

PILLAR III DISCLOSURE

J.P. Morgan Saudi Arabia Company

License Number: 12164-37

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1. Scope of Application

This report is prepared and issued by J.P. Morgan Saudi Arabia Company (hereinafter referred to as “JPMSA” or the “Company”) in accordance with the requirements of Article 68 of the Prudential Regulations issued by the Capital Markets Authority (hereinafter referred to as “CMA”).

These rules include guidelines for the annual market disclosure of the Company’s capital and risk management information required to be published on JPMSA website (<http://www.jpmorgansaudiArabia.com>).

JPMSA is a subsidiary of a foreign bank and does not hold any subsidiary investment in or outside of Saudi Arabia. As at 31 December 2019, the Company has share capital of SAR 93.75 million.

The ultimate parent of the entity in scope of the disclosure is JPMorgan Chase & Co. (“JPMorgan Chase”), a financial holding company incorporated under Delaware law in 1968.

This document refers to JPMorgan Chase or the “Firm” when referring to frameworks, methodologies, systems and controls that are adopted throughout JPMorgan Chase & Co. and its subsidiaries. JPMSA or the “Company” is used to refer to documents, financial resources and other tangible concepts relevant only to J.P. Morgan Saudi Arabia Company.

2. Capital Structure

The capital injected by the parent companies of JPMSA is unconditional in nature and does not have to be repaid unless the company is liquidated. Since its incorporation, the Company’s capital base increased from an initial share capital of SAR 60 million in 2008 to SAR 93.75 million. JPMSA also plans to retain its accumulated profits for the foreseeable future to strengthen its capital position and support planned expansionary activities. JPMSA’s total capital base is SAR 233.2 mm as at 31 Dec 2019.

Further information on capital structure is set out in Exhibit A.1 in the Appendix.

3. Capital Adequacy

The Company is continuously strengthening its risk management framework to support the growing business requirements. The current risk management process in JPMSA is considered adequate in terms of its size and operations. JPMSA ICAAP defines the framework for measuring, monitoring, reporting all material risks and for the efficient capital planning process to ensure sufficient capital is available to meet the usual business activities and any unforeseen contingencies.

JPMSA is considered adequately capitalized over the capital planning horizon. The Company also plans to retain its accumulated profits for the foreseeable future as part of its capital planning and management.

Under the CMA Prudential Rules, JPMSA’s minimum capital requirement is SAR 26.9 million. As at 31 December 2019, JPMSA has total shareholders’ equity of SAR 233.9 million which results in a coverage ratio of 8.67. The table below is a summary of the capital adequacy disclosure as set out full in Exhibits A.1 and A.2 in the Appendix.

Exhibit 3.1**Capital Base – 31 December 2019**

	SAR 000s
Paid up capital	93,750
Audited retained earnings	123,244
Reserves (other than revaluation reserves)	16,952
Deductions from Tier-1 capital	(715)
Total Capital Base	233,231
Minimum Capital Requirement	26,904
Total Capital Ratio (times)	8.67

4. Risk and Control Framework

Risk is an inherent part of J.P. Morgan Chase's business activities. The Firm's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects the safety and soundness of the Firm.

The Firm believes that effective risk management requires:

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

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

4.1 Firmwide Risk Governance Framework

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

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

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

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

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

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

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

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

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

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

4.2 EMEA Risk Governance

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

- The 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. In addition, to its regional responsibilities, the ERC has direct oversight of the risks in all EMEA Tier 1 entities. Tier 2 and 3 entities (including JPMSA) are overseen by the EMEA Risk Forum, a sub-forum of the ERC.
- The ERC is accountable to the EMEA Management Committee (EMC) and the boards, Board Risk Committees (BRC) and Oversight Committees of the relevant legal entities. In addition, it reports to the Firmwide Risk Committee (FRC) and the HR Control Forum.
- The EMEA CRO leads the Risk Management function in the region and chairs the ERC and EMEA Risk Forum. The EMEA CRO is a member of the EMC.

