



Report of Independent Accountants

To Management and the Board of Managers of
J.P. Morgan Securities LLC

We have performed the procedures enumerated on pages 2 through 58 attached to this report, which were agreed to by J.P. Morgan Securities LLC (the "Company"), solely to assist you in evaluating the Company's compliance with the provisions of the Securities and Exchange Commission ("SEC") Rule 17a-5(k) for the year ended December 31, 2019. Management is responsible for the Company's compliance with the provisions of SEC Rule 17a-5(k). The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and results thereof are included on pages 2 through 58 attached to this report.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the Company's compliance with the provisions of the Securities and Exchange Commission ("SEC") Rule 17a-5(k) for the year ended December 31, 2019. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of Management and the Board of Managers of J.P. Morgan Securities LLC and the SEC and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP
March 2, 2020



Area	Covered Area	Procedures	Results
A	The existence and functioning of oversight committees, the purposes of which are to establish and maintain policies for the measurement and monitoring of the four named risks: market, credit, liquidity, and operational.	<p>A.1 Obtain from management the most recent charters for the following JPMorgan Chase & Co.</p> <p>(“JPMC” or the “Firm”) oversight committees:</p> <p>(1) Board Risk Committee (“BRC”);</p> <p>(2) Treasury Committee;</p> <p>(3) Firmwide Risk Committee (“FRC”);</p> <p>(4) CIO, Treasury, & Corporate Risk Committee (“CTC RC”);</p> <p>(5) Corporate & Investment Bank (“CIB”) Risk Committee (“CIBRC”); and</p> <p>(6) CIB Risk Business Control Committee (“CIBRBCC”).</p> <p>(7) JPMS Board of Managers</p> <p>(8) JPMS Operating Committee</p> <p>State the following in the Results section based on the charters of each respective committee:</p> <p>(1) the respective mandates of each of the aforementioned committees,</p>	<p>A.1 We either obtained from management the most recent charters for the following JPMC oversight committees or observed those documents. The mandates for each of these oversight committees included within the respective charters are as follows:</p> <p>(1) BRC: Board Risk Committee Charter, last updated July 2019.</p> <p>1. The purpose of the Board of Directors’ Risk Committee is to assist the Board in its oversight of management’s responsibility to implement an effective global risk management framework reasonably designed to identify, assess and manage the Firm’s strategic, credit and investment, market, and operational risks.</p> <p>The Risk Committee’s responsibilities include approval of applicable primary risk policies and review of certain associated frameworks, analysis, and reporting established by management. The Risk Committee oversees reputational risks and conduct risks within its scope of responsibility.</p> <p>2. The BRC is responsible for reporting any findings within their role and responsibilities to the JPMC Board of Directors. These responsibilities are described in further detail below.</p> <p>3. The members of the BRC roles and responsibilities with respect to the Firm’s global risk management framework and risks are the following:</p> <ul style="list-style-type: none"> • Approve such policies as may be designed by the Risk Committee and Primary Risk Policies, and annually review and approve any material change to such policies • Receive report on Risk Appetite results against defined risk appetite levels for quantitative parameters and qualitative factors. The Risk Committee Chair shall be notified promptly if Risk Appetite results have exceeded or are forecasted to exceed risk appetite levels. The Risk Committee shall review firmwide value-at-risk and market stress limits, and the Risk Committee Chair shall be notified promptly of firmwide breaches • Receive, periodically, from management for Risk and Compliance, as appropriate, communications and presentations on significant control



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		<p>(2) their governance structure and reporting responsibilities,</p> <p>(3) each committee member and their role and responsibilities.</p> <p>Note the dates of each of the committee charters.</p>	<p>issues in internal audit reports, management letters from external auditors, and regulatory authorities' examination reports, and such other significant control matters that are identified by the relevant function, as appropriate, and the resolution status thereof.</p> <ul style="list-style-type: none"> • Meet periodically with the CEOs of the lines of business and with the Chief Investment Officer <p>Their roles and responsibilities with respect to evaluation that there is an effective system in place of controls reasonably designed to evaluate and control risk throughout the Firm:</p> <ul style="list-style-type: none"> • Review and approve, as appropriate, parameters, limits and/or thresholds as requested by management. The Risk Committee Chair shall be promptly notified of firmwide breaches. • Review other such key metrics agreed to with management and performance against such metrics • Review reports of significant risk issues identified by management <p>Their roles and responsibilities with respect to capital and liquidity analysis and planning:</p> <ul style="list-style-type: none"> • Unless reviewed and approved by the Board as a whole, review and approve the Firm's Recovery Plan and the annual Capital Plan • Review analysis of the Firm's liquidity risk. If liquidity management issues develop between meetings of the Risk Committee that the CFO believes could have a material adverse impact on the Firm, the Chief Financial Officer will promptly report such issues to the Chair of the Risk Committee. • With respect to liquidity risk management, approve the contingency funding plan at least annually, and approve any material revisions to the plan. • Review the acceptable level of liquidity risk that the Firm may assume in connection with its operating strategies (liquidity risk tolerances) at least annually, and bring to the Board annually for its approval. • Receive and review at least semi-annually information provided by senior management to determine whether the Firm is operating in accordance with its established liquidity risk tolerances, and bring to



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			<p>the Board semi-annually for its review.</p> <ul style="list-style-type: none"> Review periodically the liquidity risk-management strategies, policies, and procedures established by senior management, and bring to the Board for its approval and periodic review. <p>Refer to Appendix C for the full BRC membership.</p> <p>(2) Treasury Committee Charter, last updated July 2019.</p> <ol style="list-style-type: none"> The purpose of the Treasury Committee is to monitor the Firm's overall balance sheet, liquidity risk and interest rate risk and supports the oversight of ALM. Escalations raised in this committee are provided to the JPMC Board of Directors. Their roles and responsibilities are to approve the intercompany funding/ liquidity policy and funds-transfer-pricing policy annually. Their roles and responsibilities are also to review the contingency funding plan annually, interest rate risk management policy annually, short-term cash flow framework and projections quarterly, interest rate risk and strategy on an ongoing basis, and funding/liquidity risk and strategy on an ongoing basis. Membership includes: <ul style="list-style-type: none"> Firm's Treasurer / Chief Investment Officer [Chair] Firm's Treasurer / Chief Investment Officer [Chair] Chief Financial Officer, CIO, Global Treasury and PI Chief Risk Officer, CIO, Treasury & Corporate Head, Asset & Liability Management Strategy & Analytics Head, Asset & Liability Management Strategy Head, Capital & Liquidity Management Head, Capital Management Head, EMEA & APAC Treasury and International Rates/FX Head, Interest Rate Risk Management Head, Recovery & Resolution Planning



