

Pillar 3 Annual Disclosure Report as at 31st December 2020



J.P. Morgan Capital Holdings Limited

J.P. Morgan Financial Investments Limited

J.P. Morgan Mansart Management Limited

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1. Introduction

Overview

The Basel Committee on Banking Supervision published its set of rules on 16th December 2010, referred to as Basel III. The Basel framework consists of a three 'Pillar' approach:

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

The transposition of the Basel III framework into European law is in two parts: the Capital Requirements Directive IV (CRD IV/Directive 2013/36/EU) and the Capital Requirements Regulation ('CRR')¹. It was published in the Official Journal of the European Union on 27th June 2013. Part Eight of CRR includes additional provisions on regulatory disclosure for credit institutions. Both the Directive and the Regulation are applicable since 1st January 2014. This document also includes some items required under the amendments to CRR that became applicable in June 2019.

This disclosure contains the Pillar 3 disclosures for J.P. Morgan Capital Holdings Limited, J.P. Morgan Financial Investments Limited and J.P. Morgan Mansart Management Limited; and provides information on the Firm's capital structure, capital adequacy, risk exposures, and RWA.

This disclosure fulfills the requirements as set out in Part Eight of CRR, and in the supplementary Implementing Technical Standards ('ITS')² and guidelines issued by the European Banking Authority ('EBA').

These disclosures have been prepared in full accordance with the EMEA Pillar 3 Process document³, which itself has been approved at Board level by all disclosing entities.

The Pillar 3 process outlines:

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

The Pillar 3 disclosure has been approved for publication by the Board of Directors of the entities whose disclosure is contained herein. Attestation, that disclosures have been prepared in accordance with the J.P. Morgan EMEA Pillar 3 approved process, has been provided in line with the EBA Guidelines (EBA/GL/2016/11).

Frequency of Disclosure (Article 433)

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

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

All J.P. Morgan Chase entities regulated under the Capital Requirements Directive IV ('CRD IV')⁴ Capital Requirements Directive (CRD IV)/Regulation (EU) Directive 2013/36/EU have applied the Guidelines by:

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

The internal assessment process (under Title II of Guidelines) to determine which J.P. Morgan entities should disclose more frequently than annually concluded that, of the consolidated entities in scope for this document, only J.P. Morgan Capital Holdings Limited is meeting the qualitative and quantitative thresholds to necessitate more frequent disclosure.

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

² EBA /GL/2014/14 Guidelines on materiality, proprietary and confidentiality and on disclosure frequency under Articles 432(1), 432(2) and 433 of Regulation (EU) No. 575/2013 published 23th December 2017 and EBA/ GL/2016/11 Guidelines on disclosure requirements under part eight of regulation (EU) No. 575/2013 published 4th August 2017

³ J.P. Morgan EMEA Pillar 3 Process document - first published June 2016, latest update and approval April 2018

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

Means of Disclosure (Article 434)

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

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

Scope of Application (Article 436)

These disclosures are made for J.P. Morgan entities within the U.K. and include disclosure for the following:

- **J.P. Morgan Capital Holdings Limited ('JPMCHL')**
 - The primary subsidiaries of which are J.P. Morgan Securities plc. ('JPMS plc'), J.P. Morgan Europe Limited ('JPMEU') and J.P. Morgan Limited ('JPML')
 - The main activities of the entities within the JPMCHL group are Corporate and Investment Bank activities
 - JPMCHL is the holding company for a number of regulated entities, which are subject to consolidated supervision at the level of JPMCHL
 - JPMS plc and JPMEU are authorised by the Prudential Regulation Authority ('PRA') and regulated by Financial Conduct Authority ('FCA').
- **J.P. Morgan Financial Investments Limited ('JPMFIL'),**
 - The primary subsidiary of which is J.P. Morgan Markets Limited ('JPMML'). The main activities of the entities within the JPMFIL group are Corporate and Investment Bank activities
 - JPMFIL is the holding company for a regulated entity, which is subject to consolidated supervision at the level of JPMFIL
 - JPMML is authorised and regulated by the FCA
- **J.P. Morgan Mansart Management Limited ('JPMML') which does not have a UK Parent entity.**
 - The main activities of JPMML are the provision of strategic asset management services via fund solutions.
 - JPMML is authorised and regulated by the FCA

EU parent entities JPMCHL, JPMFIL & JPMML under Article 13 of the CRR, according to the aforementioned JPMC EMEA Pillar 3 Policy are identified for annual disclosure requirement.

The scope of consolidation for regulatory capital purposes is consistent with the accounting basis for consolidation. This document refers to JPMorgan Chase or the Firm when referring to frameworks, methodologies, systems and controls that are adopted throughout JPMorgan Chase and its subsidiaries. Entity names are used to refer to documents, financial resources and other tangible concepts relevant only to that entity. As required under Article 436 CRR, it is confirmed that there are no current or foreseen material practical or legal impediments to the prompt transfer of own funds or repayment between JPMS plc and its parent, nor between JPMML and its parent. No items have been omitted due to materiality reasons under Titles III and IV of the Guidelines. Any line items that are not applicable have been hidden for presentation purposes.

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.

UK departure from EU

The U.K.'s departure from the EU, which is commonly referred to as 'Brexit', occurred on 31st January 2020 and, following a transition period, was completed on 31st December 2020. As a result the Firm's UK legal entities have lost their EU passport and EEA clients can no longer be serviced from the UK, unless interim jurisdictional or other exemptions have been agreed. The Brexit Free Trade Agreement ('FTA') concluded in December 2020 contains only minimal provisions on Financial Services and any future developments will rely on regulatory dialogue based on the Memorandum of Understanding ('MoU') agreed in March 2021 that provides a foundation for future regulatory co-operation.

In preparation for Brexit, the Firm has executed on its Firmwide Brexit Implementation program which focused on the following key areas to ensure continuation of service to its EEA clients: regulatory and legal entity readiness; client readiness; and business and operational readiness. The implementation was based on the assumption of a hard Brexit without replacement arrangements in place in alignment to the final outcome.

The Firm's legal entities in Germany, Luxembourg and Ireland are now licensed to provide and are providing services to the Firm's EEA clients, including through a branch network covering locations such as Paris, Madrid and Milan. The Firm continues to monitor impacts of non-equivalence on specific areas like clearing and derivatives trading and will continue to monitor future legal and regulatory developments.

COVID-19

The Firm continues to monitor the Coronavirus Disease 2019 ('COVID-19'), based on the guidance being provided by the relevant health and government authorities, and continues to implement protocols and processes in response to the spread of the virus. The Company has not experienced a significant reduction in its capital and liquidity positions during the year as a result of COVID-19. For more details on Firmwide measures refer to the Annual reports of the companies for the year ended 31st December 2020 available on the Companies House Website.

Key Metrics

Table 1: Key Metrics

\$'mm	JPMCHL		JPMFIL		JPMML	
	Q4 2020	Q4 2019	Q4 2020	Q4 2019	Q4 2020	Q4 2019
Own funds						
Tier 1 Capital	46,744	46,200	5,141	5,140	16	14
Tier 2 Capital	12,000	12,000	—	—	—	—
Total Own Funds	58,744	58,200	5,141	5,140	16	14
Risk Weighted Assets						
Risk Weighted Assets	244,130	253,504	742	646	15	13
Capital Ratios as a Percentage of RWA						
Tier 1 Capital Ratio	19.15 %	18.22 %	693 %	796 %	104.91 %	113.42 %
Total Capital Ratio	24.06 %	22.96 %	693 %	796 %	104.91 %	113.42 %
Leverage Ratio						
Leverage Exposure	720,823	567,440	5,615	5,667		
Leverage Ratio	6.48 %	8.14 %	91.57 %	90.69 %		
Liquidity Coverage Ratio						
Liquidity Coverage Ratio	265 %	286 %				

2. Risk Management and Objectives (Article 435)

Risk Management Activities

Risk is an inherent part of JPMorgan Chase's business activities. When the Firm extends a consumer or wholesale loan, advises customers and clients 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 interest of its clients, customers and investors and protects the safety and soundness of the Firm.

The Firm believes that effective risk management requires, among other things:

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

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

Risk Organization

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

The Firm relies upon each of its LOBs and Corporate areas giving rise to risk to operate within the parameters identified by the IRM function, and within its own management-identified risk and control standards. Each LOB and Treasury and CIO, including their aligned Operations, Technology and Control Management functions are the Firm's 'first line of defense' and own the identification of risks, as well as the design and execution of controls to manage those risks. The first line of defense is responsible for adherence to applicable laws, rules and regulations and for the implementation of the risk management structure (which may include policies, standards, limits, thresholds and controls) established by IRM.

The IRM function is independent of the businesses and is the Firm's 'second line of defense'. The IRM function independently assesses and challenges the first line of defense risk management practices. The IRM function is also responsible for its own adherence to applicable laws, rules and regulations and for the implementation of policies and standards established by IRM with respect to its own processes.

The Internal Audit function is an independent function that provides objective assessment on the adequacy and effectiveness of Firmwide processes, controls, governance and risk management as the 'third line of defense'. The Internal Audit Function is headed by the General Auditor, who reports to the Audit Committee and administratively to the CEO.

In addition, there are other functions that contribute to the Firmwide control environment that are not considered part of a particular line of defense including Finance, Human Resources and Legal.

Risk Governance

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

The firm places key reliance on LOBs and Corporate areas for identifying and documenting material risks, and for managing, controlling, monitoring and escalating risks as appropriate and in accordance with IRM standards or LOB/Corporate area procedures. Senior management and each responsible individual in the LOBs and Corporate areas are responsible for identifying, managing and escalating, as appropriate, risk matters at a minimum to meet IRM standards in addition to any LOB/Function established procedures.

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

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

Global Legal Entity Risk Framework

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

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

LE Forum

The LE Forum is the governing body for the Risk Management & Compliance (RM&C) LE Frameworks, inclusive of Risk Management and Compliance, Conduct and Operational Risk (CCOR) and acts as a Project Steering Group for agreeing to decisions, assumptions, milestones and implementation across the regions.

The LE Forum exercises oversight and control of the legal entity risk management and governance standards across all regions. It is responsible for:

- Periodic review and update of LE RM&C Framework and Governance documentation, as required
- Establish, review, recommend and consider of exceptions to standards, guidance and procedures that relate to the RM&C LE governance
- Acts as Steering Group to hold project leaders and participants accountable for implementation
- Review and address matters relating to the RM&C LE Risk governance support model

LE Risk Tiering

Risk Management oversight of LEs is executed according to the risk profile of a LE. The risk profile of a LE is derived by applying the LE Risk Tiering methodology, the result of which will determine a LE's 'Risk Tier'.

Risk Tiering comprises four categories ranging from one to four, with Risk Tier one representing the highest requirement for LE Risk governance and oversight. The tiering methodology is comprised of qualitative and quantitative elements and a different level of oversight is established for each Tier, driven by a range of internal and external risk governance requirements. Core minimum and recommended governance standards have been created for each Tier of governance. Holding companies such as JPMCHL and JPMFIL are exempt from the tiering process since most of the risks are held at the level of the individual subsidiaries. Therefore, the risks will be overseen in the underlying entities and escalated where appropriate. As at 31st December 2020, JPMS plc, JPMEL and JPMML were classified as Risk tier 1 LEs, and JPMML a Tier 3 LE under this framework.

EMEA Risk Governance

As described above, J.P. Morgan's risk governance structure is based on the principle that each line of business is responsible for managing the risk inherent in its business, albeit with appropriate corporate oversight. Each LOB risk committee is responsible for decisions regarding the business risk strategy, policies (as appropriate) and controls. Therefore, each LOB within the in scope LEs form part of the firmwide risk governance structure.

To complement the global line of business structure, there is a regional risk governance construct as below:

- The EMEA Risk Committee ('ERC') provides oversight of the risks inherent in the Firm's business conducted in EMEA or booked into EMEA entities and relevant branches as well as EMEA branches of ex-EMEA firms, focusing on Tier 1 entities including JPMS plc, JPMEL and JPMML. Oversight of Tier 2 and 3 entities (such as JPMML) is delegated to the EMEA Risk Forum, a sub-forum of the ERC.
- The ERC is accountable to the EMEA Management Committee ('EMC') and the boards, Risk Committees and Oversight Committees of the relevant legal entities. It reports to the Firmwide Risk Committee ('FRC'), the EMEA HR Control Forum, in addition to the EMC and the relevant legal entity boards.
- The EMEA CRO leads the Risk Management function in the region and chairs the ERC. The EMEA CRO is a member of the EMC and meets with local regulators on a regular basis.
- Under the Individual Accountability Regime, there are four Senior Management Functions ('SMFs') in EMEA Risk Management, including the EMEA CRO and Legal Entity CROs for JPMS plc, JPMEL and JPMML. There are also a number of certified persons under the Certification Regime, including many of the EMEA Risk Management Heads that are accountable to the EMEA CRO for their regional responsibilities.

EMEA Risk Management Organisation

EMEA Risk Management Chief Risk Office, EMEA				
Risk Functions				Strategic Partners
Market Risk including MR Quantitative Research	Credit Risk including CR Quantitative Research	Country Risk	Global Environmental & Social Risk	Human Resources
MRGR – Model Governance Group	MRGR – Model Review Group	Operational Risk Management	Asset Liability Management Risk Oversight	Risk Technology
EMEA Risk Governance & Strategy	Underwriting and Reputational Risk	Asset Management Risk	CB Credit Risk	Control Office
CIO & Treasury Credit Risk	CIO & Treasury Market Risk	Risk Reporting & Middle Office	UK Digital Bank	Business Management

Identification and Measurement of Key Risks

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

Credit Risk

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. In its wholesale businesses, J.P. Morgan 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. In its consumer business, the International Consumer business will be exposed to credit risk through its consumer credit product offering.

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 and maintaining 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.

J.P. Morgan 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 firmwide policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio review parameters and guidelines for management of distressed exposures.

Risk governance and policy framework

The UK legal entity approach mirrors the Firmwide approach with legal entity specific governance overlay;

- Regional and legal entity specific credit risk approval processes are covered by legal entity credit risk policies. Specific policies exist for JPMS plc, JPMEL and JPMML which contain standards pertaining to: governance, management of concentrations, credit risk limits, New Business Initiative Approvals, and the credit risk reporting requirements; and
- Primary responsibility for decisions on acceptability of clients from a credit perspective, approval of credit lines, ongoing credit exposure monitoring, and determining impairment provisions is managed centrally according to the Firm's Credit Policy. Specifically, responsibility resides with: Credit Officers in CIB Credit Risk Management; and Global Credit Risk Management–Client Credit Management ('credit analysis') and Credit Executives ('credit approval'). In addition a Booking Office Country Approval ('BOCA') workflow has been established in iCRD to trigger formal notification and local approval for any changes to non-rule based facilities for JPMS plc, JPMML and JPMEL.

Risk Measurement

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

Credit loss estimates are based on estimates of the probability of default ('PD') and loss severity given a default. The probability of default is the likelihood that a borrower will default on its obligation; the loss given default ('LGD') is the estimated loss on the loan that would be 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.

Stress Testing

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

Credit Risk Approval and Control

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

Establishment of credit lines: All credit exposure must be approved in advance by a Credit Officer(s) with the level of credit authority required by the applicable credit authority grid unless qualifying for rules-based policies, described separately below. Such approval, together with details of the credit limits are recorded in the Credit Systems.

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

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

Risk Monitoring and Management

The Firm has developed policies and practices that are designed to preserve the independence and integrity of the approval and decision-making process of extending credit to ensure credit risks are assessed accurately, approved properly, monitored regularly and managed actively at both the transaction and portfolio levels. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio review parameters and guidelines for management of distressed exposures. In addition, certain models, assumptions and inputs used in evaluating and monitoring credit risk are independently validated by groups that are separate from the line of business.

Concentrations of credit risk arise when a number of clients, counterparties or customers are engaged in similar business activities or activities in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions. The Firm regularly monitors various segments of its credit portfolios to assess potential credit risk concentrations and to obtain additional collateral when deemed necessary and permitted under the Firm's agreements. Senior management is significantly involved in the credit approval and review process, and risk levels are adjusted as needed to reflect the Firm's risk appetite. Credit risk concentrations are evaluated primarily by industry, geography and credit family, and monitored regularly on both an aggregate portfolio level and on an individual client or counterparty basis.

Risk Reporting

To enable monitoring of credit risk and effective decision-making, aggregate credit exposure, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry, customer, product and geographic concentrations occurs monthly, and the appropriateness of the allowance for credit losses is reviewed by senior management at least on a quarterly basis. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with, risk committees, senior management and the Board of Directors as appropriate.

Market Risk

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term. The firm, through its lines of business ('LOBs'), may be exposed to market risk as a result of various financial activities, including trading, funding, underwriting and investing.

Firmwide Market Risk Governance

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

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

UK LE Market Risk Governance

The Legal Entity approach to risk governance mirrors the Firmwide approach, and is recorded within the JPMS plc, JPMEI and JPMML, Market Risk Management Framework documents ('Framework Documents'). The Legal Entity Chief Risk Officer ('CRO') and Market Risk Officer ('MRO') are responsible for considering the Firmwide methodologies / procedures with respect to each Legal Entity.

For local governance purposes Market Risk presents the Framework Documents at least annually to the relevant Risk Committees that recommends to the appropriate Board for approval.

Firmwide 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 utilises 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 and Regulatory 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. These VaR results are reported to senior management, the Board of Directors and regulators.

The Regulatory VaR model framework assumes a ten business-day holding period and an expected tail loss methodology which approximates a 99% confidence level. Regulatory VaR is applied to 'covered' positions as defined by Basel III, which may be different than the positions included in the Firm's Risk Management VaR.

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 uses a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress

for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. 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. The stress testing framework is known as Firmwide Stress Infrastructure ('FSI') which is a risk management tool that simulates changes to the prices of trading assets across a range of economic and market scenarios. It is used to measure the Firm's vulnerability to losses under a range of stressed but plausible market environments and to understand the risk factors and assets responsible for those losses.

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

Stress-test results, trends and qualitative explanations based on current market risk positions are reported to the respective Lines of Business ('LOB') and Firm's senior management to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency. In addition, results are reported to the Board of Directors.

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.

Non-statistical risk measures

Measures such as credit spreads, net open positions, basis point values, option sensitivities, are utilized within specific market context and aggregated across businesses.

Profit & Loss ('P&L') Drawdowns

Metrics to advise senior management of potential out-sized losses and to initiate discussion of remedies (e.g. reduction of exposure).

Single Name Position Risk ('SNPR')

The framework to capture exposures to credit families (and entities within credit families) or standalone issuers/issuers families not part of credit families, assuming default of the issuer with zero recovery.

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

Firmwide Market Risk Monitoring and Control

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.