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

Global Legal Entity Risk Framework

The Global Legal Entity Risk framework was established to support firmwide risk governance and oversight at the legal entity level. The framework is designed to drive appropriate oversight, best practices and escalation for legal entities globally based on tiered governance principles. Governance standards are established for each tier of governance, and include risk committee membership, reporting requirements and appointment of Legal Entity Risk Managers (LERMs). The framework is overseen by the Legal Entity Risk Forum and is organized through the regional legal entity Risk governance teams. These regional teams also support the LERMs on oversight of specific legal entity regulatory requirements.

4.3 JPMSA Legal Entity Risk Governance and Oversight Framework

JPMSA is part of the firmwide and regional risk governance oversight framework as described above.

The JPMSA Board has delegated to the JPMSA Local Management Committee (“LMC”), composed of senior management, to ensure that any significant decisions are aligned to the Firm’s strategy in light of any relevant KSA regulatory requirements, to consider the material risks and issues that are escalated to the LMC, and to provide the necessary oversight and challenge for any proposed mitigation/remediation activities.

The Location Operational Risk and Control Committee (“LORCC”), composed of respective business and control function representatives, is responsible to monitor adherence to the Operational Risk Management Framework (please refer to Operational Risk below) as well as review and identify operational risk and control items requiring escalation .

JPMSA has assigned a legal entity risk manager for the day to day risk management of the entity. The JPMSA legal entity risk manager is an attendee of the EMEA Risk Forum and a member of the LMC and LORCC.

4.4 Firmwide Risk Appetite Framework

JPMC Risk Appetite is a high level statement of the firm's appetite for risk. The Risk Appetite framework integrates risk controls, earnings, capital management, liquidity management and return targets to set the firm's risk appetite in the context of its objectives for key stakeholders, including but not limited to shareholders, depositors, regulators and clients.

4.5 JPMSA risk appetite

JPMSA leverages the firm wide Risk Appetite framework. JPMSA is also subject to a defined framework of target capital levels, as well as specific thresholds / triggers for escalation and action. Based on this framework, corrective action is taken as and when required to maintain an appropriate capitalization level.

4.6 Risk Assessment

JPMSA completes the Internal Capital Adequacy Assessment Process (“ICAAP”) annually, which forms part of management and decision-making processes such as the JPMSA risk appetite, strategy, capital and risk management frameworks, and stress testing. The ICAAP is used to assess the risks to which the JPMSA is exposed; how these risks are measured, managed, monitored and mitigated; and how much capital the JPMSA should hold to reflect these risks now, in the future and under stressed conditions.

4.6.1 Credit Risk

Risk definition	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.
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Firmwide credit risk management

Risk governance and policy framework

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

- Establishing a comprehensive credit risk policy framework
- Monitoring, measuring and managing credit risk across all portfolio segments, including transaction and exposure approval
- Setting industry concentration limits and establishing underwriting guidelines
- Assigning and managing credit authorities in connection with the approval of all credit exposure
- Managing criticized exposures and delinquent loans
- 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 decision-making and ensure credit risks are assessed accurately, approved appropriately, monitored regularly and managed actively at both the transaction and portfolio levels. The firm-wide policy framework establishes credit approval authorities, concentration limits, risk-taking methodologies, portfolio review parameters and problem loan management protocols.

Approach to risk management

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.

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 governing risk policy framework provides a single, consistent global approach while allowing the application of differing local requirements.

Risk monitoring

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

Risk reporting

To enable monitoring of credit risk and effective decision-making, aggregate credit exposure, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry; clients, counterparties and customers; product and geography are prepared 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.

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.

JPMSA credit risk management

Risk profile JPMSA's credit risk profile is limited and short-term, and is driven by deposits held with JPMorgan Chase Bank, N.A. or local banks rated no less than A- (or equivalent) by major rating agencies. .

Other assets mainly comprise of fee accruals due from related parties and prepaid expenses. Due to the nature of the business conducted in JPMSA, there is limited credit risk arising from its activities. There are no past due claims or receivables provisions on the JPMSA balance sheet. No collateral or netting has been taken in support of any transaction to date.

