduce residual risk. Action plans are developed for identified control issues and lines of business and Corporate are held accountable for tracking and resolving issues in a timely manner. Operational Risk Officers independently challenge the execution of the self-assessment and evaluate the appropriateness of the residual risk results.

In addition to the self-assessment process, the Firm tracks and monitors events that have led to or could lead to actual operational risk losses, including litigation-related events. Responsible lines of business and Corporate analyse their losses to evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where targeted remediation efforts may be required. ORM provides oversight of these activities and may also perform independent assessments of significant operational risk events and areas of concentrated or emerging risk.

Operational Risk Measurement

In addition to the level of actual operational risk losses, operational risk measurement includes operational risk-based capital and operational risk loss projections under both baseline and stressed conditions.

The primary component of the operational risk capital estimate is the Loss Distribution Approach ("LDA") statistical model, which simulates the frequency and severity of future operational risk loss projections based on historical data. The LDA model is used to estimate an aggregate operational risk loss over a one-year time horizon, at a 99.9% confidence level. The LDA model incorporates actual internal operational risk losses in the quarter following the period in which those losses were realized, and the calculation generally continues to reflect such losses even after the issues or business activities giving rise to the losses have been remediated or reduced.

As required under the Basel III capital framework, the Firm's operational risk-based capital methodology, which uses the Advanced Measurement Approach ("AMA"), incorporates internal and external losses as well as management's view of tail risk captured through

operational risk scenario analysis, and evaluation of key business environment and internal control metrics. The Firm does not reflect the impact of insurance in its AMA estimate of operational risk capital.

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

Monitoring and Reporting

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

Fiduciary Risk

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

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

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.

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

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

Liquidity Risk

Please refer to section 16.

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

The CIO, Treasury, and Corporate (“CTC”) Risk Committee establishes the Firm’s structural interest rate risk policy and related limits, which are subject to approval by the DRPC. Treasury and CIO, working in partnership with the lines of business, calculates the Firm’s structural interest rate risk profile and reviews it with senior management, including the CTC Risk Committee. In addition, oversight of structural interest rate risk is managed through a dedicated risk function reporting to the CTC CRO. This risk function is responsible for providing independent oversight and governance around assumptions and establishing and monitoring limits for structural interest rate risk.

Risk Identification and Measurement

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

Measures to manage IRR are:

- **Earnings-at-Risk** primarily measures the extent to which changes in interest rates will affect the Firm’s net interest income and interest rate-sensitive fees
- **Economic Value Sensitivity** is an additional Firmwide metric utilized to determine changes in asset/liability values due to changes in interest rates.

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

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.

The Firm has an established risk management governance framework, including a policy and procedures, 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 Firm's LOBs through adherence to their respective LOB Reputation Risk Guidelines and Procedures.

The Bank aims to reduce its reputational risk by ensuring amongst other things the following:

- Subject all staff to the Code of Conduct and obtain their affirmation that they have complied with the rules and principles on an annual basis;
- Capture and review clients' complaints on a timely basis and take timely action to prevent any escalation of a potential litigation;
- Employing qualified employees and provide regular mandatory training;
- Ensuring that senior managers understand the responsibilities of oversight and fostering a culture of escalation within the Firm.

Leverage Risk

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

Risk Management

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

Risk Reporting and Measurement

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

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

Members of the Board of Directors

In selecting candidates for the Board of Directors, JPMBL looks for individuals with strong personal attributes, diverse backgrounds and demonstrated expertise and success in one or more disciplines relevant to our business. 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, our Firm and our shareholders. Candidates for director may be recommended by current Board members or management.

As at 31st December 2018, the JPMBL Board is comprised of seven directors:

Frédéric Mouchel (Executive Director)

Frédéric Mouchel is a Managing Director in JPMorgan Chase's Corporate & Investment Bank and leads 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.

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.

Ketki Miles (Non-Executive Director) – resigned on 11 July 2018

Ketki Miles is a Managing Director and the Head of Operations for our Global Fund Services business.