Senior management, including the Firm's CEO, CRO and Market Risk Management are responsible for reviewing and approving limits on an ongoing basis. Limits that have not been reviewed within a specified time period by Market Risk Management are escalated to senior management.

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 or the granting a temporary increase in limits. Aged or significant breaches are escalated to senior management, the LOB Risk Committee, and/or the Firmwide Risk Committee.

Concentration Risk

Concentration Risk, as at 31st December 2020 applicable to JPMS PLC only, refers to any significant concentration of factors (e.g. single name, positions, etc.) that may lead to financial losses for the firm. This risk is inherently measured, monitored and controlled as part of the market risk management framework and related controls as described above.

Illiquid trading risk, as part of concentration risk, may include exposure to a lack of liquidity of financial products caused by the complexity of the product, a model derived valuation that includes risk sensitivities that are unobservable, long-dated, or thinly-traded, or exposure, plain vanilla or otherwise, that is outsized in relation to market liquidity. LOB Risk Committee members with responsibility for trading areas (LOB/Sub-LOB Trading Heads) are responsible for presenting these risks within their business to relevant LOB Risk Committees on a semi-annual basis.

Material Portfolio of Covered Positions

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

JPMFIL's market risks arise from positions in the Firm's CIB business booked in JP Morgan Markets Limited.

Market Risk in JPMML is considered nominal due to the nature of its business; this regulated entity is not licensed to deal on its own account or to underwrite issues of financial instruments on a firm commitment basis. If this were to change and the legal entity becomes exposed to market risk, the entity would be risk managed as part of the Firmwide Market Risk Management framework that JPMML is already part of.

Operational Risk

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

Operational Risk Management Framework

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

Operational Risk Governance

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

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

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

Operational Risk identification

The Firm utilizes a structured risk and control self-assessment process that is executed by the LOBs and Corporate. As part of this process, the LOBs and Corporate areas evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. The Firm's Operational Risk and Compliance organization ('Operational Risk and Compliance') 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

Operational Risk and Compliance performs independent risk assessments of the Firm's operational risks, which includes assessing the effectiveness of the control environment and reporting the results to senior management.

In addition, operational risk measurement includes operational risk-based capital and operational risk loss projections under both baseline and stressed conditions.

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

As required under the Basel III capital framework, the Firm's operational risk-based capital methodology, which uses the Advanced Measurement Approach ('AMA'), incorporates internal and external losses as well as management's view of tail risk captured through operational risk scenario analysis, and evaluation of key business environment and internal control metrics. The Firm does not reflect the impact of insurance in its AMA estimate of operational risk capital.

The Firm considers the impact of stressed economic conditions on operational risk losses and develops a forward-looking view of material operational risk events that may occur in a stressed environment. The Firm's operational risk stress testing framework is utilized in calculating results for the Firm's CCAR and other stress testing processes.

Operational Risk Monitoring and Testing

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

Management of Operational Risk

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

Operational Risk Reporting

Escalation of risks is a fundamental expectation for employees at the Firm. Risks identified by Operational Risk and Compliance are escalated to the appropriate LOB and Corporate Control Committees, as needed. Operational Risk and Compliance has established standards to ensure that consistent operational risk reporting and operational risk reports are produced on a Firmwide basis as well as by LOBs and Corporate areas. Reporting includes the evaluation of key risk indicators and key performance indicators against established thresholds as well as the assessment of different types of operational risk against stated risk appetite. The standards reinforce escalation protocols to senior management and to the Board of Directors.

Covid -19 Pandemic

Under the CCOR Management Framework, Operational Risk and Compliance monitors and assesses COVID-19 related legal and regulatory developments associated with the Firm's financial products and services offered to clients and customers as part of the existing change management process. The Firm will continue to review and assess the impact of the pandemic on operational risk and implement adequate measures as needed.

Liquidity Risk

For Liquidity Risk please refer to Section 20.

Structural Interest Rate Risk ('Interest Rate Risk')

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

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

Oversight and governance

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

- Reviews the IRR Management policy;
- Reviews the IRR profile of the Firm and compliance with IRR limits;
- Provides Governance on legal entity related exposures; and
- Reviews significant changes to IRR models and/or model assumptions including the changes related to IRR management.

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

In addition, oversight of structural interest rate risk is managed through IRR Management, a dedicated risk function reporting to the CTC CRO.

IRR Management is responsible for, but not limited to:

- Establishing and monitoring metrics to manage interest rate risk, which may include, but are not limited to Earnings at Risk ('EaR'), Duration of Equity ('DoE'), Economic Value Sensitivity;
- Defining and monitoring interest rate risk and establishing limits; signatories to limits include representatives from both the first and second lines of defense;
- Developing a process to classify, monitor and report limit breaches;
- Performing independent review of the firm's interest rate risk activities;
- Creating and maintaining governance over interest rate risk assumptions; and
- Performing interest rate risk management for certain legal entities

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

Risk Identification and Measurement

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

Measures to manage IRR include:

- Earnings-at-risk: Primary metric used to gauge the firm's shorter-term IRR exposure is Earnings at Risk ('EaR'), or the sensitivity of pre-tax income to changes in interest rates over a rolling 12 months compared to a base scenario;
- Duration of Equity ('DoE'): Primary metric used to determine the firm's long-term exposure to interest rate changes. DoE is calculated by measuring the change in the discounted value of asset, liability and off-balance sheet cash-flows for a 100 basis point ('BPS') change in interest rates, divided by the book value of equity;
- Additional scenario analysis, including FSI scenarios and bespoke scenarios are run as part of regular reporting; and
- Economic Value of Equity ('EVE') and Economic Value Sensitivities ('EVS') are additional Firmwide metrics utilised to determine changes in asset/liability values due to changes in interest rates.

Reputation Risk

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

Governance and Policy Framework

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

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

The governance framework includes the following:

- Governance – The Firmwide Risk Executive ('FRE') of Reputation Risk and Firmwide Reputation Risk Governance ('FRRG') establish the reputation risk framework for the firm. FRRG provides oversight of governance infrastructure and process to support the consistent identification, escalation, management and monitoring of reputation risk issues Firmwide.
- Lines of Business – The firm establishes the specific manner in which we identify, control and manage reputation risk as set forth in the Firmwide Reputation Risk Governance Policy and in the Firmwide Reputation Risk Standard, which apply to all LOBs, and are designed to assist with identifying and escalating any potential reputation risk. Each LOB, including the functions aligned to an LOB, is responsible for following the Firmwide Reputation Risk Governance Policy and the Firmwide Reputation Risk Standard.
- Functions – It is the responsibility of each function to consider the reputation of the firm by reference to the Firmwide Reputation Risk Governance Policy. They are expected to apply the appropriate level of due diligence to reputation risks in their respective areas, and adapt as appropriate the range of control capabilities and processes needed to minimize the risk. Matters may be escalated per the Firmwide Reputation Risk Standard or to FRRG.
- Escalation – Should any RRC or any member consider that the inherent reputation risk is of such a degree to warrant it, or if the LOB RRC does not reach consensus for a particular matter, the matter may be escalated to the FRE of Reputation Risk. The LOB Risk Committee should be the initial point of escalation prior to an escalation to the Firmwide Risk Committee ('FRC') and/or the Board Risk Committee ('BRC').

The firm's BRC Charter requires approval of the primary risk policies of the firm. The following JPMC policies and associated documents comprise key components of the policy framework:

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

Reputation damage risk appetite statement

Reputation Risk is a qualitative risk in the firm's Risk Appetite Framework. The firm has a low appetite for reputation damage as a result of the risk that an action or inaction may negatively impact perception of the Firm's integrity and reduce confidence in the Firm's competence by various constituents, including clients, counterparties, customers, investors, regulators, employees, communities or the broader public.

Approach to Risk Management

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

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

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

Securitisation Risk

The risks related to securitisation and resecuritisation positions are managed in accordance with the Firm's credit risk and market risk management policies. The Firm's due diligence procedures and risk management and mitigation of securitisation risk are detailed further under Article 449 of CRR (Section 15).

Fiduciary Risk

Fiduciary risk is the failure to exercise the applicable standard of care, failure to act in the best interests of clients or treat clients fairly as required under applicable law or regulation, potentially resulting in regulatory risk, reputation risk and financial liability. Depending on the fiduciary activity and capacity in which the firm or LOB is acting, federal, state statutes, common law and regulation require adherence to specific duties in which the firm must always place the client's interest above its own. As an example, common law requires that fiduciaries act in accordance with the duties of loyalty and care:

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

The Firmwide fiduciary risk governance is structured as follows:

Board of Director Committees:

Board Risk Committees:

- The Board Risk Committee - The committee's responsibilities include oversight of management's exercise of its responsibility to assess and manage, among other things, the governance frameworks or policies for fiduciary risk; and
- Audit Committee ('AC') - oversee and receive reporting on fiduciary risk.

Firmwide Fiduciary Risk Committees:

- The Firmwide Fiduciary Risk Governance Committee ('FFRGC') is responsible for providing Firmwide oversight of the governance framework for fiduciary risk or fiduciary related conflicts of interest risk inherent in each of the Firm's Lines of Business ('LOB'). The FFRGC is responsible for reviewing periodic reports from LOBs, reviewing progress of fiduciary regulatory items, and for further escalation to the FRC, Board Risk Committee, and AC as appropriate.

Line of Business Risk Committees:

- Each LOB and their respective risk and governance committees are responsible for the oversight and management of the fiduciary risks in their businesses in accordance with the Fiduciary Framework.

Risk Appetite

The tolerance for certain risks is controlled by the risk and control frameworks in place throughout the firm and is not numerically quantified. Fiduciary risk is governed in accordance with the Fiduciary Management and Control Policy.

Approach to risk management

Fiduciaries, under applicable law and regulation, must act in accordance with a higher standard of care than non-fiduciaries, and as a result may be exposed to substantially greater regulatory requirements and oversight, reputation risk and potential liability. Given the

specialized nature of these activities the Firm has adopted a Fiduciary framework with a disciplined and structured approach to the identification and management of fiduciary issues and the approach to risk management is as follows:

- Each LOB and in scope Corporate Function is responsible for identifying, determining and documenting its fiduciary activities and related risks and for complying with the regulations, laws and contracts related to its Fiduciary activities. Each LOB owns the risks related to the fiduciary activities it conducts and must work in consultation with Oversight & Control, Risk, Legal and Compliance in managing these risks. Each LOB, in-scope Corporate Function, and its respective Risk Committee and/or Control Committee, is responsible for the oversight and management of Fiduciary activities and associated risks within such LOB and in-scope Corporate Function;
- Each LOB and in-scope Corporate Function must have processes in place for Fiduciary activities in alignment with the Fiduciary Risk Framework, to ensure appropriate review of matters that expose the firm to fiduciary risk. Matters giving rise to associated risks must be escalated to the applicable LOB Risk and/or Control Committees. A Fiduciary risk update will be provided by Fiduciary risk committee representatives to their respective LOB Risk Committee at least annually;
- Significant changes to Firm fiduciary control activities, governing frameworks or decision making processes that impact client investment selections must be reviewed by the appropriate governance committees prior to implementation; and
- Cross-LOB fiduciary risk issues, such as actual, potential or perceived conflicts of interest, must be identified and documented with processes designed to maintain a consistent approach to address and manage cross-LOB Fiduciary activity and related risks.

Fiduciary matters with potential impact on other LOBs, must be reported to the appropriate LOB Fiduciary Committee, The LOB Fiduciary Committee will determine whether cross-LOB review of the matter is needed. The LOB Fiduciary Committee will further report significant issues to the FFRGC as appropriate. The FFRGC should escalate issues of significance and provide a periodic update to the Firmwide Risk Committee ('FRC'), the Board Risk Committee and the Audit Committee, as appropriate.

Strategic Business Risk

Strategic Business risk is the risk associated with the Firm's current and future business plans and objectives. Strategic 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

Strategic Business risk as it impacts capital is managed through the entities' strategic and business planning as part of their Capital Management Framework. Strategic Business risk is also considered and managed in a wider context. For example, for new products and services, failure to identify new or changed risks may expose the Group to financial loss or harm its reputation. Accordingly, the New Business Initiative Approval ('NBIA') policy provides a framework that governs the review and approval of new or materially changed products and services, while making sure that risks are identified, measured, monitored and controlled. LOBs are authorised to introduce new products, services and processes and are responsible for the new products and services they introduce.

Under the NBIA policy, the business is required to undertake an analysis of the economic, regulatory or legal entity capital impact of the new business, as appropriate. Signoffs for NBIA's impacting the in scope legal entities include Compliance, Legal, Risk Management, Operational Risk, Finance, Corporate Tax, Treasury, Technology and Operations.

Risk Reporting and Measurement

J.P. Morgan's stress testing programme is an important component in managing, measuring and reporting strategic 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 strategic business risk. If the baseline capital projections, which include P&L projections from the LOB, show a reduction in the earnings, this could be an indicator that a strategy is not implemented successfully and in certain cases extra capital is set aside in the form of Pillar 2. Similarly, where the stressed capital projections show risks to capital beyond the entities' risk appetite, remedial action is taken.

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

Climate and Environmental Risk

Environmental, social and governance ('ESG') considerations are integrated into the principles and policies that govern the overall business of JPMC, including JPMCHL, JPMFIL and JPMML.

This includes having robust governance policies and practices, risk management framework and controls; striving to serve our customers exceptionally and transparently; investing in our employees and cultivating a diverse and inclusive work environment; working to strengthen the communities in which we live and work; and advancing sustainable solutions for our clients and within our operations. JPMC's long-standing emphasis on running our business in this manner has made our Firm strong, resilient and well

positioned to support our clients, customers, employees and communities across the globe, even in times of crisis such as the current COVID-19 pandemic.

Today, the world faces a series of significant ecological and social ('E&S') challenges. Climate change, deforestation and loss of habitats, water quality/availability, waste and the impact of development on communities and especially indigenous nations are only some of the threats that pose risks to society and companies if they are not tackled adequately. As a global financial institution, the J.P. Morgan Group (together with its subsidiaries) recognizes that our business decisions have the potential to have an impact on the environment and the surrounding communities. For this reason, understanding our customers' approach to E&S issues is an important part of our risk management process. This helps us make informed decisions and, under certain circumstances, allows us to provide information and guidance to our customers on best practices when accessing capital markets, making disclosures to investors, or improving sustainability practices. We believe our Group can play a valuable role in helping our customers manage their E&S impact.

JPMC is committed to creating a more sustainable future for the employees, customers and communities it serves. In April 2021, JPMC announced a target of more than USD 2.5 Trillion over a period of 10 years in order to promote climate protection measures and sustainable development, including USD 1 Trillion for environmentally friendly initiatives such as renewable energies and clean technologies. This long-term goal complements the Group's financing strategy announced in 2020, which is aligned with the Paris Agreement. In May 2021, the Group published its Paris-oriented methodology, Carbon Compass, and set emission reduction targets for the three selected sectors: Oil and gas, electricity and the automotive industry. As part of its Paris-oriented financing strategy, the Group seeks to help customers overcome the challenges and take advantage of the long-term economic and environmental benefits of transitioning to a low-carbon world. Through the recently established Center for Carbon Transition, the Group will also include customers in its long-term business strategies and related information on CO2 emissions. As reporting and data availability continue to improve beyond 2021, the Group could investigate the coverage of other carbon-intensive sectors.

The Board of Directors of JPMCHL, JPMFIL and JPMMLM strive to advance the transition to our future business activities and in doing so, it is committed to the E&S considerations in our end-to-end product range, customer interactions, risk management and processes in line with the Firmwide commitment, taking into account Firmwide initiatives.

Risk Appetite

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

The Firm's Risk Appetite framework is reviewed on an ongoing basis, and is reviewed with the FRC and RC at least annually. The JPMCHL and JPMFIL material subsidiaries have their own risk appetite policy including quantitative and qualitative parameters leveraging the Firm's framework and approved annually by the relevant Boards. The ERC and relevant RC as applicable review the risk appetite parameters quarterly.

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.

Members of the Board of Directors

J.P. Morgan Capital Holdings Limited

As at 31st December 2020, the JPMCHL Board is comprised of four directors. The directors are:

Hernan Cristerna

Hernan Cristerna is the Board Chairman and is an experienced chair as he is also currently the Executive Chairman of Global M&A and a member of the Executive Committee of Investment Banking. Previously, Hernan was co-Head of Global M&A from 2013 until 2019. He has been at the Firm for over 20 years running different sector and regional. Herman received a B.A. with honours from Claremont McKenna College and holds a Master degree in Business Administration from the Harvard Business School. businesses. Hernan advises corporations in different sectors and regions on strategic matters, including mergers, acquisitions, activism, defence and related financing. Hernan's seniority and his familiarity with the business, accompanied by his extensive skills and M&A experience enable him to effectively perform the role as both a director and as the Board Chairman.

Deborah Toennies

Debbie Toennies is the Global Head of regulatory Affairs, Corporate and Investment bank. Debbie Toennies has responsibility for assessing regulatory issues impacting the Corporate and Investment Bank ('CIB') where she and her team set the strategy and direct the Firm's advocacy efforts for regulatory issues which impact the CIB and DLT/Crypto Assets broadly. She also serves as advisor for clients on the changing regulatory landscape. Prior to this role, Debbie was responsible for the analysis, coordination and advocacy of capital, liquidity and securitization regulatory issues within the Office of Regulatory Affairs. Debbie has also previously served as Head of Conduit Management and Business Development within J.P. Morgan's Securitized Products Group where she was an industry leader in advocacy initiatives with global regulators regarding securitization related issues, originated a wide variety of securitization transactions for the Firm's clients and headed investor relations for the securitization business.

Debbie has a B.S. in Accountancy from Miami University and a Masters in Business Administration in Finance and Strategy from the University of Chicago. Debbie's seniority and regulatory background, accompanied by her skills and experience complement the existing board composition.

Dale Braithwait

Dale Braithwait is the Global Head of Depository Services at J.P. Morgan. The team provides depository, trust and fiduciary services, as part of the firm's Securities Services business. Dale has served as a director of a group asset management company, and as a non-executive member of the Eurex Risk Committee. Until July 2019, Dale was the head of the EMEA Chief Risk Office, global lead of Legal Entity Risk Management, member of the EMEA Risk Committee, and the EMEA Operating Committee. Prior to this, Dale was the Global Head of the Credit Clearing business, which he set up from inception. Dale joined J.P. Morgan in 1997 and has also held roles relating to trading, risk management, capital management, valuation control, and fund administration. He left J.P. Morgan for a period of time to set-up the Risk, Operations and Finance functions of a fund manager. Dale holds a Bachelor of Science in Chemistry and Management from Imperial College, London. Dale's seniority along with his risk and depository services background, accompanied with his familiarity with the business and experience as director enables him to perform the role effectively.