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			<ul style="list-style-type: none"> • Head, Liquidity Management • Head, Liquidity Risk Oversight • LOB Treasurers • North America Treasurer • Audit, for Treasury and CIO [non-voting member]. <p>(3) FRC: Firmwide Risk Committee Charter, last updated October 7, 2019</p> <ol style="list-style-type: none"> 1. The FRC provides oversight of the risks inherent in the firm's business, including strategic, credit and investment, market, and operational risk. It also provides oversight of the risk appetite and risk identification governance, framework and results. 2. Governance structure and reporting responsibilities include: <ul style="list-style-type: none"> • Reviewing, recommending, and/or approving any items as required by law, regulation and internal risk policy • Reviewing, recommending, and/or approving any other risk related matters determined by the Committee members • Reviewing, recommending, and/or approving any matter that the committee is asked to review prior to being presented to the Board Risk Committee • Reviewing, recommending, and/or approving annual committee charter review, self-evaluation, and approval • Reviewing, recommending, and/or approving issues or concerns escalated from LOB Risk Committees, Regional Risk Committees, Firmwide Reputational Risk Governance, Firmwide Control Committee (FCC), Firmwide Fiduciary Risk Governance Committee (FFRGC), Firmwide Estimations Risk Committee (FERC), Conduct Risk Steering Committee and Committee Members • Receiving the Firmwide Monthly Independent Risk Report, Management Executive Management Report, Firmwide Weekly Market Risk Stress Report, Firmwide Daily Market Risk Breach Summary & High Utilization Report, and Board Risk Committee Key Risk Summary 3. The Chair/Co-Chair is responsible for escalating information raised in this Committee (including in meetings, Committee materials, and the



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			<p>preparation and follow-up attendant to Committee meetings), that should be provided to the JPMC BoD (including its committees) to assist it in meeting its responsibilities. This includes escalation of information required by applicable law, rule, or regulation to be provided to the Board. Meetings of this Committee will include, as a standing agenda topic, an opportunity for attendees to raise matters to be considered for communication to the Board, and meeting minutes will reflect any such items raised.</p> <p>Refer to Appendix C for the full FRC membership.</p> <p>(4) CTC RC: CIO, Treasury, and Corporate Risk Committee Charter, last updated June 13, 2019</p> <ol style="list-style-type: none"> 1. The purpose of the CTC RC is to provide oversight of the risks inherent in the CIO, Treasury and Corporate business, including credit risk, market risk, principal risk, country risk and model risk. It also provides oversight of the governance frameworks for operational risk, reputational risk, and compliance risk including fiduciary risk. In addition, the Committee provides oversight for firmwide structural interest rate risk and firmwide liquidity risk, which is managed centrally for the firm within the CIO and Treasury line of business. 2. Governance structure and reporting responsibilities include: <ul style="list-style-type: none"> • Approving firmwide temporary risk management policy exceptions, charter modifications (at least annually), meeting minutes, other issues, as relevant • Approving LOB specific items required by any policy or procedure • Approving LOB specific risk acceptances, as relevant • Approving LOB specific changes to key risk parameters, as needed • Approving LOB specific reputational risk issues, as escalated • Approving LOB specific annual recertification and updates on Fiduciary inventory • Reviewing firmwide limits and limit frameworks as relevant and reportable limit breaches, as relevant • Reviewing firmwide authorized instruments as required by the Market



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			<p>Risk Management Policy</p> <ul style="list-style-type: none"> • Reviewing firmwide estimations risk governance framework as required by the Estimations and Model Risk Management Policy • Reviewing firmwide LOB level quantitative parameters and Risk Appetite, as required by the Risk Appetite Policy • Reviewing firmwide Charter Self-assessment, at least annually • Reviewing firmwide materials risks and required by the Risk Identification Governance policy • Reviewing firmwide material illiquid trading risks, presented by LOB/Sub-LOB Trading Heads as required by the illiquid Trading Risk Policy • Reviewing firmwide sub-LOB, product risk or other deep-dives • Reviewing firmwide regulatory or compliance matters • Reviewing firmwide changes to business strategy • Reviewing firmwide issues for escalation to the Firmwide Risk Committee, the JPMC BoD, and/or other committees, as appropriate • Reviewing firmwide transactions/issues escalated by RC members or subordinate committees • Reviewing firmwide results of adverse audit and/or control issues • Reviewing firmwide fiduciary risk update including cross-LOB matters, as required by the Fiduciary Activities Governance Policy • Reviewing firmwide liquidity stress assumptions, stress practices, methodologies, and results used within liquidity risk stress tests that are part of the firm's Risk Appetite framework on a quarterly basis • Reviewing firmwide compliance to liquidity risk limits (quarterly) • Reviewing firmwide independent review of liquidity risk management practices, as required by the Liquidity Risk Oversight Policy or Liquidity Risk Oversight procedural document • Reviewing any other LOB-specific risk topic including but not limited to country, market, fiduciary, compliance ,structural interest rate or liquidity risk; as relevant, required by the policy, or as escalated by a member of the committee



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			<p>3. The Chair/Co-Chair is responsible for escalating information raised in this Committee (including in meetings, Committee materials, and the preparation and follow-up attendant to Committee meetings), that should be provided to the JPMC BoD (including its committees) to assist it in meeting its responsibilities. This includes escalation of information required by applicable law, rule, or regulation to be provided to the Board. Meetings of this Committee will include, as a standing agenda topic, an opportunity for attendees to raise matters to be considered for communication to the Board, and meeting minutes will reflect any such items raised.</p> <p>Refer to Appendix C for the full CTC RC membership.</p> <p>(5) CIBRC: Corporate & Investment Bank Risk Committee Charter, last updated June 13, 2019</p> <ol style="list-style-type: none"> 1. The purpose of the CIBRC is to provide oversight of risks inherent in the CIB business including credit risk, market risk, structural interest rate risk, principal risk, liquidity risk, country risk, and model risk. It also provides oversight of the governance frameworks for operational risk, reputational risk and compliance risk, including fiduciary risk. 2. Governance structure and reporting responsibilities include: <ul style="list-style-type: none"> • Approving firmwide temporary risk management policy exceptions • Approving firmwide charter modifications, at least annually • Approving firmwide meeting minutes • Approving firmwide other issues, as relevant • Approving LOB specific items required by law, regulation, policy or procedure • Approving LOB specific risk acceptances, as relevant • Approving LOB specific changes to key risk parameters (VaR, Stress, other measures), as appropriate • Reviewing firmwide limits and limit frameworks, as relevant and reportable limit breaches, as relevant • Reviewing firmwide authorized instruments, as required by the