In her 29 years with the firm, Ms Miles has held a number of diverse positions with increasing responsibility, including head of Technology & Operations for the Asset Management group, head of Operations for Exotics and Hybrids Derivatives, Product Development for Global Derivatives Services, Product Management for Investment Operations Services, Head of Operations in Europe for Investment Operations Services and Hedge Fund Services and most recently as the head of Operations for Accounting in Europe. Ms Miles holds a BA in Computer Science from New York University.

Christopher Rowland (Non-Executive Director)

Chris Rowland is Managing Director Global Head of Custody with the Corporate and Investment Bank (CIB). Mr Rowland has worked twice for JPMorgan. Most recently Mr Rowland re-joined the firm in 2006 to establish the EMEA Product Management Group for Global Custody followed by running the product development strategy for the Custody business, establishing Corporate and Investment Bank securities processing utilities and running the Global Fund Services business. Previously at JPMorgan Mr Rowland had performed operations, project management and operational outsourcing sales roles covering derivative products in the investment Bank. Mr Rowland spent 4 years at BNP Paribas Securities Services where he led the sales and relationship management team for the Direct Custody and Clearing business in the UK. Mr Rowland has a BA in History and Politics from Swansea University.

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

Juerg Brun is 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. Ignace Combes is currently also an Independent Non-Executive Director of Partena Professional. Ignace 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 the Treasury Services business and is currently responsible in Treasury Services for its European Legal Entity Strategy and Brexit strategy and execution. Prior to assuming this role in January 2016, 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 the business in June 2014, Ms Livesey has spent 15 years in a variety of different Compliance roles in London, New York and Germany. In her last role she was the Chief Compliance Officer for Treasury Services, based in New York.

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) appointed on 11 July 2018

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 2018 as follows:

Name	Internal Directorships	External directorships
Frederic Mouchel	1	0
Mark Garvin	1	3
Juerg Brun	1	2
Alison Livesey	1	0
Elizabeth Munro	1	0
Ignace Combes	1	1
Christopher Rowland	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

JPMBL has a disciplined focus on our workforce, workplace and marketplace - with management accountability as the foundation and element most critical to the ability to hire, train and retain great and diverse employees whose unique perspectives help realise the business objectives. JPMBL is committed to a culture of openness and meritocracy, and believe in giving every individual an opportunity to succeed while bringing their whole selves to work.

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

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

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

3. 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 1: CRD IV Regulatory Capital

Transitional Own Funds Disclosure Template (\$'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Common Equity Tier 1 (CET1) Capital: Instruments and Reserves				
1	Capital instruments and the related share premium accounts	2,011	26 (1), 27, 28, 29, EBA list 26 (3)	2,011
	<i>of which:</i> Ordinary Shares	17	EBA list 26 (3)	17
	<i>of which:</i> Share premium	1,994	EBA list 26 (3)	1,994
2	Retained earnings	1,381	26 (1) (c)	1,381
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	3,392		3,392
29	Common Equity Tier 1 (CET1) capital	3,392		3,392
Additional Tier 1 (AT1) Capital: Instruments				
59	Total capital (TC = T1 + T2)	3,392		3,392
60	Total risk weighted assets	5,059		5,059
Capital Ratios and Buffers				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	67.05%	92 (2) (a), 465	67.05%
62	Tier 1 (as a percentage of total risk exposure amount)	67.05%	92 (2) (b), 465	67.05%
63	Total capital (as a percentage of total risk exposure amount)	67.05%	92 (2) (c)	67.05%
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)	7.39%	CRD 128, 129, 130	7.50%
65	<i>of which:</i> capital conservation buffer requirement	2.50%		2.50%
66	<i>of which:</i> countercyclical buffer requirement	0.01%		0.01%
67a	<i>of which:</i> Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	0.38%	CRD 131	0.50%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	56.16%	CRD 128	56.04%

Own Funds Reconciliation

The tables below present a reconciliation between audited balance sheet own funds and regulatory own funds as at 31st December 2018 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 2: Reconciliation of Regulatory Own Funds to Balance Sheet