JPMSA's credit concentration risk is related to single name concentration (JPM group and Saudi British Bank), industry concentration (financial sector) and geographical concentration (Saudi Arabia and USA).

Risk governance and policy framework JPMSA's legal entity approach mirrors the firm-wide approach with legal entity specific governance overlay. Credit risk oversight responsibility for JPMSA sits with the Local Management Committee, made up of senior management, which in turn reports to the Board of JPMSA.

Approach to risk management JPMSA's approach mirrors the firm-wide approach and is complemented by activities and governance that are specific to JPMSA.

Resourcing of credit function and credit approval

JPMSA has established an outsourced model through a Service Level Agreement (SLA) framework to leverage firm-wide credit risk analysis capability covering the initial credit risk analysis including assignment of ratings.

Monitoring and managing the quality of the credit portfolio

Establishment of settlement lines

For the equities brokerage business, individual settlement limits have been granted to certain counterparties in order to manage potential counterparty risks (from counterparties failing to settle). This is monitored within automated systems and any breaches reported to the Credit Officers. In addition an aggregate trading limit has been established to ensure JPMSA remains adequately capitalized even in adverse events. This is also monitored through an automated failed settlement escalation process and reported at the monthly LMC meetings as appropriate.

Concentration Risk

Credit concentration risk is managed at the Firmwide level through a matrix of credit family exposure thresholds, industry limits and country risk limits. The concentration risk framework complements but does not replace normal credit approval and review requirements.

Credit risk capital requirement included in the monthly capital adequacy report which is submitted to the LMC as well as to the CMA.

Exhibit 4.1

Credit Risk – 31 December 2019

	Gross Exposures SAR 000s	Net Exposures SAR 000s	Risk Weighted Assets SAR 000s	Capital Requirement SAR 000s
Authorised persons and banks	250,399	250,399	50,080	7,011
Other Assets	10,413	10,413	31,239	4,373
Total on-balance sheet exposures	260,812	260,812	81,319	11,385

4.6.2 Market Risk

Risk definition 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.

Firmwide market risk management

Risk governance and policy framework Market Risk Management monitors market risks throughout the Firm and defines market risk guidance, such as but limited to, 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 for senior management, the Board of Directors and regulators.

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

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

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

Approach to risk management **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. The appropriate set of risk measures utilized for a given business activity is tailored based on business mandate, risk horizon, materiality, market volatility and other factors.

Value at Risk (VaR)

The Firm utilizes VaR, a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment.

The VaR framework is employed across the Firm using historical simulation based on data for the previous 12 months. VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. These VaR results are reported to senior management, the Firm's Board of Directors and regulators.

Stress Testing

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

JPMSA legal entity market risk management

<p>Risk profile</p>	<p>JPMSA's market risk is currently limited to the foreign exchange risk which is calculated as 2% of the Net Open Foreign Currency Position (other than SAR) under the CMA Prudential Rules for Currency Risk. The non-SAR open currency positions are primarily in USD.</p> <p>JPMSA's market risk on Equities Swaps business is flat (long stock offset by short Equity Linked Note). JPMSA may have market risk in case of rejected trades under the ICM Equities Brokerage business (beyond 5 days). The probability of such rejection is relatively low and estimated at 5% of number of trades based on historical information from largest brokers and settlement agents.</p>
<p>Risk governance and policy framework</p>	<p>Market risk exposures arising from activities managed within JPMSA are managed as part of the enterprise-wide market risk management framework.</p> <p>The Legal Entity Risk Manager (LERM), in partnership with Market Risk, is responsible for considering the market risk exposures within JPMSA and applying controls, as appropriate.</p>
<p>Approach to risk management</p>	<p>Given JPMSA's market risk exposures (arising from non-SAR FX cash positions), market risk capital requirement is calculated using the prescribed methodology under Pillar I requirements of the CMA Prudential Rules.</p> <p>Market risk capital requirement is included in the monthly report submitted to the LMC as well as to the CMA.</p> <p>JPMSA has implemented limits and controls to reduce market risk from rejected trades</p> <p>JPMSA has a daily report to monitor equity and FX delta from swap trades and rejected trades under ICM.</p>

Exhibit 4.2

Market risk – 31 December 2019

	Long Position SAR 000s	Capital Requirement SAR 000s
Foreign exchange	110,186	2,204
Total Market Risk	110,186	2,204

4.6.3 Operational Risk

Risk definition Operational risk is the risk associated with an adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting the Firm's processes or systems; it includes compliance, conduct, legal, and estimations and model risk. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, cybersecurity attacks, inappropriate employee 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 environment in which it operates.