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			<p>Market Risk Management Policy</p> <ul style="list-style-type: none"> • Reviewing firmwide reputational risk issues, as escalated • Reviewing firmwide LOB level quantitative parameters and Risk Appetite, as required by the Risk Appetite Policy • Reviewing firmwide submission of Risk Appetite results to Firmwide Risk Appetite as required by the Risk Appetite Policy • Reviewing firmwide over-threshold names as required by the Credit Risk Management – Wholesale Policy • Reviewing the firmwide Charter Self-Assessment, at least annually • Reviewing firmwide material risks as required by the Risk Identification Governance Policy • Reviewing firmwide material illiquid trading risks as presented by LOB/Sub-LOB Trading Heads as required by the Illiquid Trading Risk Policy • Reviewing firmwide sub-LOB, product risk or other deep-dives • Reviewing firmwide regulatory or compliance matters, as escalated • Reviewing firmwide changes to business strategy • Reviewing firmwide issues for escalation to the Firmwide Risk Committee and/or any other committee, as appropriate • Reviewing firmwide transactions/issues escalated by RC members or subordinate committees • Reviewing firmwide results of adverse audit and/or control issues, as escalated • Reviewing firmwide fiduciary risk update including cross-LOB matters, as required by the Fiduciary Activities Governance Policy • Reviewing firmwide liquidity stress assumptions, stress practices, methodologies, and results used within liquidity risk stress tests that are part of the firm's Risk Appetite framework on a quarterly basis. The review includes the size and composition of the liquidity buffer. • Reviewing firmwide compliance to liquidity risk limits (quarterly) • Reviewing firmwide independent review of liquidity risk management practices, as required by the Liquidity Risk Oversight Policy or



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			<p>Liquidity Risk Oversight procedural document</p> <ul style="list-style-type: none"> • Reviewing LOB Specific valuation controls, as relevant • Reviewing LOB Specific credit threshold and changes in the Credit Portfolio, as relevant • Reviewing LOB Specific underwriting/due diligence commitment committees • Reviewing LOB Specific matters pertinent to LOB Cross Border activities annually and as required by the Cross Board Activities Policy <p>3. The Chair/Co-Chair is responsible for escalating information raised in this Committee (including in meetings, Committee materials, and the preparation and follow-up attendant to Committee meetings), that should be provided to the JPMC BoD (including its committees) to assist it in meeting its responsibilities. This includes escalation of information required by applicable law, rule, or regulation to be provided to the Board. Meetings of this Committee will include, as a standing agenda topic, an opportunity for attendees to raise matters to be considered for communication to the Board, and meeting minutes will reflect any such items raised. Refer to Appendix C for the full CIB RC membership.</p> <p>(6) CIBRBCC: Corporate Investment Bank Risk Business Committee Charter, last updated: September 20, 2019</p> <ol style="list-style-type: none"> 1. The purpose of the CIBRBCC is to provide a forum for senior management review, discussion and escalation of existing or emerging operational risks, and control issues and risks; and a framework for managing these risks within the Risk function. Oversight of the control and operational risk framework may include (but is not limited to) policies, procedures, systems, and quality metrics. The Committee is accountable for cross line of business risk oversight and direction toward the timely resolution of issues for risks owned by the CIB Risk functions. 2. The CIB Risk Business Control Committee reviews key risk and control issues related to CIB Risk, in order to support escalation to the Risk Management & Compliance Control Committee (RM&C CC) and



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			<p>the CIB Business Control Committee (CIB BCC).</p> <ol style="list-style-type: none"> 3. Key issues identified during CIB Risk BCC meetings and material / consistent key metric breaches may be escalated to the RM&C CC and / or CIB BCC, at the discretion of the Sub-Committee Chair, Secretary and other meeting attendees. The Chair of the CIB Risk BCC is responsible for escalating information raised in this Committee (including in meetings, Committee materials, and the preparation and follow-up attendant to Committee meetings), that should be provided to the JPMC Board of Directors (including its committees) to assist it in meeting its responsibilities. <p>Refer to Appendix C for the full CIBRBCC membership.</p> <p>(7) Board of Managers: Amended and Restated Limited Liability Company Agreement of J.P. Morgan Securities LLC dated October 1, 2016 (the “Agreement”), the operating agreement or charter for the Company</p> <ol style="list-style-type: none"> 1. The Board of Managers (the “Board”) is the ultimate governing body of J.P. Morgan Securities LLC (the “Company”). Under the Amended and Restated Limited Liability Company Agreement of J.P. Morgan Securities LLC dated October 1, 2016 (the “Agreement”), the operating agreement or charter for the Company, the Board manages the business and affairs of the Company. 2. The Board shall have the power to do any and all acts necessary, convenient or incidental to or for the furtherance of the purposes described in the Agreement, including all powers, statutory or otherwise. The managers are agents of JPMS for the purpose of the company’s business, and the actions of the managers taken in accordance with such powers set forth in this agreement shall bind the company. 3. The Board will be responsible for the proper exercise of fiduciary powers; including the determination of policies, the investment and disposition of property held in a fiduciary capacity, and the direction and review of the actions of all employees utilized by the Company in the exercise of its fiduciary powers. In discharging this responsibility, the Board may assign to designated employees, by action duly recorded, the administration of such of the Company’s fiduciary powers as may be proper to assign. The Board manages the Company which is 100% owned by J.P. Morgan Broker-Dealer Holdings Inc., which is ultimately 100% owned by JPMorgan Chase & Co.



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			<p>Refer to Appendix C for the full Board of Managers membership.</p> <p>(8) JPMS Operating Committee Charter dated January 2019.</p> <ol style="list-style-type: none"> 1. The JPMS LLC Operating Committee's purpose is to review, assess and provide oversight of inherent and emerging risk and control issues across JPMS in conjunction with Oversight & Control Business Controls Office, Operations, Finance, Risk, CAO, Internal Audit, Risk, Legal and Compliance. Ensure that clarity on control accountability exists across JPMS. Guide the appropriate process improvement plans to effectively manage inherent and emerging risks and controls across JPMS. Provide a forum for escalation of Operational Risk Issues, oversight and timely resolution of issues. 2. The Committee must be focused, at minimum, on topics that require senior level attention. Such topics include, but are not limited to indicators of elevated or emerging risks, significant risk events, and/or risk and compliance programs that are at risk with regards to meeting a stated objective, deadline or other requirements. The activities in scope for the Committee are to: Approve: Charter (minimum annually), New / Amended LOB and Function Operating KRIs & Thresholds, LOB Scenario KRIs KPIs & Targets (minimum annually), Review significant operational risks and control issues as per the Control Committee Standards 3. The Committee will decide on material issues to be escalated to the JPMS Board of Managers. The Chair of the JPMS LLC Operating Committee is responsible for escalating information raised in this Committee (including in meetings, Committee materials, and the preparation and follow-up attendant to Committee meetings), that should be provided to the JPMC Board of Directors (including its committees) to assist it in meeting its responsibilities. This includes escalation of information required by applicable law, rule, or regulation to be provided to the Board <p>Refer to Appendix C for the full Operating Committee membership.</p>