Regulatory Own Funds Reconciliation to Balance Sheet	\$'m
CET1 Capital	3,590
157,971 Ordinary Shares of \$110 each	17
Share Premium Account	1,994
Retained Earnings	1,560
Other Reserves	19
CET1 Capital - Balance Sheet Own Funds	3,590
<i>Less Regulatory Adjustments</i>	
(-) Unaudited Profit	(198)
CET1 Capital - Regulatory Own Funds After Adjustments	3,392

Main Features of Capital Instruments

The table below presents the main features of regulatory capital instruments for JPMBL as at 31st December 2018 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 3: 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 17
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
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

4. 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. 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 4: EU OV1 - Overview of RWAs

	(\$'m)	RWA		Minimum capital requirements
		Q4 2018	Q4 2017	
1	Credit risk (excluding counterparty credit risk) (CCR)	4,243	2,674	339
2	<i>Of which</i> the standardised approach	4,243	2,674	339
23	Operational Risk	816	695	65
24	<i>Of which</i> basic indicator approach	816	695	65
29	Total	5,059	3,369	404

Table 5: EU OV1 additional - Overview of RWAs by exposure class

	Exposure classes (\$'m)	RWA	Overall capital requirements
6	Institutions	3,713	478
7	Corporates	311	40
16	Other items	219	28
17	Total	4,243	546

5. Exposure to Counterparty Credit Risk (Article 439)

At the end of 2018, JPMBL was not exposed to Counterparty Credit Risk (CCR). Credit risk for the Bank was limited to intraday and overdrafts to custody clients (Custody business) and to corporate clients (TS business), long-term intra-group placements: JPMBL places the major part of its overnight liquidity with its parent JPMCB N.A, London Branch, a portion of the liquidity through a 10 year term deposit, 397 days evergreens, 95 days evergreens, reverse repos and money-market term and overnight placements. These transactions can be terminated by either party, provided respectively a 397 and 95-day notice period is served or earlier by mutual consent. Primary and Secondary Nostro facilities were also established to support the business, mainly with third party credit institutions part of the agent bank network of JPMBL.

JPMBL does not engage in Securities Financing activities with third-party clients.

Credit and Counterparty Credit Risk

Credit loss estimates are based on estimates of the probability of default 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 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 related collateral. The calculations and assumptions are based on both internal and external historical experience and management judgment and are reviewed regularly. For portfolios that fluctuate based upon an underlying reference asset or index, potential future exposure is measured using probable and unexpected loss calculations based upon estimates of probability of default and loss severity given a default.

6. 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 6: 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		
SWITZERLAND	4.22	-	0.34	-	0.34	1%	0%
CZECH REPUBLIC	0.01	-	0.00	-	0.00	0%	1%
UNITED KINGDOM	0.06	-	0.00	-	0.00	0%	1%
LUXEMBOURG	233.08	-	18.65	-	18.65	75%	0%
NETHERLANDS	1.35	-	0.11	-	0.11	0%	0%
NORWAY	0.06	-	0.00	-	0.00	0%	2%
SWEDEN	12.48	-	1.00	-	1.00	4%	2%
Other Countries	59.80	-	4.78	-	4.78	19%	0%
Total**	311.06	-	24.88	-	24.88	100%	

Table 7: Amount of Institution-Specific Countercyclical Capital Buffer

	\$'mm
Total Risk Exposure Amount	5,059
Institution Specific Countercyclical Buffer Requirement	0.32
Institution Specific Countercyclical Buffer Rate	0.01%

7. 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 8: 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	4,106	3,965
2	Institutions	20,993	16,604
3	Corporates	1,219	1,124
4	Other residual exposures	219	186
5	Total standardised approach	26,537	21,879

* The firm has calculated average exposure based on the average of the four quarter end points during the year of 2018.