Jeannette Smits van Oyen

Jeannette Smits van Oyen is the Global Investment Bank Head of UK Consumer, Retail, Power & Utilities London. Jeannette Smits van Oyen is a Managing Director in the UK Investment Bank, responsible for the coverage of clients and execution of advisory assignments in the Consumer, Retail, Power & Utilities industries. Prior to her role in the UK, Jeannette was the Co-Global Head for Power & Utilities Investment Banking. Jeannette advises clients on a range of corporate finance and related topics from M&A to financing. She has over 15 years of service to J.P. Morgan, having joined from Bear Stearns in 2008. She is a member of the J.P. Morgan EMEA Philanthropy Committee and Co-Sponsor of EMEA VP Connect. Prior to her career in Banking, Jeannette trained as a Chartered Accountant at PwC with specialism in international tax. Jeannette holds a Bachelor of Accounting and Law from the University of Technology, Sydney ('Australia') and a Masters of International Finance from Skema Business School (France) and The University of Groningen ('The Netherlands'). Jeannette's seniority, finance and consumer retail background, accompanied by her skills and experience complement the existing board composition.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended 31st December 2020 as follows:

Name	Internal Directorships	External directorships
Deborah Toennies	1	0
Dale Braithwait	1	0
Hernan Cristerna	1	0
Jeannette Smits van Oyen	1	0

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

J.P. Morgan Financial Investment Limited

As at 31st December 2020, the JPMFIL Board is comprised of three directors. The directors are:

James Chatters

Mr Chatters joined the Board of J.P. Morgan Financial Investments Limited in August 2020. He is an Executive Director and a UK CIB Legal Entity Controller, responsible for the oversight of over 50 UK legal entities and oversees US standalone financial reporting. Mr Chatters has over 15 years of experience in the Financial Services industry mainly with J.P. Morgan and previously worked for Bear Stearns. Mr Chatters is qualified under Chartered Institute of Management Accountants and the Association of Accounting Technicians.

Louise Atherton-Miller

Mrs Atherton-Miller joined the Board of J.P. Morgan Financial Investments Limited in December 2017. She is a Vice President and is the Risk Control Manager for the Consumer and Community Banking line of business in the UK. Prior to this, Mrs Atherton-Miller was head of Legal Entity Risk Governance in the EMEA region. Mrs Atherton-Miller has over 35 years' experience in the Financial Services industry, working in Risk for several of J.P. Morgan's heritage firms including Manufacturers Hanover Trust Company, Chemical Bank and Chase Manhattan Bank.

John Hobson

Mr Hobson joined the Board of J.P. Morgan Financial Investments Limited in June 2017. He is an Executive Director and currently works in Luxembourg on major project delivery for Finance, having previously been the Luxembourg Senior Financial Officer. Prior to these roles, Mr Hobson was the UK Legal Entities Controller. Mr Hobson has over 22 years of Financial Services experience and has also worked for Barclays, the Royal Bank of Scotland and ABN Amro. Mr Hobson is a member of the Association of Chartered Certified Accountants.

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended 31st December 2020 as follows:

Name	Internal Directorships	External directorships
James Chatters	1	0
Louise Atherton-Miller	1	0
John Hobson	1	0

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

J.P. Morgan Mansart Management Limited

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

Shahzad Sadique

Mr Sadique joined JPMorgan in 2012, and was appointed as a director and Chief Executive Officer of JPMML in May of that year. He has over 20 years of experience in the Financial Services industry. Prior to joining J.P. Morgan, he was the Head of Morgan Stanley's structured and alternative fund business within their Investment Bank and was previously the co-Head of the retail structuring team for the multi-asset platform at Dresdner Bank. Mr Sadique began his career at Merrill Lynch in the global equity derivatives group. He holds a Master of Science in International Securities and Investment Banking from the ISMA Centre, University of Reading and a Bachelor of Arts in Financial Economics.

Matthew Melling

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

Directorships

Members of the Board of Directors have also held internal and/or external directorships during the year ended 31st December 2020 as follows:

Name	Internal Directorships	External directorships
Shahzad Sadique	1	2
Matthew Melling	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

JPMorgan Chase is breaking down barriers to lead with diversity, equity and inclusion and drive inclusive economic growth all over the world. We are working to make inclusivity and equity central to everything we do. We strive to create an inclusive culture where employees know they can bring their whole, authentic selves to work every day, and feel confident that they can thrive with equal opportunity to advance their careers. With a regular cadence, we recognize our diverse communities throughout the year — by collaborating globally and locally to celebrate our diversity and discover our intersectionality.

With a shared mindset for personal and management accountability, we embed this strategy within and across the firm's businesses and employees at all levels, through Global Supplier Diversity and dedicated leadership of our D,E&I branded strategies: Advancing Black Pathways, Latinx Affairs, LGBT+ Affairs, Military & Veterans Affairs, Office of Disability Inclusion, and Women on the Move.

The Firm has set an internal target to achieve 30% representation of women on certain key boards in EMEA. The Firm continues to make progress towards achieving this target across those boards and conducts a review on an annual basis. Further information on the Firm's global Diversity and Inclusion strategy is available at:

<https://www.jpmorgan.com/disclosures/crd4>

<https://www.jpmorganchase.com/about/people-culture/diversity-and-inclusion>

3. Information on the scope of application of the regulatory framework (Article 436)

This section outlines differences between carrying values and regulatory exposure values. Firstly LI1 tables provide linkage of financial statements categories with regulatory risk categories. The row structure represents the same row structure of the balance sheet used in the annual report for 2020. The carrying amounts as reported in published financial statements are allocated to the different risk frameworks. The main sources of differences between carrying amounts as reported in published financial statements and regulatory exposure values are depicted in LI2 tables.

There are no differences between the scope of accounting consolidation and the scope of regulatory consolidation in the reporting entities.

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

Table 2: EU LI1 - The mapping of financial statement categories with regulatory risk categories for JPMCHL

\$'mm	Carrying values as reported in published financial statements	Carrying values of items				
		Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework ⁵	Not subject to capital requirements or subject to deduction from capital
Assets						
Cash and balances at central banks	13,596	13,596	—	—	—	—
Cash at bank and in hand	157	157	—	—	—	—
Loans and advances to banks	8,268	8,268	—	—	—	—
Loans and advances to customers	993	993	—	—	—	—
Securities purchased under resale agreements	225,069	—	225,069	—	—	—
Securities borrowed	40,811	—	40,811	—	—	—
Financial assets held at fair value through profit or loss	—	—	—	—	—	—
Financial assets designated at fair value through profit or loss	425,252	233	305,588	8	119,423	—
Other assets	126,081	42,429	80,572	—	3,080	—
Prepayments and accrued income	672	672	—	—	—	—
Goodwill	27	—	—	—	—	27
Investments in JPMorgan Chase undertakings	—	—	—	—	—	—
Tangible fixed assets	15	15	—	—	—	—
Total Assets	840,941	66,363	652,040	8	122,503	27
Liabilities						
Deposits by banks	4	—	—	—	—	4
Customer accounts	2,587	—	—	—	—	2,587
Securities sold under agreements to repurchase	142,453	—	142,453	—	—	—
Securities loaned	11,848	—	11,848	—	—	—
Financial liabilities held at fair value through profit or loss	344,738	—	316,220	—	28,518	—
Financial liabilities designated at fair value through profit or loss	28,612	—	—	—	—	28,612
Other liabilities	246,887	—	45,897	—	2,891	198,099
Accruals and deferred income	1,821	—	—	—	—	1,821
Subordinates liabilities	12,000	—	—	—	—	12,000
Total liabilities	790,950	—	516,418	—	31,409	243,123

⁵ The column represents only values which are subject to specific market risk.

Table 3: EU LI1 - The mapping of financial statement categories with regulatory risk categories for JPMFIL

\$'mm	Carrying values under scope of regulatory consolidation ⁶	Carrying values of items				
		Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets						
Fixed assets	428	427	—	—	—	1
Cash at bank and in hand	280	280	—	—	—	—
Debtors	186	186	—	—	—	—
Financial assets held for trading	17	14	2	—	1	—
Financial assets designated at fair value through profit or loss	—	—	—	—	—	—
Securities purchased under agreements to resell	4,709	—	4,709	—	—	—
Total Assets	5,620	907	4,711	—	1	1
Liabilities						
Creditors: amounts falling due within one year	128	—	—	—	—	128
Provisions for liabilities	—	—	—	—	—	—
Taxation	—	—	—	—	—	—
Financial liabilities held for trading	1	—	1	—	—	—
Creditors: amounts falling due after more than one year	112	—	—	—	—	112
Total liabilities	241	—	1	—	—	240

Table 4: EU LI1 - The mapping of financial statement categories with regulatory risk categories for JPMML

\$'mm	Carrying values as reported in published financial statements	Carrying values of items				
		Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets						
Cash and cash equivalent	15	15	—	—	—	—
Debtors	7	7	—	—	—	—
Total Assets	22	22	—	—	—	—
Liabilities						
Creditors	6	—	—	—	—	6
Total liabilities	6	—	—	—	—	6

Table 5: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements for JPMCHL

\$'mm	Items subject to		
	Credit risk framework	CCR framework	Securitisation framework
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	66,363	652,040	8
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	—	516,418	—
Total net amount under the regulatory scope of consolidation	66,363	135,622	8
Off-balance-sheet amounts	4,257	—	—
Differences due to Potential Future Credit Exposure (PFCE)	—	64,614	—
Differences due to different netting rules, haircuts, modelling and collateral usage etc.	(31,225)	58,098	—
Exposures amounts considered for regulatory purposes	39,395	258,334	8

⁶ JPMFIL is not required to publish consolidated audited financial statements (exemptions under FRS 102).

Table 6: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements for JMFIL

\$'mm	Items subject to		
	Credit risk framework	CCR framework	Securitisation framework
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	907	4,710	—
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	—	1	—
Total net amount under the regulatory scope of consolidation	907	4,709	—
Differences due to Potential Future Credit Exposure (PFCE)	—	1	—
Differences due to different netting rules	—	(3,714)	—
Other	(43)	—	—
Exposure amounts considered for regulatory purposes	864	996	—

Table 7: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements for JPMML

\$'mm	Items subject to		
	Credit risk framework	CCR framework	Securitisation framework
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	22	—	—
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	—	—	—
Total net amount under the regulatory scope of consolidation	22	—	—
Exposures amounts considered for regulatory purposes	22	—	—

Explanations of Differences Between Accounting and Regulatory Exposure Amounts

Off-balance-sheet amounts: Off-balance sheet items are subject to the regulatory framework. The exposures represent values after the application of the relevant credit conversion factors ('CCF').

Difference due to Potential Future Credit Exposure ('PFCE'): In order to determine exposure value for derivatives the PFCE is calculated as per article 274 of the CRR.

Differences due to different netting rules, haircuts, modelling and collateral usage:

- The netting differences are due to legally enforceable netting agreements which cannot be applied in the same scope as for accounting framework which allows netting only if legal right of set-off exists and the cash flows are intended to be settled on a net basis. The netting rules also include the effect of Funded Credit Protection in the form of master netting agreements covering repurchase transactions.
- Collateral, haircuts and netting are taken into consideration when deriving exposures under the Internal Model Method ('IMM') for OTC derivatives.
- Exposure amounts considered for regulatory purposes are amounts before application of Credit Risk Mitigation ('CRM') but after application of regulatory netting requirements. The balance sheet includes collateral amounts therefore these values need to be excluded.

4. Own Funds (Article 437)

Own Funds Disclosures

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

The Financial Stability Board ('FSB') Total Loss Absorbing Capacity ('TLAC')⁷ standard, issued in November 2015, specified minimum TLAC requirements for G-SIB's, including at the level of their material sub-groups. Within the EU and the UK, the EU Bank Recovery and Resolution Directive ('BRRD') and its transposition into local law in the UK established a requirement for the Bank of England ('BoE') to set a target level for the Minimum Requirement for own funds and Eligible Liabilities ('MREL'). Both TLAC and MREL are intended to facilitate the resolution or recapitalization of a financial institution without causing financial instability and without recourse to public funds. The BoE updated Statement of Policy on its Approach to Setting MREL, published in June 2018, included requirements on the internal MREL resources to be held by UK material subsidiaries of overseas groups. In line with the FSB's TLAC standard, these rules came into effect, on a transitional basis, from 1st January 2019, with full compliance required by 1st January 2022. Amendments to the EU MREL framework were subsequently agreed by member states through the finalisation of the CRD V / BRRD II package. These included the implementation of the FSB TLAC standard for EU Global Systemically Important Institutions ('G-SIIs') and material subsidiaries of non-EU G-SIIs within CRR II. These rules came into effect, on a transitional basis, from 27th June 2019, with full compliance required by 1st January 2022, and have been on-shored into UK law by The Capital Requirements (Amendment) (EU Exit) Regulations 2019. These on-shored requirements apply at the level of the consolidated UK parent entity.

The information represented in the tables below constitutes the applicable data elements for Own Funds specified in the Commission Implementing Regulation (EU) No 1423/2013.

Key Changes During the Period

- JPMCHL: The total capital ratio has increased by 1.10% from 22.96% as at 31st December 2019 to 24.06%. The increase in total capital ratio is driven by a decrease in Risk Weighted Assets ('RWA') and an increase in CET1 capital. Capital increased due to an inclusion of 2020 recognised audited profits, offset due to payment of dividends.
- JPMFIL: The total capital ratio has decreased by 103% from 796% as at 31st December 2019 to 693%. The decrease in total capital ratio is driven by an increase in RWA.
- JPMML: No significant change in the capital structure during 2020.

Table 8: CRDIV Regulatory Capital for JPMCHL

Own Funds Disclosure Template (\$'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	8,081	26 (1), 27, 28, 29
1.1	of which: Ordinary shares	8,081	EBA list 26 (3)
2	Retained earnings	32,886	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9,024	26 (1)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	(1,750)	26 (2)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	48,241	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(1,470)	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	(27)	36 (1) (b), 37
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(1,497)	
29	Common Equity Tier 1 (CET1) capital	46,744	
Additional Tier 1 (AT1) capital: Instruments			
44	Additional Tier 1 (AT1) capital	—	
45	Tier 1 capital (T1 = CET1 + AT1)	46,744	
Tier 2 (T2) capital: instruments and provisions			
57	Total regulatory adjustments to Tier 2 (T2) capital	—	
58	Tier 2 (T2) capital	12,000	
59	Total capital (TC = T1 + T2)	58,744	
60	Total risk weighted assets	244,130	

⁷ The FSB Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution and Total Loss-absorbing Capacity (TLAC) Term Sheet published on 9 November 2015

Own Funds Disclosure Template (\$'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	19.15 %	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	19.15 %	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	24.06 %	92 (2) (c)
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)	7.02 %	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2.5 %	
66	of which: countercyclical buffer requirement	0.02 %	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	13.15 %	CRD 128
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	4,289	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	1,921	36 (1) (i), 45, 48
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	185	36 (1) (c), 38, 48

Table 9: CRDIV Regulatory Capital for JPMFIL

Own Funds Disclosure Template (\$'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	3	26 (1), 27, 28, 29
1.1	of which: Ordinary shares	3	EBA list 26 (3)
2	Retained earnings	(25)	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves)	5,169	26 (1)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	5,147	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(5)	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	(1)	36 (1) (b), 37
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(6)	
29	Common Equity Tier 1 (CET1) capital	5,141	
Additional Tier 1 (AT1) capital: Instruments			
44	Additional Tier 1 (AT1) capital	—	
45	Tier 1 capital (T1 = CET1 + AT1)	5,141	
Tier 2 (T2) capital: instruments and provisions			
51	Tier 2 (T2) capital before regulatory adjustments	—	
57	Total regulatory adjustments to Tier 2 (T2) capital	—	
58	Tier 2 (T2) capital	—	
59	Total capital (TC = T1 + T2)	5,141	
60	Total risk weighted assets	742	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	692.57 %	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	692.57 %	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	692.57 %	92 (2) (c)
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)	7.0 %	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2.5 %	
66	of which: countercyclical buffer requirement	— %	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	684.57 %	CRD 128

Table 10: CRDIV Regulatory Capital for JPMML

Own Funds Disclosure Template (\$'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	25	26 (1), 27, 28, 29
1.1	of which: Ordinary shares	25	EBA list 26 (3)
2	Retained earnings	(9)	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves)	—	26 (1)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	16	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)		
29	Common Equity Tier 1 (CET1) capital	16	
Additional Tier 1 (AT1) capital: Instruments			
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	—	
44	Additional Tier 1 (AT1) capital	—	
45	Tier 1 capital (T1 = CET1 + AT1)	16	
Tier 2 (T2) capital: instruments and provisions			
58	Tier 2 (T2) capital	—	
59	Total capital (TC = T1 + T2)	16	
60	Total risk weighted assets	15	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	104.91 %	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	104.91 %	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	104.91 %	92 (2) (c)
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	96.91 %	CRD 128

Own Funds Reconciliation

The tables below present a reconciliation between audited balance sheet own funds and regulatory own funds as at 31st December 2020 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 11: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMCHL

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	\$'mm
CET1 Capital		
406,909,774 Ordinary Shares of \$10 each	Accounts Note 31	4,069
Share Premium Account	Accounts Page 50	4,012
Pension Reserve	Accounts Page 50	—
Capital contribution reserve	Accounts Page 50	—
Other Reserves	Accounts Page 50	9,024
Retained Earnings	Accounts Page 50	31,136
CET1 Capital - Balance Sheet Own Funds		48,241
<i>Less Regulatory Adjustments</i>		
(-) Goodwill and Other Intangible Assets	Accounts Note 21	(27)
(-) Additional Valuation Adjustments	CRR Art. 468	(1,470)
CET1 Capital - Regulatory Own Funds After Adjustments		46,744
T2 Capital		
Subordinated Loan (maturity 17/12/2028)		12,000
T2 Capital - Balance Sheet Own Funds		12,000
T2 Capital - Regulatory Own Funds After Adjustments		12,000
Total Regulatory Own Funds		58,744

Table 12: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMFIL

Regulatory Own Funds Reconciliation to Balance Sheet	\$'mm
CET1 Capital	
1,600,002 Ordinary Shares of £1 each	3
Share Premium Account	—
Capital contribution reserve	5,169
Retained Earnings	207
CET1 Capital - Balance Sheet Own Funds	5,379
Less Regulatory Adjustments	
(-) Unaudited Profit	(232)
(-) Goodwill and Other Intangible Assets	(1)
(-) Additional Valuation Adjustments	(5)
CET1 Capital - Regulatory Own Funds After Adjustments	5,141
Total Regulatory Own Funds	5,141

Table 13: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMMLL

Regulatory Own Funds Reconciliation to Balance Sheet	Reference	\$'mm
CET1 Capital		
1 Ordinary Share of £1	Accounts Note 17	—
25,000,000 Ordinary Shares of \$1 Each	Accounts Note 17	25
Accumulated losses	Accounts Page 19	(9)
Other reserves	Accounts Page 19	—
CET1 Capital - Balance Sheet Own Funds		16
CET1 Capital - Regulatory Own Funds After Adjustments		16
Total Regulatory Own Funds		16

Liabilities

The amendments to the CRR published in June 2019 specify, under Article 72a(2), the liabilities that shall be excluded from eligible liabilities items for the purposes of MREL compliance. The table below provides a breakdown of the liability structure of JPMCHL, including the aggregate excluded liabilities under the provisions of Article 72a(2).