Area	Covered Area	Procedures	Results
A	The existence and functioning of oversight committees, the purposes of which are to establish and maintain policies for the measurement and monitoring of the four named risks: market, credit, liquidity, and operational.	<p>A.2 Obtain from management the meeting minutes for the following JPMC committees in A.1. above for the period from January 1, 2019 to December 31, 2019 and inspect the dates the meetings took place per the meeting minutes:</p> <p>(1) BRC; (2) Treasury Committee; (3) FRC; (4) CTC RC; (5) CIBRC; (6) CIBRBCC; and (7) JPMS Board of Managers</p>	<p>A.2 We obtained meeting minutes for the committees listed in procedure A.1. for the period January 1, 2019 to December 31, 2019. Refer to 'Appendix A' for a schedule of meeting dates for those meeting minutes provided by management.</p>
B	The independence of risk management units from business units.	<p>B.1 Identify that the members of the committees listed below do not have a direct reporting line to anyone in the line of business hierarchy structure:</p> <p>(1) BRC; (2) FRC; (3) CTC RC; (4) CIBRC; (5) CIBRBCC; (6) JPMS Board of Managers; and (7) JPMS Operating Committee</p> <p>(a) Obtain a listing of the members of the committees. Lookup each member in the Company's Corporate Directory and inspect the organization charts within the Company's Corporate Directory. Indicate in the results the</p>	<p>B.1.</p> <p>a. We obtained from management the most recent charters for the committees listed in Appendix C. The chair(s) of the committees and/or respective reporting responsibilities included within the charters for each of these JPMC committees are listed within Appendix C. We inspected the organizational charts within the Company's Corporate Directory for each member and noted the titles of the committee members. We also noted the line of business of the department of the employees direct manager as shown on the organization charts within the Company's Corporate Directory.</p> <p>b. We obtained a management representation letter that includes the representation that each committee contains certain members that are independent from the business units.</p> <p>c. We obtained the Liquidity Risk Oversight Policy and inspected the policy and noted that the The CTC Risk Committee (RC) is the governing committee and escalation channel to the Firmwide Risk Committee (FRC) for firmwide oversight of liquidity risk. LRO within the CTC Risk group is responsible for firmwide liquidity risk oversight.</p>



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		<p>titles of the committee members.</p> <p>(b) Obtain a management representation letter that includes the representation that the members of each committee are independent from the business units.</p> <p>(c) Obtain the Liquidity Risk Oversight Policy and inspect the policy and note the group that oversees the policy.</p>	
B	The independence of risk management units from business units.	<p>B.2. Obtain from management the most recent versions of the following JPMC policies:</p> <p>(1) Liquidity Risk Oversight Policy. State in the Results section the section of this policy that discusses the mandate of the Liquidity Risk Organization.</p>	<p>B.2. We obtained from management the most recent version of JPMCs Liquidity Risk Oversight Policy (dated October 14, 2019). The section of the respective policy that discusses the mandate of the Liquidity Risk Organization is as follows:</p> <p>(1) Liquidity Risk Organization: Section 5 - Risk Management Responsibilities</p>
C	Risk limits with respect to trading and/or counterparty exposures and guidelines with respect to reliance upon funding sources.	<p>C.1. Obtain from management the most recent versions of the following JPMC policies:</p> <p>(1) Market Risk Management Policy;</p> <p>(2) Market Risk Management Procedures;</p> <p>(3) Credit Approval Principles;</p> <p>(4) Hedge Fund Credit Risk Management Policy;</p> <p>(5) Liquidity Risk Limit and Indicator Policy; and</p> <p>(6) JPMS LLC Contingency Funding Plan ("CFP").</p> <p>State in the Results section the sections of the aforementioned JPMC policies that discuss the approval of limits for trading and counterparty</p>	<p>C.1 We obtained from management the most recent versions of the following JPMC policies. The sections of the respective policies which include the approval of limits for trading and counterparty exposures and reliance upon funding are as follows:</p> <p>(1) Market Risk Management Policy (dated October 23rd, 2019)</p> <p>a) Limit Governance: Section 5.2.1 - Approval</p> <p>b) Reliance upon Funding: Not discussed/referenced in the Policy. Refer to (6) below.</p> <p>(2) Market Risk Management Procedures (dated November 29th, 2019)</p> <p>a) Approval of Limits: Section 10.2 – Establishment/Approval Approval of Limits: Section 10.1 and 10.2</p>



Area	Covered Area	Procedures	Results
		<p>exposures and reliance on funding sources. State the dates of each policy.</p>	<p>b) Reliance upon funding: Not relevant to the approach for market risk management implemented by the discussed in the Market Risk Management Procedures and therefore not discussed in the Procedure document. Refer to (6) below.</p> <p>(3) Credit Approval Principles (December 17, 2018)</p> <p>a) Approval of Limits: Sections 4 Policy Statements and 5 Credit Exposure Approvals.,</p> <p>b) Reliance upon funding: Not discussed in the Credit Approval Principles Policy. Refer to (6) below.</p> <p>(4) Hedge Fund Credit Risk Management Policy (November 27, 2018)</p> <p>a) Approval of Limits: Section 9 Exposure Management</p> <p>b) Reliance on funding: Not discussed in the Hedge Fund Credit Risk Management Policy. Refer to (6) below</p> <p>(5) Liquidity Risk Limit and Indicator Policy (October 29, 2019)</p> <p>a) Approval of Limits: Section 4 Liquidity Risk Limit and Indicator Definitions, Section 5 Liquidity Risk Limit Indicator Governance, and Section 6 Monitoring and Reporting.</p> <p>b) Reliance upon funding: Not discussed in the Liquidity Risk Limit and Indicator Policy. Refer to (6) below.</p> <p>(6) JPMS LLC Contingency Funding Plan (May 2019)</p> <p>a) Approval of Limits: Section 5 Liquidity Risk Limits & Indicators Monitoring and Section 6 Event Management</p> <p>b) Reliance upon funding: Addendum to JPMS LLC Contingency Funding Plan – Section : 6 - Event Management</p>
D	Assigned responsibilities for the daily performance of risk measurement and	<p>D.1 Obtain from management the most recent versions of the following JPMC policies:</p> <p>(1) Market Risk Management Procedures;</p>	<p>D.1 We obtained from management the most recent versions of the following JPMC policies. The duties and responsibilities included in each of these policies for risk measurement and monitoring functions with respect to market, credit, liquidity, and funding risks are in the respective section of the JPMC policies as</p>