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 9: EU CRB-C - Geographical breakdown of exposures

Exposure Class	Net Values (\$'m)																
	SIGNIFICANT AREA: EMEA	BE	DE	GB	LU	FR	NO	DK	SE	Other Countries in EMEA (Residual Exposure)	SIGNIFICANT AREA: APAC	JP	Other Countries in APAC (Residual Exposure)	SIGNIFICANT AREA: AMERICAS	UNITED STATES OF AMERICA	Other Countries in AMERICA (Residual Exposure)	Total
Central Governments or central banks	4,106	-	-	-	4,106	-	-	-	-	-	0	-	-	0	-	-	4,106
Institutions	3,653	123	75	2,919	-	196	25	291	-	24	107	105	2	17,233	17,227	6	20,993
Corporates	1,218	-	-	-	1,140	-	-	59	12	6	0	-	0	1	-	1	1,219
Other exposures	219	-	-	-	219	-	-	-	-	-	0	-	-	0	-	-	219
Total Standardised Approach	9,196	123	75	2,919	5,465	196	25	348	12	30	107	105	2	17,234	17,227	7	26,537
Total	9,196	123	75	2,919	5,465	196	25	348	12	30	107	105	2	17,234	17,227	7	26,537

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 10: 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	4,106	-	-	4,106
2	Institutions	20,993	-	-	20,993
3	Corporates	1,168	5	46	1,219
4	Other Residual Exposure	-	-	219	219
5	Total SA approach	26,267	5	265	26,537
6	Total	26,267	5	265	26,537

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 11: EU CRB-E - Geographical breakdown of exposures

Exposure Class	Net Exposure Value (\$'m)					Total
	On Demand	<= 1 Year	> 1 year <= 5 years	> 5 years	No stated maturity	
Central Governments or central banks	4,106	-	-	-	-	4,106
Institutions	6,620	8,250	2,004	1,004	-	17,878
Corporates	311	-	-	-	-	311
Other exposures	-	-	-	-	219	219
Total Standardised Approach	11,037	8,250	2,004	1,004	219	22,514
Total	11,037	8,250	2,004	1,004	219	22,514

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

	Exposure class (\$'mm)	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	Central governments or central banks	-	4,106	-	-	-	-	4,106
2	Institutions	-	20,993	-	-	-	-	20,993
3	Corporates	-	1,219	-	-	-	-	1,219
4	Other Residual Exposure	-	219	-	-	-	-	219
5	Total standardised approach	-	26,537	-	-	-	-	26,537
6	Total	-	26,537	-	-	-	-	26,537
7	Of which: Loans	-	22,513	-	-	-	-	22,513
8	Of which: Off-balance-sheet exposures	-	4,024	-	-	-	-	4,024

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

	Exposure class (\$'mm)	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	-	5	-	-	-	-	5
2	Financial and insurance activities	-	26,267	-	-	-	-	26,267
3	Other services	-	265	-	-	-	-	265
4	Total	-	26,537	-	-	-	-	26,537

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 14: EU CR1-C - Credit quality of exposures by geography

		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	EMEA	-	9,196	-	-	-	-	9,196
2	United Kingdom	-	2,924	-	-	-	-	2,924
3	Luxembourg	-	5,467	-	-	-	-	5,467
4	Denmark	-	349	-	-	-	-	349
5	France	-	196	-	-	-	-	196
6	Belgium	-	123	-	-	-	-	123
7	Germany	-	75	-	-	-	-	75
8	Norway	-	25	-	-	-	-	25
9	Sweden	-	16	-	-	-	-	16
10	Other countries in EMEA (Residual Exposure)	-	21	-	-	-	-	21
11	AMERICA	-	17,234	-	-	-	-	17,234
12	United States	-	17,227	-	-	-	-	17,227
13	Other countries in AMERICA (Residual Exposure)	-	7	-	-	-	-	7
14	APAC	-	107	-	-	-	-	107
15	Japan	-	105	-	-	-	-	105
16	Other countries in APAC (Residual Exposure)	-	2	-	-	-	-	2
17	Total	-	26,537	-	-	-	-	26,537

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 2018.

Impaired exposures

From 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 2018 all ECL are Stage 1 and amounting to USD 39,021 in total.