Firmwide operational risk management

Risk governance and policy 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.

Approach to risk management The components of Operational Risk Management Framework are *Operational Risk Governance*

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

LOBs and Corporate control committees are responsible for reviewing data that indicates the quality and stability of processes, addressing key operational risk issues, focusing on processes with control concerns, and overseeing control remediation.

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

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

Operational Risk identification

The Firm utilizes a structured risk and control self-assessment process that is executed by the LOBs and Corporate. As part of this process, the LOBs

and Corporate evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. CCOR Management provides oversight of these activities and may also perform independent assessments of significant operational risk events and area of concentrated or emerging risk.

Operational Risk Measurement

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

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

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

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

The Firm considers the impact of stressed economic conditions on operational risk losses and develops a

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

Operational Risk Monitoring and testing

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

Management of Operational Risk

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

Operational Risk Reporting

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

Operational risk can manifest itself in various ways. Operational risk subcategories such as Compliance risk, Conduct risk, Legal risk and Estimations and Model risk, as well as other operational risks, can lead to losses which are captured through the Firm's operational risk measurement processes.

COMPLIANCE RISK MANAGEMENT

Compliance risk, a subcategory of operational risk, is the risk of failing to comply with laws, rules, regulations or codes of conduct and standards of self-regulatory organizations.

CONDUCT RISK MANAGEMENT

Conduct risk, a subcategory of operational risk, is the risk that any action or inaction by an employee or employees could lead to unfair client or customer outcomes, impact the integrity of the markets in which the Firm operates, or compromise the Firm's reputation.

LEGAL RISK MANAGEMENT

Legal risk, a subcategory of operational risk, is the risk of loss primarily caused by the actual or alleged failure to meet legal obligations that arise from the rule of law in jurisdictions in which the Firm operates, agreements with clients and customers, and products and services offered by the Firm.

ESTIMATIONS AND MODEL RISK MANAGEMENT

Estimations and Model risk, a subcategory of operational risk, is the potential for adverse consequences from decisions based on incorrect or misused estimation outputs.

Cybersecurity risk

Cybersecurity risk is an important, continuous and evolving focus for the Firm. The Firm devotes significant resources to protecting and continuing to improve the security of its computer systems, software, networks and other technology assets. The Firm's security efforts are designed to protect against, among other things, cybersecurity attacks by unauthorized parties attempting to obtain access to confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage. The Firm continues to make significant investments in enhancing its cyber-defence capabilities and to strengthen its partnerships with the appropriate government and law enforcement agencies and other businesses in order to understand the full spectrum of cybersecurity risks in the operating environment, enhance defences and improve resiliency against cybersecurity threats.

Business and technology resiliency risk

Business disruptions can occur due to forces beyond the Firm's control such as severe weather, power or telecommunications loss, accidents, failure of a third party to provide expected services, cyberattack, flooding, transit strikes, terrorism, health emergencies, the spread of infectious diseases or pandemics. The safety of the Firm's employees and customers is of the highest priority. The Firmwide resiliency program is intended to enable the Firm to recover its critical business functions and supporting assets (i.e., staff, technology and facilities) in the event of a business interruption. The program includes governance, awareness training, and testing of recovery strategies, as well as strategic and tactical initiatives to identify, assess, and manage business interruption and public safety risks. The strength and proficiency of the Firmwide resiliency program has played an integral role in maintaining the Firm's business operations during and after various events.

JPMSA operational risk management

Risk profile

Operational risk is an inherent part of the activity of JPMSA. LOB activity performed in this entity is subject to the Firm's Compliance, Conduct and Operational Risk Framework (CCOR).