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	<p>monitoring functions with respect to market, credit, liquidity, and funding risks to specific organizational units.</p>	<p>(2) Credit Approval Principles;</p> <p>(3) Hedge Fund Credit Risk Management Policy; and</p> <p>(4) Liquidity Risk Oversight Policy.</p> <p>State in the Results section the duties and responsibilities listed in the aforementioned policies for risk measurement and monitoring functions with respect to market, credit, liquidity, and funding risks.</p>	<p>follows:</p> <p>(1) Market Risk Management Procedures</p> <p>Market Risk Governance: The Firmwide Risk Executive (FRE) Market Risk and LOB Chief Risk Officers (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. Key risk measures employed in the market risk framework leverage information provided by the firm's risk infrastructure and Market Risk relies on the accuracy and completeness of the information provided.</p> <p>Ownership of Risk: The Lines of Business are responsible for the market risk exposure in their business. LOB's must manage their market risk exposure within approved market risk limits.</p> <p>Market Risk Measurement. Multiple measures are used to capture market risk and set limits as appropriate. These measures include, but are not limited to, VaR, Stress Testing, Nonstatistical measures, Profit & Loss (P&L) Drawdowns, Single Name Position Risk (SNPR) and are further detailed in the Market Risk Management procedure. 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.</p> <p>Risk 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. The firm, LOBs and their business units should not exceed their market risk limits unless authorized by a Temporary Limit Approval (TLA) or a limit change. Notifications of valid limit breaches are sent to signatories to limits. Criteria for escalation of aged or significant limit breaches are set out in the Market Risk Management procedure.</p> <p>(2) Credit Approval Principles:</p> <p>Performance of risk functions: 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. (Section 5 - Credit Exposure Approvals)</p> <p>Monitoring of risk: All capital markets trading activity is captured and measured daily against existing limits. Monitoring and reporting counterparty overlimits must be performed by personnel independent of the business trading unit. Overlimits require review and action taken by individuals with</p>



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			<p>sufficient credit authority in accordance with LOB credit authority grids for Primary and Operating Exposure; or Under the Incremental Special Authority policy terms. Certain legal entities require approval of 'passive' overlimits (i.e., overlimits due to market movements increasing exposure). (Section 4 - Policy Statements)</p> <p>(3) Hedge Fund Credit Risk Management Policy:</p> <p>The Hedge Fund Credit Risk Management policy stated the following:</p> <p>Performance of risk functions:</p> <p>a. Hedge Fund Credit will designate all relationships as one of the following:</p> <p>(i) Full Credit - generally for clients with a multi-product trading relationship and/or more complex trades or</p> <p>(ii) Hedge Fund Rules – generally for clients with single-product relationships and/or less complex/frequent trading</p> <p>b. A Hedge Fund Credit Officer with at least C3 authority must approve any trading activity prior to execution of the relevant trading agreement. (Section 4 - Policy Statements)</p> <p>Monitoring of risk: Exposure to all funds will be subject to Primary Exposure and/or Operating Exposure limits; exceptions to policy limits must be approved by a C3 or higher level approver. (Section 4)</p> <p>(4) Liquidity Risk Oversight Policy</p> <p>Performance of risk functions: Liquidity Risk Oversight group under the direction of the Chief Investment Officer, Treasury, and Corporate Chief Risk Officer ("CTC CRO"). The primary objective is to provide independent assessment, measurement, monitoring, and control of liquidity risk across the firm. (Section 4 - Policy Statements)</p> <p>Monitoring of risk: The Liquidity Risk Oversight group is responsible for independent assessment, measuring, monitoring, and control of liquidity risk across the firm, reporting to the CTC Chief Risk Officer (CRO). Their responsibilities included in (Section 5 – Risk Management Responsibilities), but are not limited to:</p> <p>(i) Defining, monitoring, and reporting liquidity risk metrics</p>



Area	Covered Area	Procedures	Results
			(ii) Independently establishing and monitoring limits and indicators, including liquidity Risk Appetite (iii) Developing a process to classify, monitor and report limit breaches (iv) Performing independent review of liquidity risk management processes (v) Monitoring and reporting internal firmwide and LE stress tests, and regulatory defined stress testing (vi) Approving or escalating for review new or updated liquidity stress assumptions (vii) Monitoring and reporting liquidity positions, balance sheet variances, and funding activities
E	The preparation of analyses of risks on a regular basis.	E.1 Market Risk - Obtain from management: (1) Three monthly Firmwide Risk Executive Management Reports (“EMR”); and a. Inspect that the EMR reports provide: Limit Metrics, 95% 10Q VaR, and worst case Stress testing results by scenario. (2) Three monthly JPMS LLC Risk Packs; and a. Inspect that reports provide: market risk reporting for each sub-LOB, including 95% 10Q VaR, G10 Norm IR BPV, 10% CSW ex-EIR, IED Beta Delta, FX Delta, stress testing results by scenario, and summary. (3) Three monthly JPMS LLC Risk Packs ; and a. Inspect that graphs provide: LOB – Revenue by Trading Type. (4) Obtain three monthly JPMS LLC Risk Packs; and a. Inspect the reports provide: breaches of limits and commentary by LOB. (5) Obtain three monthly JPMS LLC Risk Packs; and a. Inspect that the reports include Level 1 and Level 2 market risk limits and associated	E.1 Market Risk- (1) We obtained from management EMRs for the months ended: (i) June 2019; (ii) August 2019; and (iii) December 2019. a. The following items related to market risk analysis are included in each of those EMRs: (i) Limit Metrics; (ii) 95% 10Q VaR; (iii) Stress testing results by stress scenario. (2) We obtained from management the JPMS LLC Risk Packs – which provide more targeted risk information related to JPMS LLC - for the months of March, June and December 2019. a. The following items related to market risk analysis are included in each of those JPMS LLC Risk Packs: (i) Market risk reporting for the JPMS LLC legal entity: <ul style="list-style-type: none"> - 95% 10Q VaR; - Nominal IR BPV; - 10% CSW ex-EIR; - Equity Delta;