Table 14: Liability structure for JPMCHL

Liability structure	Revised Regulation (EU) No 575/2013 Article Reference	JPMCHL (\$'mm)
Tier 2 instruments	Article 72a(1)	12,000
Excluded liabilities	Article 72a(2)	578,901
Residual liabilities		200,049
Total liabilities		790,950

Main Features of Capital Instruments

The tables below present the main features of regulatory capital instruments for the in scope entities as at 31st December 2020 required by Commission Implementing Regulation (EU) No 1423/2013. The terms and conditions can be found on the Companies House website.

Table 15: Main Features of Regulatory Capital Instruments

Capital Instruments Main Features		JPMCHL		JPMFIL	JPMML	
		CET1	T2	CET1	CET1	CET1
		\$10 ordinary shares	\$ 12,000 mm subordinated loan	£1 ordinary shares	£1 ordinary shares	\$1 ordinary shares
1	Issuer	JPMCHL	JPMCHL	JPMFIL	JPMML	JPMML
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	Internal issuance	Private Placement	Private Placement	Private Placement
3	Governing law(s) of the instrument	The Companies Act 2006	English Law	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006
Regulatory treatment						
4	Transitional CRR rules	Common Equity Tier 1	Tier 2	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1	Tier 2	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	(sub-)consolidated	(sub-)consolidated	(sub-)consolidated	Solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	\$ Ordinary	\$ Subordinated Notes/ Loan	£ Ordinary	£ Ordinary	\$ Ordinary
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date). Includes issued paid up share capital and share premium	\$8,081 includes nominal and premium	\$12,000	£1.6	£0	25
9	Nominal amount of instrument	\$10	\$12,000,000,000	£1	£1	\$1
9a	Issue price	average issue price \$20	\$12,000,000,000	£1	£1	\$1
9b	Redemption price	N/A	1	N/A	N/A	N/A
10	Accounting classification	Shareholders' equity	Liability - amortised cost	Shareholders' equity	Shareholders' equity	Shareholders' equity
11	Original date of issuance (issued paid up share capital)	\$0.2m Nov 18 1999 \$2,000m Jan 25 2000 \$959m Nov 2 2000 \$1,110m Apr 9 2002 \$0.01m Dec 12 2006 \$0.01m Mar 7 2007	\$12,000m Dec 17 2018	£1.6m (\$2.6m) March 12 1999	£0.000001m Nov 7 2007	\$25m Oct 22 2012
12	Perpetual or dated	Perpetual	Dated	Perpetual	Perpetual	Perpetual
13	Original maturity date	No maturity	December 17 2018	No maturity	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	No	Yes	No	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A

Capital Instruments Main Features		JPMCHL		JPMFIL	JPMML	
		CET1	T2	CET1	CET1	CET1
		\$10 ordinary shares	\$ 12,000 mm subordinated loan	£1 ordinary shares	£1 ordinary shares	\$1 ordinary shares
Coupons / dividends						
17	Fixed or floating dividend/coupon	N/A	Floating	N/A	N/A	N/A
18	Coupon rate and any related index	N/A	1M USD Libor + 1.55%	N/A	N/A	N/A
19	Existence of a dividend stopper	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Full discretionary	Mandatory	Full discretionary	Full discretionary	Full discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Full discretionary	Mandatory	Full discretionary	Full discretionary	Full discretionary
21	Existence of step up or other incentive to redeem	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-cumulative	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
30	Write-down features	N/A	N/A	N/A	N/A	N/A
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	Unsecured and Subordinated Creditors	One class of share & same rights attached to all shares	Ranks pari passu	Ranks pari passu
36	Non-compliant transitioned features	No	No	No	No	No
37	If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

5. Capital Requirements (Article 438)

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

Internal Capital Adequacy Assessment Process

The entities in scope, J.P. Morgan Securities plc and J.P. Morgan Markets Limited, complete an Internal Capital Adequacy Assessment Process ('ICAAP') on a periodic basis. This forward-looking assessment of capital requirements given the business strategy, risk profile, risk appetite and capital plan result in potential impacts to entities' earnings, capital resources, risk-weighted assets and balance sheet. Through the ICAAP, the entities ensure that they are adequately capitalised in relation to their risk profile and appetite, not only as at the ICAAP date, but through the economic cycle and under a range of severe but plausible stress scenarios, which are designed to capture key vulnerabilities and idiosyncratic risks. The ICAAP results are reviewed by management and reviewed and approved by the Board of Directors.

Minimum Capital Requirements

The tables below show a breakdown of the RWA and associated Minimum Capital Requirements for JPMCHL, JPMFIL and JPMML. The standardised approach has been used for the calculation of credit risk. The Mark-to-Market Method ('MtM') and IMM have been employed to calculate OTC derivative exposure in CCR. Market Risk Capital Requirements have been measured by using a combination of the standardised approach and internal models including Value-at-Risk (VaR) approved by the PRA. 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. It does not include additional minimum requirements set out by the PRA or FCA as part of the Company's Individual Capital Guidance ('ICG').

Key Changes during the Period

- **JPMCHL:**
 - The decrease in market risk capital requirements under the standardised approach is driven by equities.
 - CCR increased due to increases in Securities Financing Transactions ('SFTs').
- **JPMFIL:** CCR increased due to increases in SFTs.
- **JPMML:** No significant changes in RWAs during 2020.

Table 16: EU OV1 - Overview of RWAs for JPMCHL⁸

\$'mm			RWA		Minimum capital requirements
			Q4 2020	Q4 2019	
	1	Credit risk (excluding CCR)	16,136	16,339	1,291
Article 438(c)(d)	2	Of which the standardised approach	16,136	16,339	1,291
Article 107 and Article 438(c)(d)	6	CCR	122,395	113,395	9,791
Article 438(c)(d)	7	Of which mark to market	24,100	24,775	1,928
	10	Of which internal model method (IMM)	23,322	21,603	1,866
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	193	112	15
Article 438(c)(d)	12	Of which CVA	11,530	11,163	922
Article 438(e)	13	Settlement risk	624	782	50
Article 438(e)	19	Market risk	88,188	105,734	7,055
	20	Of which the standardised approach	75,762	91,721	6,061
	21	Of which IMA	12,426	14,013	994
Article 438(f)	23	Operational risk	16,302	16,771	1,304
	24	Of which basic indicator approach	16,302	16,771	1,304
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	485	483	39
	29	Total	244,130	253,504	19,530

⁸ The exposure value to SFTs is included under CCR in table EU OV1, it is not shown in the CCR breakdown, as in line with the prescribed template.

Table 17: EU OV1 - Overview of RWAs for JPMFIL

\$'mm			RWA		Minimum capital requirements
			Q4 2020	Q4 2019	
	1	Credit risk (excluding CCR)	329	350	26
Article 438(c)(d)	2	Of which the standardised approach	329	350	26
Article 107 and Article 438(c)(d)	6	CCR	236	104	19
Article 438(c)(d)	7	Of which mark to market	1	6	—
Article 438(c)(d)	12	Of which CVA	—	75	—
Article 438 (e)	19	Market risk	—	—	—
	20	Of which the standardised approach	—	—	—
Article 438(f)	23	Operational risk	177	192	14
	24	Of which basic indicator approach	177	192	14
	29	Total	742	646	59

Table 18: EU OV1 - Overview of RWAs for JPMML⁹

\$'mm			RWA		Minimum capital requirements
			Q4 2020	Q4 2019	
	1	Credit risk (excluding CCR)	11	7	1
Article 438(c)(d)	2	Of which the standardised approach	11	7	1
Article 438(e)	19	Market risk	1	—	—
	20	Of which the standardised approach	1	—	—
	29	Total	12	7	1

The table below shows a breakdown of the minimum capital requirements for Credit Risk (including Counterparty Credit Risk) by exposure class.

Table 19: EU OV1 additional - Overview of RWAs by exposure class

Exposure classes (\$'mm)		JPMCHL		JPMFIL		JPMML	
		RWA	Capital requirement	RWA	Capital requirement	RWA	Capital requirement
1	Central governments or central banks	4,080	326	—	—	—	—
2	Regional governments or local authorities	179	14	—	—	—	—
3	Public sector entities	1,987	159	—	—	—	—
4	Multilateral Development Banks	19	2	—	—	—	—
5	International Organisations	—	—	—	—	—	—
6	Institutions	25,656	2,052	431	34	3	—
7	Corporates	58,039	4,643	5	—	9	1
10	Exposures in default	137	11	—	—	—	—
11	Items associated with particularly high risk	35,532	2,843	—	—	—	—
15	Equity exposures	378	30	21	2	—	—
16	Other exposures	1,100	88	108	9	—	—
17	Total	127,107	10,168	565	45	12	1

Total Capital Requirements

In accordance with PRA Supervisory Statement SS31/15 the firm is now required to disclose the Total Capital Requirements ('TCR'). TCR is the sum of Pillar 1 and Pillar 2A capital requirements. The requirement is only applicable for firms at the highest level of consolidation in the UK regulated by the PRA.

Table 20: Total Capital Requirements

\$'mm	JPMCHL	
	Q4 2020	Q4 2019
Total capital requirements	25,637	27,931

⁹ The additional risk exposure amount due to fixed overheads is \$3mm. Therefore the total RWAs amount is \$15mm.

6. Exposure to Counterparty Credit Risk (Article 439)

Internal Capital and Credit Limits for Counterparty Credit Exposures

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

To capture the potential future variability of credit exposure, the Firm calculates, on a client-by-client basis, three measures of potential derivatives-related credit loss: Peak, Derivative Risk Equivalent ('DRE'), and Average exposure ('AVG'). These measures all incorporate netting and collateral benefits, where applicable.

Peak represents a conservative measure of potential exposure to a counterparty calculated in a manner that is broadly equivalent to a 97.5% confidence level over the life of the transaction. Peak is the primary measure used by the Firm for setting of credit limits for derivative transactions, senior management reporting and derivatives exposure management. DRE exposure is a measure that expresses the risk of derivative exposure on a basis intended to be equivalent to the risk of loan exposures. DRE is a less extreme measure of potential credit loss than Peak and is used for aggregating derivative credit risk exposures with loans and other credit risk. Finally, AVG is a measure of the expected fair value of the Firm's derivative receivables at future time periods, including the benefit of collateral. AVG exposure over the total life of the derivative contract is used as the primary metric for pricing purposes and is used to calculate credit risk capital and the CVA.

CVA is based on the Firm's AVG to counterparty and the counterparty's credit spread in the credit derivatives market. The Firm believes that active risk management is essential to controlling the dynamic credit risk in the derivatives portfolio. In addition, the Firm's risk management process takes into consideration the potential impact of wrong-way risk, which is broadly defined as the potential for increased correlation between the Firm's exposure to a counterparty (AVG) and the counterparty's credit quality. Many factors may influence the nature and magnitude of these correlations over time. To the extent that these correlations are identified, the Firm may adjust the CVA associated with that counterparty's AVG. The Firm risk manages exposure to changes in CVA by entering into credit derivative transactions, as well as interest rate, foreign exchange, equity and commodity derivative transactions.

For SFTs, the Firm uses Securities Risk Equivalent, a measure conceptually close to DRE.

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

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

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

Policies for Securing Collateral and Establishing Credit Reserves

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

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

Wrong-Way Risk Policies

The Firm may be exposed to additional credit risk as a result of the wrong way nature of certain OTC derivatives, Cleared Derivatives and securities financing trades, or the wrong way nature of collateral taken against these trades. Accordingly J.P. Morgan has established a credit policy that defines the CIB governance framework and additional controls to cover specific and general wrong way risk. Specific wrong-way OTC derivatives and securities financing trades have conservative credit exposure assigned which would lead to higher CVA and economic credit capital being much higher than for unrelated trades.

Compared with Specific Wrong Way ('SWW') risk, General Wrong Way ('GWW') risk tends to require a more subjective assessment of the correlation between the exposure drivers on a transaction and the counterparty's credit worthiness. This is where potential exposure on a transaction has material correlation to the counterparty's creditworthiness, but without there being a direct or legal connection.

Impact of Credit Rating Downgrade

The impact of a downgrade in the Firm's credit rating is considered in the JPMorgan Chase & Co. SEC 10-K filing, at a firmwide level. Credit rating downgrade analysis is incorporated within the liquidity risk metrics for JPMCHL's key entities.

The following table shows the potential impact of a single-notch and two-notch downgrade of the long-term credit rating of JPMS plc, at 31st December 2020, related to OTC derivative contracts with contingent collateral or termination features that may be triggered upon a ratings downgrade. Derivatives contracts generally require additional collateral to be posted or terminations to be triggered when the predefined threshold rating is breached:

Table 21: Impact of credit rating downgrade on collateral

\$'mm	Single-notch downgrade	Two-notch downgrade
Non-cumulative outflow	7	1,010

Counterparty Credit Risk Analysis

The table below shows counterparty credit risk exposures (excluding trades cleared through a CCP) by methods used to calculate CRR regulatory requirements for JPMCHL. Counterparty credit risk exposures are calculated under the standardised approaches set out in the CRR. Derivative exposures are calculated using the MtM method (CRR Article 274) and the IMM (CRR Article 283). SFTs use the Financial Collateral Comprehensive Method ('FCCM') (CRR Article 223). Long settlement transactions are treated under the FCCM method.

Table 22: EU CCR1 - Analysis of CRR exposure by approach for JPMCHL

	\$'mm	Replacement cost/current market value	Potential future credit exposures	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	4,958	41,742			50,092	23,271
4	IMM (for derivatives and SFTs)			21,817	1.4	30,544	23,322
6	Of which derivatives and long settlement transactions			21,817	1.4	30,544	23,322
9	Financial collateral comprehensive method (for SFTs)					87,395	63,002
11	Total						109,595

Table 23: EU CCR1 - Analysis of CRR exposure by approach for JPMFIL

	\$'mm	Replacement cost/current market value	Potential future credit exposures	EAD post CRM	RWAs
1	Mark to market	2	1	3	1
9	Financial collateral comprehensive method (for SFTs)			471	235
11	Total				236

The flow statements explaining changes in the CCR RWAs determined under the IMM are depicted in the table below.

Table 24: EU CCR7 - RWA flow statements of CCR exposures under the IMM for JPMCHL

	\$'mm	RWA	Capital requirements
1	RWAs as at the end of the previous reporting period (1st January 2020)	21,603	1,728
2	Asset size	1,620	130
3	Credit quality of counterparties	216	17
4	Model updates (IMM only)	(67)	(5)
8	Other ¹⁰	(50)	(4)
9	RWAs as at the end of the current reporting period (31st December 2020)	23,322	1,866

¹⁰ Includes changes in Specific Wrong Way Risk ('SWWR').

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

Table 25: EU CCR5-A - Impact of netting and collateral held on exposure values for JPMCHL

\$'mm	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held ¹¹	Net credit exposure
Derivatives ¹²	320,550	(245,797)	74,753	(27,592)	47,161
SFTs subject to a netting agreement	461,431	(269,279)	192,152	(104,355)	87,797
SFTs not subject to a netting agreement	7,098	—	7,098	(43)	7,055
Non-eligible collateral under the CRR ¹³	—	—	—	(1,041)	—
Total	789,079	(515,076)	274,003	(131,990)	142,013

Table 26: EU CCR5-A - Impact of netting and collateral held on exposure values for JPMFIL

\$'mm	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	2	(1)	1	—	1
SFTs subject to a netting agreement	4,185	—	4,185	(3,716)	469
SFTs not subject to a netting agreement	524	—	524	(523)	2
Total	4,711	(1)	4,710	(4,239)	472

Collateral Used in Counterparty Credit Risk

The breakdown of all types collateral posted or received by JPMCHL and JPMFIL to mitigate CCR exposure to derivatives and SFTs is shown in the tables below. As at 31st December 2020, the majority of collateral used was in high quality bonds while the rest was in cash and equities.

Table 27: EU CCR5-B - Composition of collateral for exposures to CCR for JPMCHL¹⁴

\$'mm	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	—	81,521	—	86,412	15,899	17,367
Debt securities (Central Governments)	—	1,336	—	266	34,636	24,132
Debt securities (Corporates)	—	17,458	—	3,162	187,728	145,367
Debt securities (Institutions)	—	5,986	—	11,970	303,990	230,027
Equities	—	653	—	16	94,903	73,902
Convertible securities	—	—	—	—	3,659	567
CIUs	—	—	—	—	6,960	3,132
Other	—	4	—	—	32	6
Total	—	106,958	—	101,826	647,807	494,500

Table 28: EU CCR5-B - Composition of collateral for exposures to CCR for JPMFIL

\$'mm	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	—	—	—	—	—	4,217
Debt securities (Central Governments)	—	—	—	—	—	—
Debt securities (Corporates)	—	—	—	—	—	—
Debt securities (Institutions)	—	—	—	—	3,699	—
Total	—	—	—	—	3,699	4,217

¹¹ Includes supervisory volatility adjustments and excludes collateral for OTC derivative exposures under IMM.

¹² The prudent valuation adjustments are deducted from the regulatory capital but they are not used to calculate the derivative credit exposure, therefore the balances represent values before the application of the prudent valuation adjustments.

¹³ Non-eligible collateral does not include supervisory volatility adjustments.

¹⁴ The table includes both eligible and non-eligible collateral before application of supervisory volatility adjustments.

CVA Capital Charge

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

Table 29: EU CCR2 - CVA capital charge

\$'mm		JPMCHL	
		Exposure value	RWA
1	Total portfolios subject to the advanced method	16,504	7,627
2	(i) VaR component (including the 3× multiplier)		3,263
3	(ii) SVaR component (including the 3× multiplier)		4,364
4	All portfolios subject to the standardised method	7,464	3,903
5	Total subject to the CVA capital charge	23,968	11,530

Exposure to CCPs

The following table shows a comprehensive picture of JPMCHL's exposures to CCPs. JPMCHL does not have any exposure to non-QCCPs¹⁵. The exposure amount for default funds contributions is calculated as per Article 308 of CRR. JPMFIL and JPMML do not clear via CCPs.