ECL are treated as specific credit risk adjustments 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 2018 there were no past due exposures reported in JPMBL.

8. 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 2018, following the EBA guidelines.

Information on importance of encumbrance

The below disclosure represents the computed median values of the four quarters between 31 December 2017 and 31 December 2018, 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 16: Encumbered assets

	(\$'m)	Carrying amount of encumbered assets	Carrying amount of unencumbered assets
10	Assets of the reporting institution	160	20,197
20	Loans on demand	160	12,694
100	Loans and advances other than loans on demand	-	7,317
120	Other assets	-	186

As at 31st December 2018, JPMBL has “minimum reserve” cash deposits held at the Luxembourg Central Bank (“BCL”) which are encumbered. No other assets are encumbered as of this date.

Table 17: 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	-	1,072
160	Debt securities	-	1,072

As at 31st December 2018, 100% of the collateral available for encumbrance which JPMBL held from JPMB N.A., London Branch was in government bonds of which 100% from G6 countries.

Table 18: Encumbered assets/collateral received and associated liabilities

	(\$'m)	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
120	Other sources of encumbrance	160	160

9. 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.

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

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

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

- Central governments and central banks;
- Institutions.

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 19: 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	4,106	-	4,106	-	-	0.00%
2	Institutions	17,878	3,116	17,878	630	3,712	20.06%
3	Corporates	311	907	311	-	311	100.00%
4	Other items	219	-	219	-	219	100.00%
5	Total	22,514	4,023	22,514	630	4,242	18.33%

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 20: EU CR5 – Standardised approach (Pre-CRM)

Exposure classes		Risk weight (\$'m)				Total	Of which unrated
		0%	20%	50%	100%		
1	Central governments or central banks	4,106	-	-	-	4,106	-
2	Regional government or local authorities	-	-	-	-	0	-
6	Institutions	-	20,970	17	7	20,994	-
7	Corporates	907	-	-	311	1,218	311
11	Other items	-	-	-	219	219	219
12	Total	5,014	20,970	17	537	26,538	530

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 21: EU CR5 – Standardised approach (post-CRM)

Exposure classes		Risk weight (\$'m)				Total	Of which unrated
		0%	20%	50%	100%		
1	Central governments or central banks	4,106	-	-	-	4,106	-
2	Regional government or local authorities	-	-	-	-	-	-
6	Institutions	-	18,485	17	7	18,508	-
7	Corporates	-	-	-	311	311	311
11	Other items	-	-	-	219	219	219
12	Total	4,106	18,485	17	537	23,144	530

10. Exposure to Market Risk (Article 445)

JPMBL's market risk profile is primarily driven by foreign-exchange risk arising from Treasury funding activities.

Table 22: EU MR1 – Market risk under the standardised approach

		RWAs	Capital requirements
Outright products			
3	Foreign exchange risk	24	-
9	Total	24	-

As of 31st December 2018, 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.

11. 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.

Table 23: Risk Weighted Assets for Operational Risk

Basic indicator Approach	\$'m
Total RWA	816

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.

An inventory of operational risk scenarios were developed during 2018/2019 for JPMBL. The Pillar 2 operational risk capital requirement is set as the two largest high severity losses from the inventory.

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

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

The following table shows the economic value and Earnings impact for +/- 200bp shift in rate for Treasury risk positions in the banking book of JPMBL as at December 2018, calculated in USD.

Table 24: Interest Rate Risk in the Banking Book

Non Trading +200bp Economic Impact (\$'m)	Non Trading -200bp Economic Impact (\$'m)	Non Trading +200bp Earnings Impact (\$'m)	Non Trading -200bp Earnings Impact (\$'m)
190	(140)	126	(129)

13. 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, 2018.

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 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 2018 Performance Year in December 2018 with no material changes and was satisfied with its implementation.
- The Committee held three meetings in respect of the 2018 Performance Year, including meeting in January 2019 to consider the outcomes of the 2018 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 21 December 2018 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 2018 Performance Year.