Area	Covered Area	Procedures	Results
		<p>utilizations.</p> <p>(6) Obtain from management the JPMS LLC Risk Packs</p> <p>a. Inspect that the reports include market risk limits and breaches.</p>	<p>- FX Delta; and</p> <p>(ii) Stress testing results by scenario; and</p> <p>(iii) Summary</p> <p>(3) We obtained from management three monthly JPMS LLC Risk Packs for the following months: (i) March 2019 (ii) June 2019 (iii) December 2019.</p> <p>a. We inspected the decks and they did not include each LOB Revenue By Trading Type.</p> <p>(4) We obtained from management three monthly JPMS LLC Risk Packs for the months of (i) March 2019 (ii) June 2019 (iii) December 2019.</p> <p>a. We inspected the reports and it includes breaches of limits and commentary by LOB.</p> <p>(5) We obtained from management three monthly JPMS LLC Risk Packs that include JPMS LLC Level 1 and Level 2 Market Risk Limits for during the months of (i) March 2019 (ii) June 2019 (iii) December 2019.</p> <p>(6) We obtained from management three monthly JPMS LLC Risk Packs for the months of (i) March 2019 (ii) June 2019 (iii) December 2019.</p> <p>a. We inspected the reports and they include market risk limits and breaches.</p>
E	The preparation of analyses of risks on a regular basis.	<p>E.2 Credit Risk - Obtain from management:</p> <p>(1) Three monthly JPMS Legal Entity Risk Reporting Packs; and</p> <p>a. Inspect that wholesale credit risk metrics include: credit exposure by industry concentrations, credit exposure by product, and credit exposure by region, and credit exposure by top client related to the JPMS legal entity.</p> <p>(2) Three monthly CIBRBCC Reporting Packs</p>	<p>E.2 Credit Risk –</p> <p>(1) We obtained from management the JPMS Legal Entity Risk Reporting packs for the months: (i) March 2019; (ii) June 2019; and (iii) December 2019.</p> <p>a. The following items related to credit risk analysis are included in those Risk Packs:</p> <p>(i) Credit risk exposure by industry concentrations;</p> <p>(ii) Credit exposure by product;</p> <p>(iii) Credit exposure by region; and</p> <p>(iv) Credit exposure by top (internal and external) client related to the JPMS legal entity.</p>

Area	Covered Area	Procedures	Results
		<p>(i.e. the CIB market risk packs); and</p> <p>a. Inspect that the reports provide credit risk operational metrics, such as: past due annual reviews; aged non- matured over-limits and violations, and unlinked/ungraded exposures.</p>	<p>(2) We obtained from management the CIBRBCC Reporting Packs for the months: (i) April 2019; (ii) October 2019; and (iii) December 2019.</p> <p>a. The following items related to credit risk operational metrics are included in those CIBRBCC Reporting Packs:</p> <p>(i) Past due metrics;</p> <p>(ii) Aged overlimits and Aged active overlimits; and</p> <p>(iii) Unlinked exposure and ungraded client exposures.</p>
E	The preparation of analyses of risks on a regular basis.	<p>E.3 Liquidity/Funding Risk - Obtain from management:</p> <p>(1) Three JPMS Liquidity Risk Limits and Indicators Summary; and</p> <p>a. Inspect that liquidity risk analyses include:</p> <p>JPM Stress- Legal Entity Recovery Limit JPM Stress – Peak 90D Risk Appetite JPM Stress – Peak 90D</p> <p>LAB and Non LAB Tri-party repo haircuts HoldCo borrowing changes (Refer to aforementioned JPMC Liquidity Risk Limits and Indicators Summary for metric titled “HoldCo Payable change”)</p> <p>Non LAB secured funding maturity mismatch changes (various horizons) Internalization changes</p> <p>Margin Debit changes Free Credit changes</p> <p>(2) Three JPMS Weekly Stress Test Reports; and</p> <p>a. Inspect that the impact of stress scenarios on Liquid Asset Buffer, Secured Funding Outflows, Commitment Outflows, Derivative Outflows, Other Outflows, Secured Funding Inflows, and Other Inflows are evaluated over stress windows ranging from 1-90 days.</p>	<p>E.3 (1) We obtained from management the JPMS Liquidity Risk Limits and Indicators Summary for the weeks of: (i) November 08, 2019; (ii) December 02, 2019; (iii) December 31 2019;</p> <p>a. The following metrics are included in those Liquidity Risk Limits and Indicators Summary reports:</p> <p>(i) JPM Stress - Legal Entity Recovery Limit</p> <p>(ii) JPM Stress - Peak 90D Risk Appetite</p> <p>(iii) JPM Stress – Peak 90D</p> <p>(iv) LAB and Non LAB Tri-party haircuts</p> <p>(v) HoldCo borrowing changes (Refer to aforementioned JPMC Liquidity Risk Limits and Indicators Summary for metric titled "Hold Co Payable - daily changes")</p> <p>(vi) Non LAB secured funding maturity mismatch weekly changes (various maturity horizons)</p> <p>(vii) Internalization changes</p> <p>(viii) Margin Debt changes</p> <p>(ix) Free Credit changes</p> <p>(2) We obtained from management the JPMS Weekly Stress Test Reports for the weeks of: (i) November 07, 2019; (ii) November 14, 2019; (iii) November 22, 2019.</p> <p>a. The impact of stress scenarios compared over stress windows ranging from 1-90 days were included in the Weekly Stress Test Reports on the following items:</p>



Area	Covered Area	Procedures	Results
			(i) Liquid Asset Buffer; (ii) Secured Funding Outflows; (iii) Commitment Outflows; (iv) Net Derivative Outflows; (v) Other Outflows; (vi) Secured Funding Inflows; and (vii) Other Inflows.
E	The preparation of analyses of risks on a regular basis.	E.4 Operational Risk - Obtain from Management: (1) Five weekly Production Review Meeting materials; and a. Inspect that the analyses includes, Nostros/suspense, aged fails, aged suspense items, payables/receivables; domestic Stock Borrow and Loan metrics, and aged fails/suspense monitoring and analysis.	E.4 (1) We obtained from management weekly Production Review Meeting materials for the weeks of: (i) August 14, 2019; (ii) September 04, 2019; (iii) October 02, 2019; (iv) November 13, 2019; and (v) December 11, 2019. a. The meeting materials included an analysis of the following: (i) Included aging of fails; (ii) Cash suspense breaks report, including aging analysis; (iii) Payables/Receivables, including aging analysis;
F	The ability to distinguish the risks of the Broker-Dealer from the risks of affiliates of the Broker- Dealer.	F.1 Obtain from management three monthly JPMS Legal Entity Risk Reporting Packs and JPMS Liquidity Risk Limits and Indicators Summary: (1) Market Risk – a. Inspect that market risk metrics include: Risk (“VaR”) by asset class and line of business, sensitivity, worst case stress scenarios, and market risk by top 20 issuers related to the JPMS legal entity. (2) Credit Risk – a. Inspect that wholesale credit risk metrics include: credit exposure by industry concentrations, credit exposure by product, credit exposure by region, and credit exposure by top client related to the JPMS legal entity.	F.1 We obtained from management the JPMS Legal Entity Risk Reporting Packs for the months ended: (i) March 2019; (ii) June 2019; and (iii) December 2019. (1) Market Risk- a. The following market risk metrics related to JPMS were included in the JPMS Legal Entity Risk Reporting Packs: (i) VaR by asset class and LoB; (ii) Sensitivity analyses; (iii) Worst scenario; and (iv) Market risk by top 20 issuers affecting JPMS. (2) Credit Risk – a. The following credit risk metrics related to JPMS were included in the JPMS