Table 30: EU CCR8 - Exposures to CCPs

\$'mm		EAD post CRM	RWAs
1	Exposures to QCCPs (total)		1,171
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	47,053	957
3	(i) OTC derivatives	22,693	454
4	(ii) Exchange-traded derivatives	16,903	354
5	(iii) SFTs	7,457	149
7	Segregated initial margin ¹⁶		
8	Non-segregated initial margin	1,038	21
9	Prefunded default fund contributions	1,087	193
11	Exposures to non-QCCPs (total)		—

Credit Derivatives Breakdown

The table below presents a breakdown of credit derivatives notional for JPMCHL by product type and whether they are held for client intermediation (other credit derivatives) or for the firm's own portfolio (credit derivative hedges). The firm makes limited use of credit derivatives hedges for the purpose of credit risk mitigation as disclosed in Section 18. Credit derivatives trading activity is only carried out within the JPMS plc.

Table 31: EU CCR6 - Credit derivatives exposures for JPMCHL

\$'mm	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Credit default swaps	—	—	1,747,775
Total return swaps	22,833	—	3,239
Total notionals	22,833	—	1,751,014
Fair values			
Positive fair value (asset)	—	—	26,987
Negative fair value (liability)	(8,804)	—	(26,033)

¹⁵ QCCP (qualifying central counterparty) means a central counterparty that has been either authorised in accordance with Article 14 of Regulation (EU) No 648/ 2012 or recognised in accordance with Article 25 of that Regulation.

¹⁶ For regulatory purposes all segregated margin is treated as non-segregated.

7. Countercyclical Capital Buffers (Article 440)

Under Basel III, each firm is required to hold an additional capital buffer against macroeconomic risks associated with an increase in aggregate credit. Each firm is required to calculate its institution-specific countercyclical buffer rate as a weighted average of the buffer rates that have been set for each jurisdiction to which the firm has relevant credit exposures. The countercyclical buffer is then the institution-specific countercyclical buffer rate multiplied by total RWA. JPMML as an IFPRU limited licence firm is not required to hold a countercyclical capital buffer (CRR Article 95)¹⁷.

Table 32: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMCHL

Breakdown by country (\$'mm)	General credit exposures	Trading book exposure		Securitisation 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	Value of trading book exposure for internal models	Exposure value for SA	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total		
Luxembourg	4,521	663	—	—	370	123	—	493	4.91 %	0.25 %
Norway	510	59	—	—	34	3	—	37	0.37 %	1.00 %
Hong Kong	427	197	—	—	34	22	—	57	0.57 %	1.00 %
Czech Republic	38	2	—	—	3	—	—	3	0.03 %	0.50 %
Slovakia	11	—	—	—	1	—	—	1	0.01 %	1.00 %
Bulgaria	—	1	—	—	—	—	—	—	— %	0.50 %
Other Countries	81,412	24,887	2	29	7,136	2,296	15	9,446	94.11 %	0.00 %
Total	86,919	25,809	2	29	7,578	2,445	15	10,037	100 %	

Table 33: Geographic Distribution of Credit Exposures Relevant to the Calculation of the Countercyclical Capital Buffer for JPMFIL

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	Value of trading book exposure for internal models	Of which: General credit exposures	Of which: Trading book exposures	Total		
United States Of America	126	—	—	11	—	11	99.25%	0.00 %
Other Countries	1	—	—	—	—	—	0.75 %	0.00 %
Total	127	—	—	11	—	11	100 %	

Table 34: Amount of Institution-Specific Countercyclical Capital Buffer

\$'mm	JPMCHL	JPMFIL
Total Risk Exposure Amount	244,130	742
Institution Specific Countercyclical Buffer Rate	0.02 %	0.00 %
Institution Specific Countercyclical Buffer Requirement	54	—

¹⁷Article 7(1) of Commission Implementing Regulation (EU) No 680/2014.

8. Credit Risk Adjustments (Article 442)

Impairment of financial assets and lending-related commitments

The Company recognises expected credit losses ('ECL') for financial assets that are measured at amortised cost or fair value through other comprehensive income ('FVOCI'), and specified off-balance sheet lending-related commitments such as loan commitments and financial guarantee contracts that are in the Traditional Credit Products ('TCP') portfolios.

Provisions for ECL are recognised on initial recognition of the financial instrument based on expectations of credit losses at that time. The credit loss allowance includes ECLs for financial instruments that may default in the next 12-month period for financial instruments that have not observed a significant increase in credit risk since initial recognition ('stage 1') or over a lifetime period for financial instruments that have observed a significant increase in credit risk since initial recognition ('stage 2'). The allowance also includes lifetime ECLs for financial instruments where there is objective evidence of credit-impairment at the reporting date ('stage 3'). In determining the appropriate stage for a financial instrument, the Company applies the definition of default consistent with the Basel definition of default to maintain uniformity of the definition across the Firm.

The determination of the stage for credit losses under the ECL model is dependent on the measurement of a significant increase in credit risk ('SICR'). In determining SICR, the Company has conducted quantitative tests, which considers, but is not limited to, existing risk management indicators, credit rating changes and reasonable and supportable forward-looking information. Forward-looking information reflects a range of scenarios that incorporate macro-economic factors that are composed and monitored by the Firmwide specialised economic forecasting team.

The key input components for the quantification of expected credit loss through the ECL model includes the probability of default ('PD'), loss given default ('LGD') and exposure at default ('EAD'). The Company seeks to efficiently and effectively leverage as much as possible existing regulatory and capital frameworks where overlap is present for IFRS 9. Differences observed between content in existing frameworks and requirements under IFRS 9 have been identified and are adjusted accordingly. The inputs to the ECL model capture historical datasets and a reasonable and supportable forecasting horizon to estimate expected credit losses.

Impairment of non-financial assets

Non-financial assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal at each reporting date.

Past due

A financial asset is past due when a counterparty has failed to make a payment when contractually due following appropriate market convention.

Credit Risk Adjustments for Derivatives

In determining the fair value of a derivative portfolio, valuation adjustments may be appropriate to reflect the credit quality of the counterparty, the credit quality of the Company, and the funding risk inherent in certain derivatives. The credit and funding risks of the derivative portfolio are generally mitigated by arrangements provided to the Company by JPMorgan Chase Bank, N.A. and therefore the Company takes account of these arrangements in estimating the fair value of its derivative portfolio.

The following analysis for credit exposures is only provided for material exposure classes or industries exceeding 5% of the total net value. All other exposure classes or industries are included under 'Other residual exposure'. Exposure class 'Exposure in default' is only shown as its original exposure class. JPMML's capital requirement for credit risk (including counterparty risk) is \$902k and therefore due to immateriality additional disclosures have not been made throughout section 8.

All tables in this section do not include counterparty credit risk.

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 35: EU CRB-B - Total and average net amount of exposures for JPMCHL

Exposure class (\$'mm)		JPMCHL	
		Net exposure at the end of the period	Average net exposure over the period
1	Central governments or central banks	13,831	24,874
2	Institutions	11,493	9,126
3	Corporates	22,583	18,036
4	Other Residual Exposure	1,520	1,757
5	Total standardised approach	49,427	53,793

Table 36: EU CRB-B - Total and average net amount of exposures for JPMFIL

Exposure class (\$'mm)		JPMFIL	
		Net exposure at the end of the period	Average net exposure over the period
1	Institutions	737	742
2	Other Residual Exposure	127	134
3	Total standardised approach	864	876

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 37: EU CRB-C - Geographical breakdown of exposures for JPMCHL

Exposure class (\$'mm)		Net Value												
		EMEA	United Kingdom	Federal Republic of Germany	Luxembourg	Other Countries in EMEA (Residual Exposure)	AMERICA	United States of America	Mexico	Other Countries in AMERICA (Residual Exposure)	APAC	People's Republic of China	Other Countries in APAC (Residual Exposure)	Total
1	Central governments or central banks	13,804	13,789	12	—	3	—	—	—	—	27	—	27	13,831
2	Institutions	2,986	158	2,105	59	664	6,441	6,203	52	186	2,066	1,945	121	11,493
3	Corporates	10,197	611	643	1,607	7,336	11,235	4,562	5,305	1,368	1,151	17	1,134	22,583
4	Others residual exposure	239	116	1	42	80	1,280	1,210	—	70	1	—	—	1,520
5	Total standardised approach	27,226	14,674	2,759	1,710	8,083	18,956	11,976	5,356	1,624	3,245	1,963	1,282	49,427

Table 38: EU CRB-C - Geographical breakdown of exposures for JPMFIL

Exposure class (\$'mm)		Net Value				
		EMEA	Other Countries in EMEA (Residual Exposure)	AMERICA	United States of America	Total
1	Institutions	—	—	737	737	737
2	Other residual exposure	1	1	126	126	127
3	Total standardised approach	1	1	863	863	864

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 39: EU CRB-D - Concentration of exposures by industry or counterparty types for JPMCHL

Exposure class (\$'mm)		Finance Industry	Manufacturing	Mining and quarrying	Wholesale and retail trade	Other Residual Exposure	Total
1	Central governments or central banks	13,637	—	—	—	194	13,831
2	Institutions	11,321	—	—	—	172	11,493
3	Corporates	7,181	3,581	6,370	2,635	2,816	22,583
4	Other Residual Exposure	1,402	17	—	1	100	1,520
5	Total standardised approach	33,541	3,598	6,370	2,636	3,282	49,427

Table 40: EU CRB-D - Concentration of exposures by industry or counterparty types for JPMFIL

Exposure class (\$'mm)		Finance Industry	Total
1	Institutions	737	737
2	Other Residual Exposure	127	127
3	Total standardised approach	864	864

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 41: EU CRB-E - Maturity of exposures for JPMCHL

Exposure class (\$'mm)		Net exposures					Total
		On Demand	< = 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	
1	Central governments or central banks	13,596	11	—	—	224	13,831
2	Institutions	—	7,464	—	—	662	8,126
3	Corporates	20	2,026	1,031	379	8,203	11,659
4	Other Residual Exposure	—	122	43	—	1,407	1,572
5	Total standardised approach	13,616	9,623	1,074	379	10,496	35,188

Table 42: EU CRB-E - Maturity of exposures for JPMFIL

Exposure class (\$'mm)		Net exposure value					Total
		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	
1	Institutions	—	229	—	—	508	737
2	Other Residual Exposure	—	2	—	—	125	127
3	Total standardised approach	—	231	—	—	633	864

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 43: EU CR1-A - Credit quality of exposures by exposure class and instrument for JPMCHL

Exposure class (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					
								(a+b-c-d)
1	Central governments or central banks	—	13,831	—	—	—	—	13,831
2	Institutions	—	11,493	—	—	—	—	11,493
3	Corporates	109	22,517	43	—	—	61	22,583
4	Other Residual Exposure	—	1,520	—	—	—	1	1,520
5	Total standardised approach	109	49,361	43	—	—	62	49,427
6	Total	109	49,361	43	—	—	62	49,427
7	Of which: Loans	85	22,920	27	—	—	23	22,978
8	Of which: Debt securities	—	101	—	—	—	—	101
9	Of which: Off-balance-sheet exposures	24	14,231	16	—	—	39	14,239

Table 44: EU CR1-A - Credit quality of exposures by exposure class and instrument for JPMFIL

Exposure class (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					
								(a+b-c-d)
1	Institutions	—	737	—	—	—	—	737
2	Other Residual Exposure	—	127	—	—	—	—	127
3	Total standardised approach	—	864	—	—	—	—	864
4	Total	—	864	—	—	—	—	864
5	Of which: Loans	—	31	—	—	—	—	31

Industry Analysis of Credit Risk 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 45: EU CR1-B - Credit quality of exposures by industry or counterparty types for JPMCHL

Industry sector (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Finance Industry	25	33,532	16	—	—	36	33,541
2	Manufacturing	24	3,583	9	—	—	3	3,598
3	Mining and quarrying	—	6,370	—	—	—	2	6,370
4	Wholesale and retail trade	—	2,636	1	—	—	9	2,635
5	Other Residual Exposure	60	3,240	17	—	—	12	3,283
6	Total	109	49,361	43	—	—	62	49,427

Table 46: EU CR1-B - Credit quality of exposures by industry or counterparty types for JPMFIL

Industry sector (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Finance Industry	—	864	—	—	—	—	864
3	Total	—	864	—	—	—	—	864

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 47: EU CR1-C - Credit quality of exposures by geography for JPMCHL

Country (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	EMEA	109	27,156	39	—	—	47	27,226
2	United Kingdom	—	14,674	—	—	—	3	14,674
3	Federal Republic Of Germany	—	2,759	—	—	—	—	2,759
4	Luxembourg	49	1,671	10	—	—	27	1,710
5	Other Countries in EMEA (Residual Exposure)	60	8,052	29	—	—	17	8,083
6	AMERICA	—	18,960	4	—	—	15	18,956
7	United States of America	—	11,980	4	—	—	15	11,976
8	Mexico	—	5,356	—	—	—	—	5,356
9	Other Countries in AMERICA (Residual Exposure)	—	1,624	—	—	—	—	1,624
10	APAC	—	3,245	—	—	—	—	3,245
11	People's Republic Of China	—	1,963	—	—	—	—	1,963
12	Other Countries in APAC (Residual Exposure)	—	1,282	—	—	—	—	1,282
14	Total	109	49,361	43	—	—	62	49,427

Table 48: EU CR1-C - Credit quality of exposures by geography for JPMFIL

Country (\$'mm)		a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	EMEA	—	1	—	—	—	—	1
2	Other Countries in EMEA (Residual Exposure)	—	1	—	—	—	—	1
3	AMERICA	—	863	—	—	—	—	863
4	United States of America	—	863	—	—	—	—	863
5	Total	—	864	—	—	—	—	864

Non-performing, Forborne and Past Due Exposures

The following tables provide an overview on disclosure of non-performing exposures as per EBA/GL/2018/10 and consistent with FinRep submission.

JPMFIL and JPMML have not reported any provisions, non-performing, forborne or past due exposures, therefore disclosures have not been made.

Table 49: Credit quality of forborne exposures for JPMCHL

\$'mm		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Performing forborne	Non-performing forborne			On performing forborne exposures	On non - performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
				Of which defaulted	Of which impaired				
1	Loans and advances	—	38	38	38	—	10	28	28
6	Non-financial corporations	—	38	38	38	—	10	28	28
10	Total	—	38	38	38	—	10	28	28

Table 50: Credit quality of performing and non-performing exposures by past due days for JPMCHL

\$mm		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
			Not past due or past due <=30 days	Past due > 30 days <= 90 days		Unlikely to pay that are not past due or are past due <= 90 days	Past due > 90 days <= 180 days	Past due > 180 days <= 1 year	Past due > 1 year <= 2 years	Past due > 2 years <= 5 years	Past due > 5 years <= 7 years	Past due > 7 years	Of which defaulted
1	Loans and advances	272,590	272,590	—	62	62	—	—	—	—	—	—	62
2	Central banks	11,672	11,672	—	—	—	—	—	—	—	—	—	—
3	General governments	82	82	—	—	—	—	—	—	—	—	—	—
4	Credit institutions	103,680	103,680	—	—	—	—	—	—	—	—	—	—
5	Other financial corporations	151,834	151,834	—	—	—	—	—	—	—	—	—	—
6	Non-financial corporations	5,322	5,322	—	62	62	—	—	—	—	—	—	62
9	Debt securities	22,035	22,035	—	—	—	—	—	—	—	—	—	—
10	Central banks	22,035	22,035	—	—	—	—	—	—	—	—	—	—
15	Off - Balance sheet exposure	10,313	—	—	23	—	—	—	—	—	—	—	23
18	Credit institutions	39	—	—	—	—	—	—	—	—	—	—	—
19	Other financial corporations	2,340	—	—	—	—	—	—	—	—	—	—	—
20	Non-financial corporations	7,934	—	—	23	—	—	—	—	—	—	—	23
22	Total	304,938	294,625	—	85	62	—	—	—	—	—	—	85

Table 51: Performing and non-performing exposures and related provisions for JPMCHL

\$'mm		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-off	Collateral and financial guarantees received	
		Performing exposures			Non-performing exposures			Performing exposures - accumulated impairment and provisions			Non-performing exposures - accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non-performing exposures
			Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3			
1	Loans and advances	272,590	50,453	256	62	—	62	9	3	6	15	—	15	15	272,192	47
2	Central banks	11,672	—	—	—	—	—	—	—	—	—	—	—	—	11,672	—
3	General governments	82	—	—	—	—	—	—	—	—	—	—	—	—	82	—
4	Credit institutions	103,680	49,732	—	—	—	—	—	—	—	—	—	—	—	103,680	—
5	Other financial corporations	151,834	512	233	—	—	—	6	—	6	—	—	—	—	151,609	—
6	Non-financial corporations	5,322	209	23	62	—	62	3	3	—	15	—	15	15	5,149	47
9	Debt securities	22,035	22,035	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Central banks	22,035	22,035	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Off-balance-sheet exposures	10,313	8,170	2,143	23	—	23	16	4	12	3	—	3	—	8,351	21
18	Credit institutions	39	30	9	—	—	—	—	—	—	—	—	—	—	30	—
19	Other financial corporations	2,340	1,835	505	—	—	—	7	1	6	—	—	—	—	2,323	—
20	Non-financial corporations	7,934	6,305	1,629	23	—	23	9	3	6	3	—	3	—	5,998	21
22	Total	304,938	80,658	2,399	85	—	85	25	7	18	18	—	18	15	280,543	68

Collateral obtained by taking possession and execution processes

As at 31st December 2020 there was no collateral which would be obtained by taking possession.

Credit Risk Adjustments

No credit risk adjustment was made in JPMFIL and JPMML in the reporting period. The specific credit risk adjustments relate to loans to corporate customers.

Table 52: EU CR2-A - Changes in the stock of general and specific credit risk adjustments

\$'mm		JPMCHL
		Accumulated specific credit risk adjustment
1	Opening balance (1 st January 2020)	4
2	Increases due to amounts set aside for estimated loan losses during the period	24
3	Decreases due to amounts reversed for estimated loan losses during the period	(1)
9	Closing balance (31 st December 2020)	27
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss ¹⁸	(1)
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	24

Defaulted and Impaired Exposures

The table below presents changes in defaulted or impaired loans and debt securities between 1st January 2020 to 31st December 2020. The defaulted exposures represents loans made to corporate customers. No defaulted exposure was reported in JPMFIL and JPMML.

Table 53: EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities

\$'mm		JPMCHL
		Gross carrying value defaulted exposures
1	Opening balance (1 st January 2020)	—
2	Loans and debt securities that have defaulted or impaired since the last reporting period	85
5	Other changes ¹⁹	—
6	Closing balance (31 st December 2020)	85

¹⁸ The negative balance represents a positive entry in the P&L and vice versa.