JPMSA is an entity with well-established processes and a developed infrastructure to support the businesses conducted at the legal entity: investment banking advisory, brokerage (equities and markets), direct custody and clearing. New products are subject to the requirements of the NBIA policy prior to launch, including the assessment of potential impact to legal entities. The businesses within JPMSA identify and assess operational risks through the firm's annual self-assessment program. In addition, a risk profile for JPMSA is prepared based on internal and external operational risk events information, and involving the business, location subject matter experts and legal entity stakeholders, on an annual basis.

Risk governance and policy framework

The Business and Corporate have primary responsibility for the management of operational risk for all EMEA locations in which they conduct business. Each business has a framework designed to ensure that emerging risks and control issues are tracked and monitored to resolution. Various business control forums and committees receive data

that allows them to gain insight into the operational risk environment and identify emerging trends and issues that they may challenge.

The business operational risk framework is complemented by the JPMSA Legal Entity Risk Governance Framework as outlined above.

The JPMSA Board has overall responsibility for ensuring the appropriate management of Operational Risks impacting the entity. They discharge this responsibility through:

- Recognition of the operation of global policies to ensure each business and Corporate has accountability for the operational risk management inherent on its activity.
- Review and discussion at the Board level, risks, issues, and the effectiveness of the operational risk framework.

Approach to risk management	JPMSA's approach mirrors the Firm's approach for all elements of the CCOR framework. Operational risk is measured using the prescribed methodology under Pillar I requirements of the CMA Prudential Rules and is included to the monthly report submitted to the LMC as well as to the CMA.
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Exhibit 4.3

Operational risk – 31 December 2019

	Capital requirement SAR 000s
Total operational risk	13,315

4.6.4 Liquidity Risk

Risk definition	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.
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Firmwide liquidity risk management

Risk governance and policy framework	<p>The firm has established and implemented strategies, policies and procedures to effectively manage liquidity risk at the Firmwide, legal entity and LOB levels. The specific risk committees responsible for liquidity risk governance include the Board Risk Committee, Firmwide ALCO and CTC Risk Committee, as well as risk committees and ALCOs of regions, legal entities and LOBs.</p> <p>Liquidity Risk Oversight is managed through an independent Firmwide risk group within the CIO, Treasury, and Corporate (CTC) Risk organization.</p> <ul style="list-style-type: none"> ■ Liquidity risk management issues are governed by the CTC Risk Committee (RC), which is co-chaired by the JPMC CFO and CTC CRO ■ The CTC RC will review amendments made to the liquidity risk stress testing assumptions used within the firm's Risk Appetite framework. The CTC RC will review stress practices, methodologies, assumptions, and results used within liquidity risk stress tests that are part of the firm's
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Risk Appetite framework on a quarterly basis. The assumptions and results included in the quarterly stress review will be approved by JPMC CRO, CFO and Global Treasurer. The firm's Liquidity Risk Oversight Policy specifies overall principles for the firm's approach to liquidity risk oversight. This policy establishes the requirements to assess, measure, monitor and control liquidity risk. Liquidity risk limits and indicators are governed by the firmwide Liquidity Risk Limits and Indicators Standard, which is approved by the CTC CRO.

Approach to risk management

The Firm has a liquidity risk oversight function whose primary objective is to provide independent assessment, measurement, monitoring, and control of liquidity risk across the Firm. Liquidity Risk Oversight's responsibilities include, but are not limited to:

- 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 Risk Limits and Indicators

Liquidity limits and indicators are governed by the firmwide Liquidity Risk Limits and Indicators Policy, which is approved by the CTC CRO.

- Limits are defined as internal risk metrics that control the amount of liquidity risk or balance sheet exposure taken across the firm. Limits aim to restrict the amount of liquidity risk or balance sheet exposure to ensure the maintenance of the firm's liquidity position and risk appetite, as determined by firm's senior management.
- Indicators serve as early warning signals of changes within market or counterparty/customer behaviour. Indicator breaches require a prompt assessment of the current and/or potentially changing liquidity status for the firm, region or the LOB.