Area	Covered Area	Procedures	Results
		<p>(3) Market, credit, liquidity and funding, and operational risk –</p> <p>a. Specify whether market, credit, liquidity and funding, and operational risk is included in the JPMS Legal Entity Risk Reporting Pack</p> <p>(4) Obtain a management representation letter that asserts that the risk of the broker-dealer can be distinguished from the risks of affiliates.</p> <p>(5) Observe and document the process for separating the market, credit, liquidity and funding, and operational risk data of the broker-dealer from that of its affiliates</p>	<p>Legal Entity Risk Reporting Packs:</p> <p>(i) Credit risk by industry;</p> <p>(ii) Credit exposure by product;</p> <p>(iii) Credit exposure by region; and</p> <p>(iv) Credit exposure by top (internal and external) clients related to the JPMS legal entity.</p> <p>See procedure E.3 above with respect to the JPMS Liquidity Risk Limits and Indicators Summary.</p> <p>(3) The market, credit, and liquidity and funding related to JPMS were included in the JPMS Legal Entity Risk Reporting Packs.</p> <p>(4) Obtained from management a representation letter that asserts that the risk of the broker-dealer can be distinguished from the risks of affiliates.</p> <p>(5) We observed the following risk data being separated for JPMS LLC as described below on 2/7/2020 with Amr Sabbagh and Steve Wu:</p> <ol style="list-style-type: none"> 1. Market Risk: We observed Steve Wu log into MaRRs using his SID. Steve entered in “10K EOD VaR” into the user interface and queried for Legal Entity (SAP) type “865/ J.P. Morgan Securities LLC,” which generated the stand alone VaR amount for JPMS LLC. 2. Credit Risk: We observed Steve Wu log into CRRT (credit risk data warehouse) using his SID. Steve then ran the “Non-branch standalone query” to pull in the standalone credit exposure for JPMS LLC by specifying Booking Legal Entity CD of 0865 and the cob date of “Dec-31-2019”. The results included credit risk for only external counterparties. 3. Liquidity and funding: The engagement team observed Ben Roscoe log into LRI (Liquidity Risk Infrastructure). Ben located the “Scenario Manager Stress” view in LRI. Using the Scenario Manager Stress user interface, Ben generated the liquidity and funding datapull by legal entity on a “Stand alone basis with branches” for all LOBs and at the “consolidated level” for all LOBs. The outputs included outputs by product type (loans, deposits, commitments, among others)



Area	Covered Area	Procedures	Results
			<p>Ben then logged into the “Metrics and Monitoring” view in LRI. Ben filtered the data by “o865”, “daily,” and “strategic” and generated the queries at the consolidated, branch, and stand alone within the “Dimension Value” view.</p> <p>Ben located the management pack summary within the “Analytics” view of LRI. The engagement team observed Ben generate the Liquidity Management Stress Dashboard by Legal Entity which Ben explained is a Tableau dashboard fed with data from LRI directly and available within LRI for front-end user access.</p> <p>4. Operational Risk: The engagement team observed Amandeep Chowdry log into FORCE and run the “Legal Entity Report for R&R-By Legal Entity ID” report for all lines of businesses for operational risk between 1/1/2019 to 1/31/2020. The engagement team agreed the row count on the output generated to the row count on the Operation Risk user tool used to create various operational risk reports. The user tool separates the operational risk from FORCE into separate legal entity tabs based on the LE’s included in the raw output from FORCE. The standard template for o865 in the user tool included the total for lit and non-lit with broken out by LOB with YTD amounts all full year 2019 amounts.</p>
F	The ability to distinguish the risks of the Broker-Dealer from the risks of affiliates of the Broker- Dealer.	<p>F.2 Obtain from management:</p> <p>(1) Three weekly stress test reports; and</p> <p>a. Inspect that the impact of stress scenarios on Liquid Asset Buffer, Secured Funding Outflows, Commitment Outflows, Net Derivative Outflows, Other Outflows, Secured Funding Inflows, and Other Inflows are compared over stress windows ranging from 1-90 days for the JPMS LLC legal entity, separately from its affiliates.</p>	<p>F.2 We obtained from management the Stress Test Reports for LE o865 for weeks of: (i) November 07, 2019; (ii) November 14, 2019; (iii) November 22, 2019;</p> <p>a. The impact of firmwide stress scenarios compared over stress windows ranging from 1-90 days is included in each of the referenced Stress Test Reports for the following items:</p> <p>(i) Liquid Asset Buffer;</p> <p>(ii) Secured Funding Outflows;</p> <p>(iii) Commitment Outflows;</p> <p>(iv) Net Derivative Outflows;</p> <p>(v) Other Outflows; and</p> <p>(vi) Secured Funding Inflows; and</p> <p>(vii) Other Inflows</p>



Area	Covered Area	Procedures	Results
F	The ability to distinguish the risks of the Broker-Dealer from the risks of affiliates of the Broker- Dealer.	<p>F.3 Obtain from management:</p> <p>(1) Three monthly JPMS LLC Operating Committee review materials.</p> <p>a. Inspect that the report includes:</p> <ul style="list-style-type: none"> - the error, fines & losses/breaches; and - Operational Charges related to 15c3-1 (Net Capital) and 15c3-3 (Customer Protection). <p>(2) Minutes from three JPMS Board of Managers meetings</p> <p>a. Inspect the minutes include discussion of matters specific to JPMS LLC</p>	<p>F.3 We obtained from management three JPMS Operating Committee review materials for the months of: (i) September 2019; (ii) November 2019; and (iii) December 2019.</p> <p>(1). The Operating Committee review materials for each of the referenced months included errors, fines and losses/breaches, and Operational Charges related to 15c3-1 (Net Capital) and 15c3-3 (Customer Protection).</p> <p>(2) The engagement team inspected the JPMS Board of Manager meetings minutes and noted they included discussions specific to JPMS LLC.</p>
G	The incorporation of principal positions and counterpart exposures into the computation of capital requirements under Appendices E and F.	<p>G.1 Obtain from management the Market Risk Management Procedures. Inspect, based on that policy, that the Finance/Product Control and/or Business Middle Offices are delegated the following responsibilities:</p> <p>a. Reconciles data delivered for VAR, Stress, Single Name, Country, Specific Risk and other market risk calculations to an independent file / data store, such as the general ledger, front office or risk aggregation systems to verify accuracy and completeness, and signs off on the reconciliation of this information in the market risk systems, daily, or as required;</p> <p>b. Validates the accuracy of reference data including portfolio mappings, accounting method, legal entities and client/issuer identifiers;</p> <p>c. Validates the accuracy of P&L information supplied to MRR. Where this information is not available, risk information may be obtained from non-independent sources, i.e. trading-desk originated reporting, but only where necessary;</p> <p>d. Verifies the completeness, accuracy and quality of the data provided to MR</p>	<p>G.1 We obtained from management the Market Risk Management Procedures and inspected that they include the responsibilities delegated to Finance/Product Control and/or Business Middle Offices in Section 10.3.1 Market Risk Reporting Related Responsibilities as follows:</p> <p>Finance/Product Control and/or Business Middle Office provide risk information to Market Risk Reporting (MRR) for exposure calculation and monitoring against limits. Where this information is not available, risk information may be obtained from non- independent sources, i.e. trading-desk originated reporting, but only where necessary. MRR and Product Control provide daily limit reporting to senior management, tailored to meet the requirements of the intended recipients.</p>