¹⁹ Includes loans sold or repaid in the reporting period.

9. Unencumbered Assets (Article 443)

Background

The below disclosures represent the computed median values of the four quarters between 1st January 2020 and 31st December 2020, in accordance with the EBA guidelines in Part Eight of CRD IV ((EU) regulation 2017/2295 supplementing regulation EU No 575/2013 on the disclosure of encumbered and unencumbered assets). Note the median is calculated individually across all cells hence rows in the tables above are not additive.

Disclosure on Asset Encumbrance

J.P. Morgan Capital Holdings Ltd.

Table 54: Encumbered and unencumbered assets for JPMCHL

\$'mm	Carrying amount of encumbered assets	of which notionally eligible EHQLA and HQLA	Fair value of encumbered assets	of which notionally eligible EHQLA and HQLA	Carrying amount of unencumbered assets	of which EHQLA and HQLA	Fair value of unencumbered assets	of which EHQLA and HQLA
Assets of the reporting institution	131,580	79,115			751,769	466,216		
Equity instruments	24,858	3,699			21,414	937		
Debt securities	35,966	25,960	35,966	25,960	30,248	5,195	30,248	5,195
of which: covered bonds	796	796	796	796	126	44	126	44
of which: asset-backed securities	9	9	9	9	858	790	858	790
of which: issued by general governments	24,527	21,271	24,527	21,271	9,832	4,160	9,832	4,160
of which: issued by financial corporations	8,413	2,285	8,413	2,285	18,483	157	18,483	157
of which: issued by non-financial corporations	2,080	1,250	2,080	1,250	1,382	138	1,382	138
Other assets	71,917	50,795			699,418	459,505		

Table 55: Collateral received for JPMCHL

\$'mm	Fair value of encumbered collateral received or own debt securities issued	of which notionally eligible EHQLA and HQLA	Fair value of collateral received or own debt securities issued available for encumbrance	of which EHQLA and HQLA
Collateral received by the reporting institution	499,680	368,933	1,414	634
Loans on demand	—	—	—	—
Equity instruments	93,407	22,661	518	113
Debt securities	406,483	346,034	896	516
of which: covered bonds	374	374	—	—
of which: asset-backed securities	51	51	—	—
of which: issued by general governments	349,812	333,679	597	500
of which: issued by financial corporations	47,261	3,768	252	13
of which: issued by non-financial corporations	9,534	7,628	—	—
Loans and advances other than loans on demand	—	—	—	—
Other collateral received	—	—	—	—
Own debt securities issued other than own covered bonds or ABSs	—	—	—	—
Own covered bonds and asset-backed securities issued and not yet pledged	—	—	—	—
Total assets, collateral received and own debt securities issued	637,294	449,415		

Table 56: Sources of encumbrance for JPMCHL

\$'mm	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	280,265	292,131

Accompanying narrative information

Asset Encumbrance refers to assets that are pledged or otherwise committed to counterparties to secure, collateralise or credit-enhance a transaction, such that the assets cannot be freely transferred, withdrawn, liquidated, sold or disposed of. The counterparties to which the assets are pledged, such as secured creditors, will have a prior claim on encumbered assets in the event of insolvency. Firms whose funding base includes a larger proportion of wholesale unsecured funding will be more vulnerable to the risks arising from the structural insubordination of their unsecured creditors in a crisis and may face increased cost of funding, shortening tenors or not being able to roll, or issue new, liabilities where they relate to unsecured funding.

J.P. Morgan Financial Investments Ltd.

Table 57: Encumbered and unencumbered assets for JPMFIL

\$'mm	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	—		4,694	
Equity instruments	—		11	
Debt securities	—	—	—	—
of which: covered bonds	—	—	—	—
of which: asset-backed securities	—	—	—	—
of which: issued by general governments	—	—	—	—
of which: issued by financial corporations	—	—	—	—
of which: issued by non-financial corporations	—	—	—	—
Other assets	—		4,683	

Table 58: Collateral received for JPMFIL

\$'mm	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received by the reporting institution	116	—
Loans on demand	—	—
Equity instruments	—	—
Debt securities	116	—
of which: covered bonds	—	—
of which: asset-backed securities	—	—
of which: issued by general governments	—	—
of which: issued by financial corporations	90	—
of which: issued by non-financial corporations	—	—
Loans and advances other than loans on demand	—	—
Other collateral received	—	—
Own debt securities issued other than own covered bonds or ABSs	—	—
Own covered bonds and asset-backed securities issued and not yet pledged	—	—
Total assets, collateral received and own debt securities issued	122	

Table 59: Sources of encumbrance for JPMFIL

\$'mm	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	—	—

Accompanying narrative information

JPMFIL is almost wholly made up of JP Morgan Markets Ltd and there is very little asset encumbrance within this entity. On balance sheet, cash collateral given by the entity is encumbered, however the balance is immaterial.

This level of encumbrance has been maintained and no further sources of encumbrance are expected going forward.

J.P. Morgan Mansart Management Ltd.**Table 60: Encumbered and unencumbered assets for JPMML**

\$'mm	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	—		21	
Equity instruments	—		—	
Debt securities	—	—	—	—
of which: covered bonds	—	—	—	—
of which: asset-backed securities	—	—	—	—
of which: issued by general governments	—	—	—	—
of which: issued by financial corporations	—	—	—	—
of which: issued by non-financial corporations	—	—	—	—
Other assets	—		21	

Accompanying narrative information

This entity has neither collateral received nor encumbrance to report.

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

ECAIs and Exposure Classes

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

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

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

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

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

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

Exposures at Default by Risk Weights

Credit Risk Exposure at Default Pre-Credit Risk Mitigation

The following tables show exposures at default before credit risk mitigation broken down by credit exposure class and risk weights. The tables includes only credit risk exposures (excluding counterparty credit risk). Risk weights applied for EEA member states are applied under article 114 and hence bucketed under 0%. The Credit and Counterparty Risk requirement for JPMML is only \$902k and therefore the supplementary disclosures below are not made.

Table 61: EU CR5 - Standardised approach (pre-CRM) for JPMCHL

Exposure class (\$'mm)		Risk weight							Total	Of which unrated
		0%	20%	50%	100%	150%	250%	1250%		
1	Central governments or central banks	13,610	—	—	28	—	193	—	13,831	221
3	Public sector entities	—	12	—	—	—	—	—	12	1
6	Institutions	—	7,717	3,708	20	—	—	48	11,493	951
7	Corporates	—	1,329	2,202	18,675	271	—	15	22,492	8,800
10	Exposures in default	—	—	—	11	80	—	—	91	60
11	Higher-risk categories	—	—	—	—	153	—	4	157	156
15	Equity	—	—	—	—	250	1	—	251	251
16	Other items	—	—	—	1,100	—	—	—	1,127	1,100
17	Total	13,610	9,058	5,910	19,834	754	194	67	49,454	11,540

Table 62: EU CR5 - Standardised approach (pre-CRM) for JPMFIL

Exposure class (\$'mm)		Risk weight					Total	Of which unrated
		20%	50%	100%	150%	Deducted		
6	Institutions	578	158	—	—	—	737	350
15	Equity	—	—	—	14	—	14	14
16	Other items	—	—	109	—	1	110	109
17	Total	578	158	113	14	1	865	477

Credit Risk Exposure at Default 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 63: EU CR5 - Standardised approach (post-CRM) for JPMCHL

Exposure classes		Risk weight							Total	Of which unrated
		0%	20%	50%	100%	150%	250%	1250%		
1	Central governments or central banks	13,610	—	—	28	—	193	—	13,831	221
3	Public sector entities	—	12	—	—	—	—	—	12	1
6	Institutions	—	7,630	2,117	20	—	—	48	9,815	879
7	Corporates	—	1,019	1,518	9,578	189	—	15	12,319	6,602
11	Higher-risk categories	—	—	—	—	151	—	4	155	155
15	Equity	—	—	—	—	250	1	—	251	251
16	Other items	—	—	—	1,100	—	—	—	1,127	1,100
17	Total	13,610	8,661	3,635	10,727	680	194	67	37,601	9,258

Table 64: EU CR5 - Standardised approach (post-CRM) for JPMFIL

Exposure classes		Risk weight					Total	Of which unrated
		20%	50%	100%	150%	Deducted		
6	Institutions	579	158	—	—	—	737	350
15	Equity	—	—	—	14	—	14	14
16	Other items	—	—	109	—	1	110	109
17	Total	579	158	113	14	1	865	477

Counterparty Credit Risk Exposures at Default Pre-Credit Risk Mitigation

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

Table 65: EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (pre-CRM) for JPMCHL

Exposure class (\$'mm)		Risk weight						Total	Of which unrated
		0%	2%	20%	50%	100%	150%		
1	Central government or central banks	12,806	—	97	10,630	4,021	—	27,554	3,971
2	Regional government or local authorities	138	—	128	—	153	—	419	147
3	Public sector entities	964	—	3,761	121	1,229	—	6,075	4,248
4	Multilateral development banks	57	—	—	—	22	—	79	42
5	International organisations	150	—	—	—	—	—	150	5
6	Institutions	—	47,885	52,713	23,898	1,269	—	125,765	48,595
7	Corporates	—	—	3,290	2,508	49,548	1,827	57,173	50,455
9	Higher-risk categories	—	—	—	—	—	26,098	26,098	26,097
12	Total	14,115	47,885	59,989	37,157	56,242	27,925	243,313	133,560

Table 66: EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (pre-CRM) for JPMFIL

Exposure class (\$'mm)		Risk Weight		Total	Of which unrated
		20%	50%		
6	Institutions	527	470	997	—
12	Total	527	470	997	—

Counterparty Credit Risk Exposures at Default Post-Credit Risk Mitigation

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

Table 67: EU CCR3 - Standardised approach - CCR (post-CRM) exposures by regulatory portfolio and risk for JPMCHL

Exposure class (\$'mm)		Risk weight						Total	Of which unrated
		0%	2%	20%	50%	100%	150%		
1	Central government or central banks	12,771	—	97	—	3,550	—	16,418	3,499
2	Regional government or local authorities	138	—	128	—	153	—	419	147
3	Public sector entities	963	—	3,579	121	1,208	—	5,871	4,235
4	Multilateral development banks	50	—	—	—	19	—	69	32
5	International organisations	145	—	—	—	—	—	145	—
6	Institutions	—	48,075	50,085	20,698	1,122	—	119,980	48,164
7	Corporates	—	—	3,273	1,924	42,673	1,827	49,697	43,765
9	Higher-risk categories	—	—	—	—	—	23,502	23,502	23,502
12	Total	14,067	48,075	57,162	22,743	48,725	25,329	216,101	123,344

Table 68: EU CCR3 - Standardised approach - CCR (post-CRM) exposures by regulatory portfolio and risk for JPMFIL

Exposure class (\$'mm)		Risk weight		Total	Of which unrated
		20%	50%		
6	Institutions	4	470	474	—
12	Total	4	470	474	—

11. Exposure to Market Risk (Article 445)

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

Table 69: EU MR1 - Market risk under the standardised approach

\$mm		JPMCHL	
		RWA	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	34,561	2,765
2	Equity risk (general and specific)	22,110	1,769
3	Foreign exchange risk	10,222	818
4	Commodity risk	3,356	268
	Options		
5	Simplified approach	—	—
6	Delta-plus method	1,768	141
7	Scenario approach	2,835	227
8	Securitisation (specific risk)	910	73
9	Total	75,762	6,061

12. Operational Risk (Article 446)

Pillar 1

All UK material regulated entities with the exception of JPMMML calculate 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.

The minimum capital requirement for JPMMML under the Fixed Overheads approach is calculated as the higher of the Fixed Overheads Requirement and the sum of market risk, credit risk and other Pillar 1 capital requirements.

Table 70: Risk Weighted Assets for Operational Risk

Calculation Method (\$'mm)	JPMCHL	JPMFIL	JPMMML
Basic Indicator Approach	16,302	177	
Fixed Overheads Requirement			15
Total RWA	16,302	177	15

Pillar 2

In addition to the Pillar 1 assessment, the Firm uses an internal approach to calculate operational risk capital under Pillar 2. This internal approach leverages an operational risk scenario analysis framework for calculating each legal entity's operational risk capital. Risk scenarios that are quantified during the scenario analysis process are derived from the list of material risks and therefore are representative of the most material risks within the legal entity.

Operational risk scenarios focus on exceptional but plausible operational risk events which may or may not have previously impacted the legal entities. 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 reputation 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 the legal entities.

The Pillar 2 operational risk measurement approach for the legal entities leverages information collected in the scenario analysis workshops, to estimate both a lower and upper bound of an exceptional but plausible loss. The pillar 2 operational risk capital requirement for JPMCHL uses the outputs from the scenario analysis process as an input into the Economic Capital Model to derive the Operational Risk Capital for the Entity.

The Pillar 2 operational risk capital requirement for JPMFIL and JPMMML is set using the two largest high severity operational risk loss scenarios.

13. Non Trading Book Equity Investments (Article 447)

The non-trading book equity positions are primarily related to strategic investments in clearing houses and exchanges which are required to be held for membership to be able to access their services. Other non-trading book equity positions are related to investments in JP Morgan Chase undertakings.

Value of investments

The non-trading book equity investments are reflected on the balance sheet at fair value. The balance sheet value is also used for the purpose of calculating exposure values for regulatory capital reporting. Further details on investment valuations can be found in the corresponding annual accounts available on the Companies House website.

Table 71: Balance Sheet Value of Investments

Investment (\$'mm)	JPMCHL	JPMFIL
Investments held at fair value	251	14

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

J.P. Morgan Capital Holdings Limited

In addition to the Firmwide interest rate risk ('IRR') measures, JPMCHL's IRR is monitored through the standard approach, in line with PRA guidance (as discussed in the PRA's consultation paper (Assessing capital adequacy under Pillar 2)). In particular, the instantaneous impact of a 200bps 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 evaluated for each of the UK entities under JPMCHL. The evaluation of the impact of a 200bps shock on the economic value of JPMCHL's non-trading book vs. the legal entity's capital resources is assessed quarterly.

The following table shows the economic impact for a 200bp shift in rate for JPMCHL as at 31st December 2020, calculated in USD.

Table 72: IRRBB for JPMCHL

Non Trading +200bp Economic Impact (\$'m)	Non Trading -200bp Economic Impact (\$'mm)
184	-131

J.P. Morgan Financial Investments Limited

JPMML's limited banking book activity is generated by intercompany funding in mainly overnight funding of balances. The interest rate risk on this activity is not material.

15. Exposure to Securitisation Positions (Article 449)

Securitisation Activities

JPMS plc is the only entity within the JPMCHL group that engages in securitisation activity relating to trading book investor activity. There is no activity in JPMFIL or JPMML.

The risks related to securitisation and resecuritisation positions are managed in accordance with the Firm's credit risk and market risk management policies.

Due Diligence

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

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

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

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

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

Of the entities in scope of the CRR for JP Morgan, to the end of December 2020, only JPMS plc is involved in securitisation activity. JPMS plc was involved as an arranger, underwriter and investor in Securitisation in 2020.

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

Risk Management and Mitigation

Each LOB that transacts in these positions and the Market Risk function work together to monitor the positions, position changes, and the composition of the total portfolio. This includes, but is not limited to, the review of daily positions against approved risk limits using risk measures such as market values, risk factor sensitivities and stress loss scenarios. Covered securitisation and resecuritisation positions are included in the Firm's Risk Management VaR and Regulatory VaR. These positions are included in the market risk and limit reports that are distributed on a daily basis to the trading desks, Risk Management and senior managers within the lines of business. In addition to the daily reporting, weekly senior management meetings are scheduled between Front Office and Market Risk where such items as, but not limited to, sizeable transactions or market events impacting risk exposures are discussed.

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

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

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

The desk takes on different levels of risk depending on the market and the type of risk required to meet the business objectives, along with providing liquidity for our clients at appropriate market levels. The portfolio of risk is mixed between various asset classes, with the concentration of the portfolio as at 31st December 2020 predominantly being senior and mezzanine in the waterfall structure.

Risk Weighting and use of ECAs

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

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

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

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

Accounting for Securitisation Positions

The Firm's accounting policies for JPMS plc, under FRS 101, include matters relating to the accounting for securitisations. The determination of whether or not transactions whereby assets are securitized in SPVs are treated as sales is dependent on whether or not the legal rights to the cash flows of the assets have been transferred to the entity, and whether the Firm has transferred substantially all of the assets risks and rewards. This is in accordance with IFRS 9 Financial Instruments, which is the accounting standard that outlines the rules for derecognition of financial assets. This analysis assists in the determination of whether or not the transactions are accounted for as sales or financings. Accounting for synthetic securitisations is determined under the appropriate accounting guidance, such as the guidance for accounting for derivatives and other financial instruments under IFRS 9.

The Firm will recognize arrangements whereby it will provide financial support for the entity depending on the legal form of the arrangement and the substance of the arrangement. Typically the Firm would look to the guidance under IFRS 9 for these arrangements as they meet the definition of financial instruments. The Firm notes that where JPMS plc has involvement in securitisations, it also needs to determine whether the securitisation entity needs to be consolidated in accordance with the guidance under IFRS 10 Consolidated Financial Statements and disclosed in accordance with IFRS 12 Disclosures of Interests in Other Entities and/or IFRS 9.

Key Changes during the Period

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

Table 73: Outstanding Amount of Exposures Securitised by Seniority for JPMCHL

Exposure Type (\$'mm)	Securitized Positions Held		
	Senior	Mezzanine	First Loss (Equity)
Residential Mortgages	549	104	26
Commercial Mortgages	13	26	2
<i>Of which: Resecuritisations</i>	—	—	—
Loans to Corporates or SMEs	74	104	2
<i>Of which: Resecuritisations</i>	—	4	—
Consumer Loans	38	—	—
Other Assets	25	15	46
<i>Of which: Resecuritisations</i>	—	—	—
Total	699	249	76

Table 74: Aggregate Amount of Securitized Positions Retained or Purchased by Exposure Type for JPMCHL

Type of Investment (\$'mm)	Retained	Purchased	Total
Residential Mortgages	—	679	679
Commercial Mortgages	—	41	41
<i>Of which: Resecuritisations</i>	—	—	—
Loans to Corporates or SMEs	—	180	180
<i>Of which: Resecuritisations</i>	—	4	4
Consumer Loans	—	38	38
Other Assets	—	86	86
<i>Of which: Resecuritisations</i>	—	—	—
Total	—	1,024	1,024

Table 75: Aggregate Amount of Securitised Positions Retained or Purchased by Risk Weight Band for JPMCHL

Risk Weight Band	IRB S&P Equivalent Rating	Standardised S&P Equivalent Rating	Retained (\$'mm)	Purchased (\$'mm)
<= 10%	AAA to A+ (Senior Only)	N/A	—	—
> 10% <= 20%	A to A- (Senior Only) / AAA to A+ (Base Case)	N/A	—	6
> 20% <= 50%	A to A- (Base Case)	AAA to AA-	—	650
> 50% <= 100%	BBB+ to BBB (Base Case)	A+ to A-	—	134
> 100% <= 650%	BBB- (Base Case) to BB (Base Case)	BBB+ to BB-	—	190
> 650% <= 1250%	BB- (Base Case)	N/A	—	44
Deducted	B+ & Below (Base Case)	N/A	—	—
Total			—	1,024

Table 76: Aggregate Amount of Securitised and Re-securitised Positions by CQS for JPMCHL

Securitisation / Resecuritisation (\$'mm)	CQS 1	CQS 2	CQS 3	CQS 4	Other	Total
Securitisations	6	650	134	186	44	1,020
Resecuritisations	—	—	—	4	—	4
Total	6	650	134	190	44	1,024

16. Remuneration (Article 450)

Background

This section sets out the remuneration disclosures required under Article 450 of the Capital Requirements Regulation (the ‘CRR’)²⁰ in relation to the UK Entities in scope, and in respect of the remuneration period (‘Performance Year’) ending 31st December 2020.