The Firm's contingency funding plan (CFP), which is reviewed by ALCO and approved by the DRPC, is a compilation of procedures and action plans for managing liquidity through stress events.

JPMSA legal entity liquidity risk management

Risk profile

JPMSA has no significant liabilities and most of the assets are liquid overnight deposits or nostro accounts at banks.

Risk governance and policy framework

JPMSA is incorporated into the Firmwide liquidity risk governance and policy framework.

JPMSA's Board of Directors have delegated the risk oversight (including liquidity risk) to the Local Management Committee.

Approach to risk management

JPMSA is incorporated into the Firmwide liquidity risk management framework (see above).

JPMSA may need some funding in case of rejected trades under the Independent Custody Model in its Equities Brokerage. Although the probability of such rejection is relatively low, JPMSA has established processes for providing necessary liquidity to JPMSA in such scenarios by other JPM entities.

JPMSA received a guarantee facility from SABB to support the equities and custody business settlement activity with the exchange (Tadawul). SABB guarantees JPMSA's settlement liabilities to the exchange. JPMSA provides an order note on the back of this.

A. Appendices

Exhibit A.1

Disclosure on Capital Base – 31 December 2019	
Capital Base	SAR '000
Tier-1 capital	
Paid-up capital	93,750
Audited retained earnings	123,244
Share premium	0
Reserves (other than revaluation reserves)	16,952
Tier-1 capital contribution	0
Deductions from Tier-1 capital	(715)
Total Tier-1 capital	233,231
Tier-2 capital	
Subordinated loans	0
Cumulative preference shares	0
Revaluation reserves	0
Other deductions from Tier-2 (-)	0
Deduction to meet Tier-2 capital limit (-)	0
Total Tier-2 capital	0
Total capital base	233,231

Exhibit A.2
Disclosure on Capital Adequacy – 31 December 2019

Exposure Class	Exposures before CRM SAR '000	Net Exposures after CRM SAR '000	Risk Weighted Assets SAR '000	Capital Requirement SAR '000
Credit Risk				
<i>On-balance Sheet Exposures</i>				
Governments and Central Banks	–	–	–	–
Authorised Persons and Banks	250,399	250,399	50,080	7,011
Corporates				
Retail	–	–	–	–
Investments	–	–	–	–
Securitisation	–	–	–	–
Margin Financing	–	–	–	–
Other Assets	10,413	10,413	31,239	4,373
Total On-Balance sheet Exposures	260,812	260,812	81,319	11,385
<i>Off-balance Sheet Exposures</i>				
OTC/Credit Derivatives	–	–	–	–
Repurchase agreements	–	–	–	–
Securities borrowing/lending	–	–	–	–
Commitments	–	–	–	–
Other off-balance sheet exposures	–	–	–	–
Total Off-Balance sheet Exposures	–	–	–	–
Total On and Off-Balance sheet Exposures	260,812	260,812	81,319	11,385
Prohibited Exposure Risk Requirement	–	–	–	–
Total Credit Risk Exposures	260,812	260,812	81,319	11,385
Market Risk				
	Long Position	Short Position		
Interest rate risks	–	–		–
Equity price risks	–	–		–
Risks related to investment funds	–	–		–
Securitization/re-securitization positions	–	–		–
Excess exposure risks	–	–		–
Settlement risks and counterparty risks	–	–		–
Foreign exchange rate risks	110,186	–		2,204
Commodities risks	–	–		–
Total Market Risk Exposures	110,186	–		2,204
Operational Risk				
Minimum Capital Requirements				13,315
Surplus/(Deficit) in capital				26,904
Total Capital ratio (times)				8.67