Table 25: All staff

In EUR thousands	Fixed Compensation	Variable Compensation	Total Compensation
All staff	45,078	6,436	51,514

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 26: Breakdown by Business Area

In EUR thousands	Total Compensation 2018	Number of Identified Staff
Management Body and Senior Management ⁶	2,341	11
Other CRD IV Identified Staff	6,616	22
Total	8,956	33

⁶All outstanding deferred awards are subject to malus and clawback provisions as set out in the most recent EMEA Remuneration Policy Disclosure

Table 27: Breakdown of Total Compensation

In EUR thousands	Fixed Compensation 2018 (Cash)	Variable Compensation in respect of 2018			
		Upfront Cash	Upfront Equity	Deferred Cash	Deferred Equity
Management Body and Senior Management	1,425	141	141	131	503
Other CRD IV Identified Staff	4,506	1,329	173	44	564
Total	5,931	1,470	313	175	1,067

Table 28: Analysis of Deferred Compensation

In EUR thousands	Outstanding as at 1 January 2018	Awarded during 2018	Paid out during 2018	Adjusted ex-post		Forfeited during 2018	Outstanding as at 31 December 2018	
				Explicit ⁷	Implicit ⁸		Unvested	Vested
Equity-based								
Management Body and Senior Management	6,914	2,185	(2,653)	-	(476)	(15)	5,109	845
Other CRD IV Identified Staff:	701	432	(325)	-	(68)	-	741	-
Cash-based								
Management Body and Senior Management	888	278	(379)	-	10	-	796	-
Other CRD IV Identified Staff:	57	20	(37)	-	-	-	40	-

Guarantees, Sign-on and Severance Payments

No guaranteed variable remuneration, sign-on or severance payments were made to CRD IV Identified Staff for the 2018 Performance Year.

2018 Total Compensation for CRD IV Identified Staff Earning at least EUR 1 Million

No CRD IV Identified Staff received compensation exceeding EUR 1 million in respect of the 2018 Performance Year.

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.

14. 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 de-leveraging 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 29: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

Regulatory Own Funds Reconciliation to Balance Sheet		\$'m
1	Total assets as per financial statements	23,586
2	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	91
3	Leverage ratio total exposure measure	23,677

Table 30: Leverage Ratio Common Disclosure

Regulatory Own Funds Reconciliation to Balance Sheet		\$'m
On-balance sheet exposures		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	23,586
2	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	23,586
Other off-balance sheet exposures		
3	Off-balance sheet exposures at gross notional amount	907
4	(Adjustments for conversion to credit equivalent amounts)	(817)
5	Other off-balance sheet exposures (sum of lines 17 and 18)	91
Capital and total exposure measure		
6	Tier 1 capital	3,392
7	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	23,677
Leverage ratio		
8	Leverage ratio	14.33%

15. 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 2018 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.

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 31 December 2018 there are reverse repo transactions in place with JPMBC N.A., London Branch for US\$1,072mm.

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 2018, 100% of the collateral which JPMBL held from JPMBC N.A., London Branch was in government bonds of which 100% from G6 countries.

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 31: EU CR3 - CRM techniques

	\$'mm	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	24,056	3,637	3,637	-	-
2	Total exposures	24,056	3,637	3,637	-	-

As of 31st December 2018 JPMBL has no financial guarantees or credit derivatives used as credit risk mitigation items for its exposures.

16. 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 management

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

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

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

- Analysing and understanding the liquidity characteristics of the assets and liabilities of the Firm, lines of business and legal entities, taking into account legal, regulatory, and operational restrictions;
- Developing internal liquidity stress testing assumptions;
- Defining and monitoring firmwide and legal entity specific liquidity strategies, policies, guidelines, reporting and contingency funding plans;
- Managing liquidity within 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 the underlying liquidity characteristics of balance sheet assets and liabilities as well as certain off-balance sheet items.

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.