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

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

Qualitative Disclosures

As part of the Firm, the UK Entities in scope apply J.P. Morgan’s global compensation philosophy and pay practices. The qualitative remuneration disclosures required under Paragraphs 1(a) - (f) of Article 450 CRR for all employees of the Firm’s subsidiaries and branches located in EMEA, including staff of the UK Entities in scope, are available in the most recent EMEA Remuneration Policy Disclosure at:

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

Additional qualitative disclosures specific to the UK Entities

The UK Entities in scope complied with the applicable remuneration requirements of the Capital Requirements Directive (‘CRD IV’)²¹, as implemented in the Prudential Regulation Authority Rulebook and Financial Conduct Authority Handbook (the ‘Remuneration Rules’). The following additional disclosures should therefore be read in conjunction with the EMEA Remuneration Policy Disclosure:

- The Firm has established a UK Remuneration Committee (‘UK RemCo’) formed of non-executive directors, including from the Boards of relevant entities in the UK Entities.
- The UK RemCo reviews the remuneration policy applicable to the UK Entities (the ‘Remuneration Policy’) on an annual basis, recommends it to the relevant Boards for adoption, and oversees its implementation. The UK RemCo last reviewed the Remuneration Policy that applied for the 2020 Performance Year in June 2020 with no material changes and was satisfied with its implementation.
- The UK RemCo held three meetings in respect of the 2020 Performance Year.
- The UK Entities undertake an annual review of its staff against the qualitative and quantitative criteria set out in the European Banking Authority’s relevant Regulatory Technical Standard²² to identify those roles which could potentially have a material impact on the risk profile of the UK Entities (‘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.
- The UK Entities Risk and Compliance functions are involved in the review of the Remuneration Policy, including reviewing the approach to the designation of 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 UK RemCo.
- All relevant UK Entities have obtained the relevant shareholder approval in accordance with Article 94(1)g of CRD IV (as implemented by the Remuneration Rules) to pay their CRD IV Identified Staff a maximum ratio of fixed to variable compensation of 1:2. This approval was last received on 29 September 2014, and 100% of shareholders were represented and in favour.
- JPMML also complies with the applicable remuneration requirements of the Alternative Investment Fund Manager Directive and the UCITS V Directive. Further details are available in JPMML’s Remuneration Policy Statement, available at <https://jpmorganmansart.com>
- 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 GBP 500,000 or more; or (ii) the individual is a Board member of one of the relevant UK Entities.
 - 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 the subset of CRD IV Identified Staff designated as ‘Risk Managers’ in accordance with the Remuneration Rules, the deferral period is at least five years, with vesting in five equal tranches on or around the anniversaries of the grant date. For CRD IV Identified Staff who hold PRA-designated functions under the Senior Manager Regime, the regulatory required deferral is deferred for at least seven years, with vesting in five equal annual tranches from the third anniversary of the grant date.
 - At least 50% of IC (both deferred and non-deferred) is awarded as Retained Stock or Restricted Stock Units ‘RSUs’).

²⁰ Regulation (EU) No. 575 / 2013

²¹ Directive 2013/36/EU

²² Commission Delegated Regulation (EU) No 604/2014

- 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, with the exception of RSUs awarded to Risk Managers (excluding Senior Managers) for which the retention period is six months.
- 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 to malus and clawback provisions which reflects the requirements of the Remuneration Rules, in addition to the firmwide recovery provisions and the Firm's Bonus Recoupment Policy.

Quantitative disclosures

The following aggregate quantitative disclosures relate to the UK CIB Group's employees, and therefore include relevant employees of both the UK Entities in scope and other relevant UK CIB entities.

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

All staff

Table 77: All staff

In USD thousands	Fixed Compensation	Variable Compensation	Total Compensation
All staff	2,246,654	1,211,961	3,458,615

CRD IV Identified Staff

Table 78: Breakdown by Business Area

In USD thousands	Total Compensation 2020	Number of Identified Staff
Management Body ²³	89,033	22
Senior Management ²⁴	70,384	20
All other CRD IV Identified Staff:		
Corporate & Investment Bank	962,395	615
Corporate functions	56,724	54
Independent Control Functions	21,934	32
All other	13,646	14
Total	1,214,117	757

Table 79: Breakdown of Total Compensation

In USD thousands	Fixed Compensation 2020 (Cash)	Variable Compensation in respect of 2020			
		Upfront Cash	Upfront Equity	Deferred Cash	Deferred Equity
Management Body	33,350	3,052	3,052	278	49,301
Senior Management	29,679	3,852	3,783	792	32,279
All other CRD IV Identified Staff:					
Corporate & Investment Bank	462,624	99,734	88,444	25,009	286,584
Corporate functions	27,688	8,518	5,645	1,740	13,133
Independent Control Functions	11,574	2,941	2,609	333	4,478
All other	7,136	2,288	1,149	76	2,996
Total	572,052	120,385	104,682	28,227	388,770

²³ Includes both Executives and Non-Executives.

²⁴ Includes the Firm's Senior Managers under the UK's Senior Managers Regime, excluding those on the Management Body.

Table 80: Analysis of Deferred Compensation

In USD thousands	Outstanding as at 1 st January 2020 ²⁵	Awarded during 2020	Paid out during 2020	Adjusted ex-post		Forfeited	Outstanding as at 31 st December 2020	
				Explicit	Implicit ²⁶		Unvested	Vested
Share-based								
Management Body	199,976	43,785	(30,970)	—	(18,764)	—	178,098	15,930
Senior Management	91,759	27,681	(26,509)	—	(7,047)	—	76,175	9,710
All other CRD IV Identified Staff:								
Corporate & Investment Bank	843,279	316,574	(441,013)	—	(58,409)	(8,849)	649,653	1,930
Corporate functions	50,099	20,275	(23,269)	—	(4,729)	(512)	41,443	421
Independent Control Functions	11,060	6,666	(6,859)	—	(623)	—	10,243	—
All other	8,754	3,796	(4,513)	—	(751)	—	7,243	42
Total	1,204,927	418,777	(533,134)	—	(90,322)	(9,360)	962,856	28,032
Cash-based								
Management Body	628	262	(237)	—	14	—	667	—
Senior Management	1,119	750	(302)	—	32	—	1,600	—
All other CRD IV Identified Staff:								
Corporate & Investment Bank	38,325	15,971	(18,970)	—	750	(999)	35,077	—
Corporate functions	2,353	1,823	(941)	—	79	—	3,315	—
Independent Control Functions	560	243	(241)	—	20	—	582	—
All other	191	51	(95)	—	3	—	150	—
Total	43,177	19,100	(20,785)	—	898	(999)	41,390	—

Table 81: Guarantees, Sign-ons and Severance Payments

In USD thousands	Guarantees and Sign-on		Severance		
	Number of Identified Staff	Made during the year	Number of Identified Staff	Made during the year	Highest award to a single person
All CRD IV Identified Staff	—	—	23	14,562	3,573

Table 82: Total Compensation Banding for CRD IV Identified Staff Earning at least EUR 1 Million

2020 Total Compensation Bands	Number of Identified Staff
€1,000,001 to €1,500,000	157
€1,500,001 to €2,000,000	89
€2,000,001 to €2,500,000	40
€2,500,001 to €3,000,000	21
€3,000,001 to €3,500,000	15
€3,500,001 to €4,000,000	14
€4,000,001 to €4,500,000	7
€4,500,001 to €5,000,000	6
€5,000,001 to €6,000,000	7
Over €6,000,000	11

²⁵ All outstanding deferred awards are subject to malus and clawback provisions as set out in the most recent EMEA Remuneration Policy Disclosure

²⁶ 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.

17. Leverage (Article 451)

Managing Leverage Risk

Leverage risk is monitored through the same processes and frameworks as capital adequacy and stress testing.

Leverage is assessed both on a quarterly point-in-time basis and through stress-testing. The latter is particularly important, as it is forward-looking: if the Company's leverage ratios remain sustainable under stressed conditions, the risk of forced de-leveraging will be low. The results of applying a range of severe but plausible stresses to Company's leverage ratios indicate that at the worst point in the worst stress scenario, the group maintains a healthy leverage ratio.

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

Leverage Ratio Commentary

- **JPMCHL:** The leverage ratio has decreased by 1.66% from 8.14% as at 31st December 2019 to 6.48%. The decrease in the leverage ratio is driven by an increase in the leverage exposure, partially offset by increase in T1 capital. Leverage exposure increased due to an increase in SFTs and on-balance sheet exposures. Capital increased due to an inclusion of 2020 recognised audited profits, offset due to payment of dividends.
- **JPMFIL:** The leverage ratio stands at 91.57% as at 31st December 2020, with no significant changes.

Table 83: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

LR Sum (\$'mm)		JPMCHL	JPMFIL
		Applicable Amount	
1	Total assets as per published financial statements	840,941	5,620
4	Adjustments for derivative financial instruments	(144,090)	—
5	Adjustment for securities financing transactions (SFTs)	18,826	—
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	6,643	—
7	Other adjustments	(1,497)	(5)
8	Leverage ratio total exposure measure	720,823	5,615

Table 84: Split of On-Balance Sheet Exposures

LR Spl (\$'mm)		JPMCHL	JPMFIL
		CRR leverage ratio exposures	
EU-1	Total on-balance sheet exposures (exc. Derivatives, SFTs and exempted exposures), of which:	178,022	909
EU-2	Trading book exposures	144,133	44
EU-3	Banking book exposures, of which:	33,889	865
EU-5	Exposures treated as sovereigns	13,831	—
EU-6	Exposures to regional governments, MDB, international organisations and PSEs not treated as sovereigns	12	—
EU-7	Institutions	7,069	737
EU-10	Corporate	11,442	4
EU-11	Exposures in default	67	—
EU-12	Other exposures (e.g. equity, securitisations and other non-credit obligation assets)	1,467	124

Table 85: Leverage Ratio Common Disclosure

LR Com (\$'mm)		JPMCHL	JPMFIL
		CRR leverage ratio exposures	
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	257,114	909
2	(Asset amounts deducted in determining Tier 1 capital)	(1,497)	(5)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	255,617	904
Derivative exposures			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	28,374	1
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	211,030	1
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(62,933)	—
8	(Exempted CCP leg of client-cleared trade exposures)	(16,160)	—
9	Adjusted effective notional amount of written credit derivatives	875,855	—
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(875,159)	—
11	Total derivative exposures (sum of lines 4 to 10)	161,007	2
SFT exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	396,317	4,709
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(117,587)	—
14	Counterparty credit risk exposure for SFT assets	18,826	—
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	297,556	4,709
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	11,590	—
18	(Adjustments for conversion to credit equivalent amounts)	(4,947)	—
19	Other off-balance sheet exposures (sum of lines 17 and 18)	6,643	—
Capital and total exposure measure			
20	Tier 1 capital	46,744	5,141
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	720,823	5,615
Leverage ratio			
22	Leverage ratio	6.48 %	91.57 %
Choice on transitional arrangements and amount of derecognised fiduciary items			
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in	Fully phased in

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

As part of its management of credit and counterparty credit exposures, the Firm actively engages in credit risk mitigation techniques to reduce the amount of credit risk it is taking, to spread the concentration of risk across its portfolio and ultimately to ensure efficient use of capital in compliance with the applicable regulations. This is accomplished through a number of means, including loan sales, receipt of collateral, master netting agreements, guarantees and credit derivatives and other risk-reduction techniques.

As a result of such credit risk mitigation activities the firm is potentially exposed to residual risk to the extent that said techniques prove less effective than expected. In this regard, the firm has established policies and procedures to ensure that this risk is adequately governed and the mitigating technique conservatively measured, as detailed below.

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

Guarantees: The Third-Party Credit Supports policy sets out specific criteria for guarantees to be eligible for capital reduction, and to the extent they are not eligible the exposure retains its full value for the purposes of capital calculation. To ensure the legal enforceability of the commitment by the guarantor, all guarantees must be reviewed by legal counsel at the outset and are also subject to periodic review to ensure their ongoing effectiveness.

Credit Derivatives: The Firm uses credit derivatives to mitigate the credit risk associated with traditional lending activities (loans and lending-related commitments) and derivatives counterparty exposure in the Firm's wholesale businesses. The effectiveness of credit default swaps ('CDS') as a hedge against the Firm's exposures may vary depending on a number of factors, including the named reference entity (i.e., the Firm may experience losses on specific exposures that are different than the named reference entities in the purchased CDS); the contractual terms of the CDS (which may have a defined credit event that does not align with an actual loss realized by the Firm); and the maturity of the Firm's CDS protection (which in some cases may be shorter than the Firm's exposures). However, the Firm generally seeks to purchase credit protection with a maturity date that is the same or similar to the maturity date of the exposure for which the protection was purchased, and remaining differences in maturity are actively monitored and managed by the Firm.

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 ('CoCF') is assigned to each jurisdiction where the Firm has obtained a legal opinion on collateral enforceability. Any changes to CoCFs require approval by the Legal department. If the CoCF 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. These policies apply to the business which is booked in applicable UK legal entities. Cash and high quality bonds are generally considered acceptable collateral.

Main Types of Collateral

As at 31st December 2020, circa 78% of the collateral which JPMS plc held was in cash and 22% in securities of which 14% in government bonds from G6 countries. If restricting the collateral assets to posting from external counterparties to JPMS plc, circa 77% was in cash and 23% in securities of which 14% in government bonds from G6 countries. Given the prudent standards in place and extent of governance and controls on credit risk mitigation, the possible residual risk is effectively mitigated, and as such no additional mitigation in terms of capital is deemed to be necessary against this risk.

Credit Risk Mitigation Effect for Credit Risk Exposures

The following tables illustrate the effect of credit risk mitigation techniques applied for credit risk exposures (i.e. on-balance sheet and off-balance sheet exposures) including RWA density as a synthetic metric on the riskiness of each exposure class portfolio.

Table 86: EU CR4 - Standardised approach - Credit risk exposure and CRM effects for JPMCHL

Exposure classes (\$'mm)		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	RWAs	RWA density
1	Central governments or central banks	13,831	—	13,831	—	511	3.69%
3	Public sector entities	12	—	12	—	3	21.38%
6	Institutions	8,126	3,367	8,126	1,689	3,207	32.67%
7	Corporates	11,659	10,833	6,094	6,225	11,009	89.37%
10	Exposures in default	67	24	67	24	137	150%
11	Higher-risk categories	142	15	141	14	277	178.69%
15	Equity	251	—	251	—	378	150.39%
16	Other items	1,100	—	1,100	—	1,100	100.00%
17	Total	35,188	14,239	29,622	7,952	16,622	44.24%

Table 87: EU CR4 - Standardised approach - Credit risk exposure and CRM effects for JPMFIL

Exposure classes (\$'mm)		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	RWAs	RWA density
6	Institutions	737	—	737	—	195	26.44%
7	Corporates	4	—	4	—	4	99.69%
15	Equity	14	—	14	—	21	150.00%
16	Other items	109	—	109	—	109	100.00%
17	Total	864	—	864	—	329	38.06%

Credit Risk Mitigation Techniques

To reduce capital requirements exposures can be secured by collateral, financial guarantees or credit derivatives. JPMCHL and JPMFIL secure their exposure only by collateral as it is shown in the tables below.

Table 88: CRM techniques - Overview by exposure class for JPMCHL

Exposure class (\$'mm)		Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Central governments or central banks	30,248	11,138	11,138	—	—
2	Regional government or local authorities	420	—	—	—	—
3	Public sector entities	5,884	203	203	—	—
4	Multilateral development banks	69	10	10	—	—
5	International organisations	145	5	5	—	—
6	Institutions	131,472	6,229	6,229	—	—
7	Corporates	66,624	13,089	13,089	—	—
10	Exposures in default	91	—	—	—	—
11	Higher-risk categories	23,659	2,606	2,606	—	—
15	Equity	251	—	—	—	—
16	Other items	1,100	—	—	—	—
17	Total	259,963	33,280	33,280	—	—

Table 89: CRM techniques - Overview by exposure class for JPMFIL

Exposure class (\$'mm)		Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
6	Institutions	1,210	523	523	—	—
7	Corporates	5	—	—	—	—
15	Equity	14	—	—	—	—
16	Other items	109	—	—	—	—
17	Total	1,338	523	523	—	—

Table 90: EU CR3 - CRM techniques - Overview for JPMCHL

\$'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	17,412	5,566	5,566	—	—
2	Total debt securities	101	—	—	—	—
3	Total exposures	17,513	5,566	5,566	—	—
4	Of which defaulted	85	—	—	—	—

Table 91: EU CR3 - CRM techniques - Overview for JPMFIL

\$'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	31	—	—	—	—
3	Total exposures	31	—	—	—	—

Exposures Covered by Credit Derivatives and Guarantees

JPMS PLC has a significant volume of credit derivatives in its trading portfolio. These are held for trading intent and are treated under the market risk framework rather than as credit risk mitigation.

Balance Sheet Netting

The Firms' financial statements are prepared under FRS 101 with the exception of JPMCHL consolidated financial statements which are prepared under FRS 102. FRS 101 applies the recognition and measurement requirements of International Financial Reporting Standards ('IFRS') as adopted by the European Union, with reduced disclosures. Under IFRS financial assets and financial liabilities are offset and the net amount reported in the balance sheet when the requirements of IAS 32 'Financial Instruments: Presentation' are met; (i) there is currently a legally enforceable right to offset the recognised amounts and (ii) there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the firm or the counterparty. The same offsetting criterion is applied under FRS 102.