Exhibit A.3

Disclosure on Credit Risk's Risk Weight (SAR '000) – 31 December 2019

Risk Weights	Exposures after netting and credit risk mitigation											Total Exposure after netting and Credit Risk Mitigation	Total Risk Weighted Assets	
	Governments and central banks	Administrative bodies and NPO	Authorised persons and banks	Margin Financing	Corporates	Retail	Past due items	Investments	Securitization	Other assets	Off-balance sheet commitments			
0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20%	-	-	250,399	-	-	-	-	-	-	-	-	-	250,399	50,080
50%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300%	-	-	-	-	-	-	-	-	-	10,413	-	-	10,413	31,239
400%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
714% (include prohibited exposure)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Risk Weight	0%	0%	20%	0%	714%	0%	0%	0%	0%	300%	0%	-	31.18%	31.18%
Deduction from Capital Base	-	-	7,011	-	-	-	-	-	-	4,373	-	-	11,385	11,385

Exhibit A.4
Disclosure on Credit Risk's Rated Exposure (SAR '000) – 31 December 2019

Exposure Class	Long term Ratings of counterparties							
	Credit quality step	1	2	3	4	5	6	Unrated
	S&P	AAA TO AA-	A+ TO A-	BBB+ TO BBB-	BB+ TO BB-	B+ TO B-	CCC+ and below	Unrated
	Fitch	AAA TO AA-	A+ TO A-	BBB+ TO BBB-	BB+ TO BB-	B+ TO B-	CCC+ and below	Unrated
	Moody's	Aaa TO Aa3	A1 TO A3	Baa1 TO Baa3	Ba1 TO Ba3	B1 TO B3	Caa1 and below	Unrated
	Capital Intelligence	AAA	AA TO A	BBB	BB	B	C and below	Unrated
On and Off-balance-sheet Exposures								
Governments and Central Banks		-	-	-	-	-	-	-
Authorised Persons and Banks		-	250,399	-	-	-	-	-
Corporates		-	-	-	-	-	-	-
Retail		-	-	-	-	-	-	-
Investments		-	-	-	-	-	-	-
Securitization		-	-	-	-	-	-	-
Margin Financing		-	-	-	-	-	-	-
Other Assets		-	7,749	-	-	-	-	2,664
Total		-	258,148	-	-	-	-	2,664

Exposure Class	Short term Ratings of counterparties					
	Credit quality step	1	2	3	4	Unrated
	S & P	A-1+, A-1	A-2	A-3	Below A-3	Unrated
	Fitch	F1+, F1	F2	F3	Below F3	Unrated
	Moody's	P-1	P-2	P-3	Not Prime	Unrated
	Capital Intelligence	A1	A2	A3	Below A3	Unrated
On and Off-balance-sheet Exposures						
Governments and Central Banks		-	-	-	-	-
Authorised Persons and Banks		250,399	-	-	-	-
Corporates		-	-	-	-	-
Retail		-	-	-	-	-
Investments		-	-	-	-	-
Securitization		-	-	-	-	-
Margin Financing		-	-	-	-	-
Other Assets		7,749	-	-	-	2,664
Total		258,148	-	-	-	2,664

Exhibit A.5
Disclosure on Credit Risk Mitigation (CRM) (SAR '000) – 31 December 2019

Exposure Class	Exposures before CRM	Exposures covered by Guarantees/ Credit derivatives	Exposures covered by Financial Collateral	Exposures covered by Netting Agreement	Exposures covered by other eligible collaterals	Exposures after CRM
Credit Risk						
<i>On-balance Sheet Exposures</i>						
Governments and Central Banks	-	-	-	-	-	-
Authorised Persons and Banks	250,399	-	-	-	-	250,399
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	-	-
Investments	-	-	-	-	-	-
Securitization	-	-	-	-	-	-
Margin Financing	-	-	-	-	-	-
Other Assets	10,413	-	-	-	-	10,413
Total On-Balance sheet Exposures	260,812	-	-	-	-	260,812
<i>Off-balance Sheet Exposures</i>						
OTC/Credit Derivatives	-	-	-	-	-	-
Exposure in the form of repurchase agreements	-	-	-	-	-	-
Exposure in the form of securities lending	-	-	-	-	-	-
Exposure in the form of commitments	-	-	-	-	-	-
*Other Off-Balance sheet Exposures	-	-	-	-	-	-
Total Off-Balance sheet Exposures	-	-	-	-	-	-
Total On and Off-Balance sheet Exposures	260,812	-	-	-	-	260,812