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

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

Liquidity Risk Oversight

The Firm has a liquidity risk oversight function whose primary objective is to provide assessment, measurement, monitoring, and control of liquidity risk across the Firm. Liquidity risk oversight is managed through a 'CRO'), who reports to the Firm's CRO, as part of the independent risk management function, is responsible for firmwide Liquidity Risk Oversight. Liquidity Risk Oversight's responsibilities include:

- Establishing and monitoring limits, indicators and thresholds including liquidity risk appetite tolerances;
- Monitoring internal firmwide and material legal entity liquidity stress tests, and monitoring and reporting regulatory defined liquidity stress testing;
- Approving or escalating for review liquidity stress assumptions;
- Monitoring liquidity positions, balance sheet variances, and funding activities; and

Conducting ad hoc analysis to identify potential emerging liquidity risk.

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 and the Firm's material legal entities and other entities as relevant, on a regular basis and ad hoc stress tests are performed, as needed, in response to specific market events or concerns.

Liquidity stress tests assume all of the Firm's contractual financial obligations are met and take into consideration varying levels of access to unsecured and secured funding markets, estimated non-contractual and contingent cash outflows and potential impediments to the availability and transferability of liquidity between jurisdictions and material legal entities such as regulatory, legal or other restrictions.

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

Regulatory required stress tests and internal stress tests are conducted to ensure the Firm meets all compliance requirements. The Firm has systems in place to aid in the measurement, management, monitoring and reporting of liquidity risks.

Contingency funding plan

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

Key Ratios and Figures

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.

From 1st January 2018 the LCR is required to be a minimum of 100%.

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).

⁹In line with the EBA guidelines the average ratio disclosed in Table 32 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'.

Table 32: Items prone to rapid change as defined in EBA GL/2017/01

Currency and units: (\$'m)		Total unweighted value (average)				Total weighted value (average)			
		31-Dec-18	30-Sep-18	30-Jun-18	31-Mar-18	31-Dec-18	30-Sep-18	30-Jun-18	31-Mar-18
Reference date:		31-Dec-18	30-Sep-18	30-Jun-18	31-Mar-18	31-Dec-18	30-Sep-18	30-Jun-18	31-Mar-18
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS									
1	Total high-quality liquid assets (HQLA)					3,835	3,584	3,301	3,016
CASH-OUTFLOWS									
5	Unsecured wholesale funding	17,690	15,758	15,197	14,895	8,824	7,967	7,864	7,911
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	11,241	9,971	9,694	9,259	2,810	2,493	2,423	2,314
7	Non-operational deposits (all counterparties)	6,449	5,787	5,503	5,636	6,014	5,475	5,441	5,597
14	Other contractual funding obligations	6	12	11	13	0	0	0	0
15	Other contingent funding obligations	1,181	1,112	1,108	1,088	-	-	-	-
16	TOTAL CASH OUTFLOWS					8,825	7,968	7,864	7,911
CASH-INFLOWS									
17	Secured lending (e.g. reverse repos)	90	-	-	-	0	-	-	-
18	Inflows from fully performing exposures	8,547	8,337	8,389	9,105	8,466	8,325	8,381	9,100
19	Other cash inflows	1,085	578	551	298	217	116	110	60
20	TOTAL CASH INFLOWS	9,722	8,915	8,940	9,403	8,683	8,441	8,491	9,159
EU-20c	<i>Inflows Subject to 75% Cap</i>	<i>9,722</i>	<i>8,915</i>	<i>8,940</i>	<i>9,403</i>	<i>8,683</i>	<i>8,441</i>	<i>8,491</i>	<i>9,159</i>
						TOTAL ADJUSTED VALUE			
21	LIQUIDITY BUFFER					3,835	3,584	3,301	3,016
22	TOTAL NET CASH OUTFLOWS					2,206	1,992	1,966	1,978
23	LIQUIDITY COVERAGE RATIO (%)					176%	181%	168%	153%

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 176% for the year ending on 31st December 2018.

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.

17. 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.

18. Disclosures Not Applicable as of 31st December 2018

The following Articles of CRR are not applicable to JPMBL as at December 31, 2018:

- 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).

19. 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
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