Credit Risk Netting

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

19. Use of Internal Market Risk Model (Article 455)

Own Funds Requirements for Market Risk under the IMA

The standardised approach (Section 11) and Internal market risk models are employed to compute own funds requirements for market risk in JPMCHL. For qualitative information please refer to Section 2.

The capital charge under IMA represents approximately 14.09% of total market risk capital charge. The table below summarises the components of the own funds requirements under the IMA for market risk.

Table 92: EU MR2-A - Market risk under the IMA

\$'mm		JPMCHL	
		RWA	Capital requirements
1	VaR (higher of values a and b)	3,347	268
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		89
(b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		268
2	SVaR (higher of values a and b)	8,062	645
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		403
(b)	Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		645
3	IRC (higher of values a and b)	1,017	81
(a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		81
(b)	Average of the IRC number over the preceding 12 weeks		80
6	Total	12,426	994

As it is displayed in the table below, own funds requirements decreased by \$127mm to \$994mm mainly driven by decreases in SVaR. There were no material methodology or policy changes to the calculations.

Table 93: EU MR2-B - RWA flow statements of market risk exposures under the IMA

\$'mm		VaR	SVaR	IRC	Total RWAs	Total capital requirements
1	RWAs at 1st January 2020	1,797	9,847	2,369	14,013	1,121
2	Movement in risk levels	1,550	(447)	(1,352)	(249)	(20)
3	Model updates/changes	—	(1,338)	—	(1,338)	(107)
4	Methodology and policy	—	—	—	—	—
8	RWAs at 31st December 2020	3,347	8,062	1,017	12,426	994

Other Quantitative Information for Market Risk under the IMA

The following table displays the capital requirement values (maximum, minimum, average and the ending for the reporting period) resulting from different types of models approved by the PRA to be used for computing the regulatory capital charge at group level. The table captures data from 1st January 2020 till 31st December 2020.

Table 94: EU MR3 - IMA values for trading portfolios

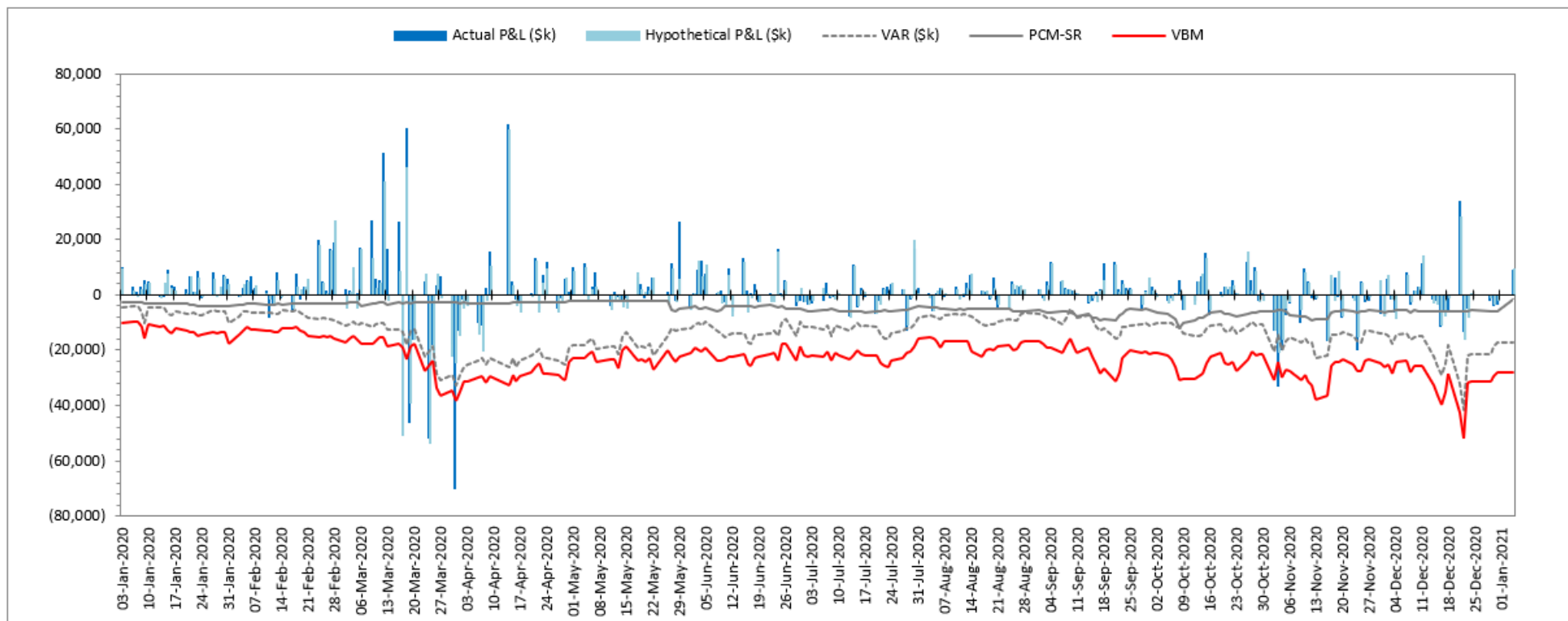
(\$'mm)		JPMCHL
VaR (10 day 99%)		
1	Maximum value	165
2	Average value	71
3	Minimum value	27
4	Period end	89
SVaR (10 day 99%)		
5	Maximum value	436
6	Average value	350
7	Minimum value	285
8	Period end	403
IRC (99.9%)		
9	Maximum value	166
10	Average value	82
11	Minimum value	48
12	Period end	81

VBM Back-Testing

The Firm evaluates the effectiveness of its VBM²⁷ methodology by back-testing, which compares daily market risk-related gains and losses with daily VBM results for a one-day holding period and a 99% confidence level as prescribed by capital rules. Market risk related gains and losses are defined as profits and losses on trading book positions, captured through Hypothetical P&L and Actual P&L²⁸.

VBM 'back-testing exceptions' occur when market risk related losses are greater than the estimate predicted by the VBM for the corresponding day. The following chart presents the VBM back-testing results for JPM's trading book positions covered by current IMA permission. In 2020 four hypothetical and four actual profit and loss exceptions were observed, of which seven exceptions occurred in March 2020, due to market volatility as a result of COVID-19.

Table 95: Comparison of VaR estimates with gains/losses



²⁷ J.P. Morgan uses 'VaR- based measure' ('VBM'), which should be treated as VaR for IMA regulatory capital purposes (as defined in the CRR).

²⁸ **Hypothetical P&L** (which is defined in JPM internal terminology as 'Clean P&L') is defined as market risk-related gains and losses on in-scope products and legal entities, excluding fees, brokerage commissions, fair value adjustments, net interest income, carry and gains and loss arising from day one positions.

Actual P&L consists of 'Hypothetical P&L,' as defined above, plus carry, gains and losses from day one positions and certain reserves. P&L is updated with reserves including but not limited to fair value adjustments, model limitation and price testing at month-end.

20. Liquidity risk (Article 435(1))

Liquidity Risk is the risk that the Firm 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.

Liquidity Risk Oversight

The Firm has a Liquidity Risk Oversight function whose primary objective is to provide oversight of liquidity risk across the Firm. Liquidity Risk Oversight's responsibilities include:

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

Liquidity Management

The primary objectives of the Firm's liquidity management are to:

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

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

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

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

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

Risk Governance and Measurement

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

Internal stress testing

Liquidity stress tests are intended to ensure that the Firm has sufficient liquidity under a variety of adverse scenarios, including scenarios analysed as part of the firm's resolution and recovery planning. Stress scenarios are produced for JPMorgan Chase & Co. and the Firm's material legal entities on a regular basis, and other stress tests are performed in response to specific market events or concerns.

Liquidity stress tests assume all of the Firm's contractual financial obligations are met and take into consideration:

- Varying levels of access to unsecured and secured funding markets,
- Estimated non-contractual and contingent cash outflows and

- Potential impediments to the availability and transferability of liquidity between jurisdictions and material legal entities such as regulatory, legal or other restrictions.

Liquidity outflow assumptions are modelled across a range of time horizons and currency dimensions and contemplate both market and idiosyncratic stresses. Results of stress tests are considered in the formulation of the Firm's funding plan and assessment of its liquidity position.

Contingency funding plan

The Firm's contingency funding plan ('CFP') sets out the strategies for addressing and managing liquidity resource needs during a liquidity stress event and incorporates liquidity risk limits, indicators and risk appetite tolerances that make up Liquidity Escalation Points. The CFP also identifies the alternative contingent funding and liquidity resources available to the Firm and its legal entities in a period of stress.

Internal Liquidity Adequacy Assessment Process

Annually, JPMCHL completes the Internal Liquidity Adequacy Assessment Process ('ILAAP'), which provides management with an assessment of the adequacy of JPMCHL and its subsidiaries' 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 JPMCHL 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 or its subsidiaries' 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 JPMCHL Board.

Liquidity Risk Reporting and Measurement System

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

Liquidity Coverage Ratio ('LCR')

The Liquidity Coverage Ratio²⁹ as per the Commission Delegated Regulation (EU) 2015/61 requires credit institutions to maintain an amount of unencumbered high quality liquid assets that is sufficient to meet their estimated total net cash outflows over a prospective 30 calendar-day period of significant stress.

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

²⁹ In line with the EBA guidelines the average ratio disclosed in Table 96 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 96: EU LIQ1 - Quantitative information of LCR for JPMCHL³⁰

Scope of consolidation: JPMCHL		Total unweighted value (average)				Total weighted value (average)			
Currency and units: (\$'mm)									
Quarter ending on:		31-Dec-20	30-Sep-20	30-Jun-20	31-Mar-20	31-Dec-20	30-Sep-20	30-Jun-20	31-Mar-20
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)					64,873	63,510	62,218	58,625
CASH-OUTFLOWS									
2	Retail deposits and deposits from small business customers, of which:	2,519	2,627	2,655	2,721	252	263	265	272
3	Stable deposits	—	—	—	—	—	—	—	—
4	Less stable deposits	2,519	2,627	2,655	2,721	252	263	265	272
5	Unsecured wholesale funding	14,007	12,561	13,357	12,866	13,884	12,444	13,244	12,755
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	163	157	151	148	41	39	38	37
7	Non-operational deposits (all counterparties)	13,843	12,405	13,206	12,718	13,843	12,405	13,206	12,718
9	Secured wholesale funding					58,223	54,988	52,421	47,380
10	Additional requirements	34,632	35,193	35,211	34,885	22,495	21,589	19,941	18,420
11	Outflows related to derivative exposures and other collateral requirements	24,051	24,347	23,310	21,513	19,984	19,206	17,515	15,762
12	Outflows related to loss of funding on debt products	780	598	448	447	780	598	448	447
13	Credit and liquidity facilities	9,801	10,248	11,453	12,924	1,731	1,785	1,978	2,211
14	Other contractual funding obligations	27,902	34,326	41,709	48,922	2,726	2,584	2,400	2,041
15	Other contingent funding obligations	3,017	3,915	4,346	4,725	1,056	1,345	1,444	1,561
16	TOTAL CASH OUTFLOWS					98,637	93,212	89,715	82,429
CASH-INFLOWS									
17	Secured lending (eg reverse repos)	336,137	325,870	324,089	318,873	78,856	78,885	79,847	77,347
18	Inflows from fully performing exposures	6,318	5,326	5,172	5,035	3,490	2,889	2,874	2,667
19	Other cash inflows	3,867	4,147	4,050	4,103	3,867	4,147	4,050	4,102
20	TOTAL CASH INFLOWS	346,322	335,343	333,310	328,011	86,213	85,921	86,770	84,116
EU-20c	Inflows Subject to 75% Cap	294,624	283,331	281,979	277,840	86,213	85,921	86,770	84,116
						Total adjusted value			
21	LIQUIDITY BUFFER					64,873	63,510	62,218	58,625
22	TOTAL NET CASH OUTFLOWS					24,659	23,303	22,429	20,607
23	LIQUIDITY COVERAGE RATIO (%)					265%	278%	282%	288%

The 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 adjusted value of net cash outflows is calculated after the cap on inflows is applied where applicable. The liquidity buffer disclosed covers both Pillar I and Pillar II liquidity risks.

³⁰ Certain rows have been deleted from the predefined fixed format of the EU LIQ1 template because they are either not applicable or blank.

Concentration of Funding and Liquidity Sources

JPMCHL's stock of HQLA primarily consists of unencumbered cash and certain high quality liquid securities as defined in the LCR rule. JPMCHL funds its balance sheet through diverse sources of funding including operational and non-operational deposits and secured and unsecured funding in the capital markets. The primary source of the long-term unsecured funding liabilities is from other affiliates.

Derivative Exposures and Potential Collateral Calls

In the normal course of business, JPMCHL uses derivative instruments predominantly for market-making activities and to manage its own credit and other market risk exposure. The LCR cash flows related to derivative contracts primarily reflect potential calls from counterparties to post additional collateral in the form of variation margin or initial margin due to potential valuation changes or downgrades of the Company's external credit ratings. In addition, the LCR derivative cash flows reflect counterparties' contractual right to substitute higher quality collateral with lower quality collateral, as well as requiring the return of initial margin to clients.

Currency Mismatch in the LCR

JPMCHL ensures that the currency composition of its liquidity buffer is broadly matched with that of its net outflows by monitoring the liquidity position for each significant currency using its internal stress tests and indicators, as appropriate.

Other

JPMML and JPMFIL are not subject to Commission Delegated Regulation (EU) 2015/61. Consequently, they are not subject to the LCR disclosure guidelines set out in EBA/GL/2017/01.

21. Bank Recovery and Resolution Directive

Pursuant to the disclosure requirements under the PRA's Group Financial Support Instrument 2015, the (entities in question) have not entered into any group financial support agreement.

Pursuant to the disclosure requirements under the FCA handbook section IFPRU 11.5, no firm or qualifying parent undertaking on which the disclosure obligation is imposed, has entered into any group financial support agreement.

22. Disclosures Not Applicable to the UK Entities

The following Articles of CRR are not applicable as at 31st December 2020:

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

23. Glossary of Acronyms

AC	Audit Committee	ILAAP	Internal Liquidity Adequacy Assessment Process
ALCO	Asset and Liability Committee	IMA	Internal Model Approach
AMA	Advanced Measurement Approach	IMM	Internal Model Method
APAC	Asia Pacific	IRM	Independent Risk Management
AVG	Average exposure	IRR	Interest Rate Risk
AT	Additional Tier	IRRBB	Interest Rate Risk in the Banking Book
BIA	Basic Indicator Approach	ITS	Implementing Technical Standards
BOCA	Booking Office Country Approval	JPM	J.P. Morgan
BoE	Bank of England	JPMC	J.P. Morgan Chase and Company
BPS	Basis Point	JPMCHL	J.P. Morgan Capital Holdings Limited
BRC	Board Risk Committee	JPML	J.P. Morgan Limited
BRRD	Bank Recovery and Resolution Directive	JPMEL	J.P. Morgan Europe Limited
CCAR	Comprehensive Capital Analysis and Review	JPMFIL	J.P. Morgan Financial Investments Limited
CCO	Chief Compliance Officer	JPMML	J.P. Morgan Markets Limited
CCOR	Compliance, Conduct, and Operational Risk	JPMMLL	J.P. Morgan Mansart Management Limited
CCR	Counterparty Credit Risk	JPMS PLC	J.P. Morgan Securities PLC
CCF	Credit Conversion Factor	LCR	Liquidity Coverage Ratio
CoCF	Collateral Confidence Factor	LE	Legal Entities
CCP	Central Counterparty Clearing House	LERMs	Legal Entity Risk Managers
CDS	Credit Default Swap	LDA	Loss Distribution Approach
CEO	Chief Executive officer	LGD	Loss given default
CET	Common Equity Tier	LOB	Line of Business
CFP	Contingency Funding Plan	LRI	Liquidity Risk Infrastructure
CIB	Corporate and Investment Bank	MoU	Memorandum of Understanding
CIO	Chief Investment Office	MREL	Minimum Requirement for own funds and Eligible Liabilities
COVID-19	Coronavirus Disease 2019	MRO	Market Risk Officer
CQS	Credit Quality Step	MtM	Mark-to-Market Method
CRD	Capital Requirements Directive	NBIA	New Business Initiative Approval
CRM	Credit Risk Mitigation	NCF	Netting Confidence Factor
CRO	Chief Risk Officer	ORO's	Operational Risk Officers
CRR	Capital Requirements Regulation	O-SII	Other Systemically Important Institutions
CTC RC	The CIO, Treasury and Other Corporate Risk Committee	OTC	Over the Counter
CVA	Credit Valuation Adjustment	PD	Probability of Default
DoE	Duration of Equity	PFCE	Potential Future Credit Exposure
DRE	Derivative Risk Equivalent	P&L	Profit & Loss
EAD	Exposure At Default	PRA	Prudential Regulation Authority
EaR	Earnings at Risk	RM&C	Risk Management & Compliance
EBA	European Banking Authority	RRC	Reputation Risk Committee
ECAI	External Credit Assessment Institutions	RRO	Reputation Risk Office
ECL	Expected Credit Losses	RSU	Restricted Stock Units
ECM	Exposure Control Module	RWA	Risk Weighted Assets
EMC	EMEA Management Committee	SICR	Significant Increase In Credit Risk
EMEA	Europe, Middle East and Africa	S&P	Standard & Poor's
ERC	EMEA Risk Committee	SFT	Securities Financing Transactions
ESG	Environmental, Social and Governance	SMF	Senior Management Functions
E&S	Environmental and social	SNPR	Single Name Position Risk
EVE	Economic Value of Equity	SWW	Specific Wrong Way
EVS	Economic Value Sensitivity	SWWR	Specific Wrong Way Risk
FCA	Financial Conduct Authority	T2	Tier 2
FCCM	Financial Collateral Comprehensive Method	TAG	Transaction Approval Group
FRRG	Firmwide Reputation Risk Governance	TCIO	Treasury and Chief Investment Office
FFRGC	Firmwide Fiduciary Risk Governance Committee	TCR	Total Capital Requirements
FRC	Firmwide Risk Committee	TCP	Traditional Credit Products
FRE	Firmwide Risk Executive	TLAC	Total Loss Absorbing Capacity
FRS	Financial Reporting Standard	VaR	Value-at-Risk
FSB	Financial Stability Board	UK RemCo	UK Remuneration Committee
FSI	Firmwide Stress Infrastructure		
FTA	The Brexit Free Trade Agreement		
FVOCI	Fair Value Through Other Comprehensive Income		

GFC	Global Funds Control Other Comprehensive Income
G-SII	Globally Systemically Important Institution
GWW	General Wrong Way
IAS	International Accounting Standards
ICAAP	Internal Capital Adequacy Assessment Process
ICG	Individual Capital Guidance
IFM	Intraday Facility Monitor
IFRS	International Financial Reporting Standards