Area	Covered Area	Procedures	Results
		<p>e. Uploads data feeds to the market risk system per Service Level Agreements</p> <p>Obtain management representation letter that principal positions and counterparty exposures are incorporated into the computation of capital requirements under Appendix E.</p>	
G	<p>The incorporation of principal positions and counterparty exposures into the computation of capital requirements under Appendices E and F.</p>	<p>G.2 Obtain from management three month-end Market Risk RWA JPMS Analysis files ("MR RWA Analysis"), three month-end Credit Risk JPMS LLC Consolidated Capital Files and three monthly JPMS LLC FOCUS Reports for the same periods. Inspect the reports and:</p> <p>(1) Compare the MR RWA Analysis file to the "FOCUS Schedule 1: FINRA Supplementary Capital Information" for each of the three month ends for the following FOCUS lines:</p> <p>a. Line 3634– Market Risk;</p> <p>b. Line 3655 – VaR-Based Measure ("VBM");</p> <p>c. Line 3647 - Stressed VaR Based Measure ("SVBM")</p> <p>d. Line 3646 – Specific Risk. Inclusive of the items below:</p> <p>1. Incremental Risk Charge ("IRC")</p> <p>2. Comprehensive Risk Measure ("CRM")</p> <p>3. Specific Risk ("SR") for non-securitization</p> <p>4. SR for securitization</p>	<p>G. 2 We obtained from management the BDRA Market Risk Summary and JPMS LLC FOCUS Reports for the following months: (i) June 2019; (ii) September 2019; (iii) December 2019.</p> <p>(1) For each of the three months referenced, we compared and agreed the amounts in the MR RWA Analysis Files to the amounts in "FOCUS Schedule I: FINRA Supplementary Capital Information" in the aforementioned FOCUS Reports for:</p> <p>(i) Line 3634– Market Risk;</p> <p>(ii) Line 3655 – VaR-Based Measure ("VBM");</p> <p>(iii) Line 3647 - Stressed VaR Based Measure ("SVBM")</p> <p>(iv) Line 3646 – Specific Risk. Inclusive of the items below:</p> <p>1 Incremental Risk Charge ("IRC")</p> <p>2. Comprehensive Risk Measure ("CRM")</p> <p>3. Specific Risk ("SR") for non-securitization</p> <p>4. SR for securitization</p> <p>5. De Minimis/Max Loss</p> <p>6. B3 Sec, Non-Covered</p> <p>7. B3 AFS, Non-Covered</p> <p>8. B3 TCP, Non-Covered</p> <p>(2) For each of the three months referenced, we compared the amount for total credit risk exposure in the Credit Risk Capital Files to the amount in Line 3688 -Total Credit Risk Exposure inclusive of the items listed below, in "FOCUS</p>



Area	Covered Area	Procedures	Results
		<p>5. De Minimis/Max Loss</p> <p>6. B3 Sec, Non-Covered</p> <p>7. B3 AFS, Non-Covered</p> <p>8. B3 TCP, Non-Covered</p> <p>(2) Compare the Credit Risk JPMS LLC Consolidated to the "FOCUS Schedule 1: FINRA Supplementary Capital Information" for each of the three month ends for the following FOCUS line:</p> <p>a. Line 3688 – Credit Risk. Inclusive of the items below:</p> <p>1. Online 3rd Party</p> <p>2. Online InterCo</p> <p>3. Offline Haircut Charge 3-1 3rd Party</p> <p>4. Offline Haircut Charge 3-1 InterCo.</p> <p>5. Offline Haircut FX FWD 3-1 3rd Party</p> <p>6. Offline Haircut FX FWD 3-1 InterCo.</p> <p>7. Current Exposure – 3rd Party</p> <p>8. Current Exposure – InterCo.</p> <p>Observe in the Results section any variances between the MR RWA Analysis / Credit Risk JPMS LLC Consolidated, and the respective three monthly JPMS LLC FOCUS Reports for each selection.</p> <p>(3) Obtain 2 samples of the BDRA Market Risk Pack. Specify whether that market risk amount takes into account specific risk in positions, including specific equity risk.</p> <p>(4) Obtain 2 samples of the BDRA Market Risk Pack. Specify the components of the Basel 2.5</p>	<p>Schedule I: FINRA Supplementary Capital Information" and noted there were no variances.</p> <p>1. Online 3rd Party</p> <p>2. Online InterCo</p> <p>3. Offline Haircut Charge 3-1 3rd Party</p> <p>4. Offline Haircut Charge 3-1 InterCo.</p> <p>5. Offline Haircut FX FWD 3-1 3rd Day</p> <p>6. Offline Haircut FX FWD 3-1 Interco.</p> <p>7. Current Exposure – 3rd Party</p> <p>8. Current Exposure – InterCo.</p> <p>(3) We obtained from management the BDRA Market Risk Packs for the following months: (i) September 2019; (ii) December 2019 and concluded that the files do note that the VaR model takes into account specific risk in positions, including specific equity risk</p> <p>(4) We obtained from management the BDRA Market Risk Packs for the following months: (i) September 2019; (ii) December 2019 and inspected the specific components of the Basel 2.5 calculation which included the following:</p> <p>1. Market Risk Exposure</p> <p>2. Deductions for specific risk, unless included in 1 above (i.e VaR)</p> <p>3. Risk Deduction using scenario analysis</p> <p>4. Residual Marketable Securities (15c3-1(c)(2)(vi))</p> <p>5. Credit Risk Exposure</p>



Area	Covered Area	Procedures	Results
		calculation included	
G	The incorporation of principal positions and counterpart exposures into the computation of capital requirements under Appendices E and F.	<p>G.3 Obtain from management:</p> <p>(1) the current year list of the Value-at-Risk (“VaR”) Basel 2.5 models that have been approved by the SEC to be used in the calculation of market risk for JPMS LLC and state in the Results section.</p> <p>(2) Obtain all communications of model changes from management to the SEC in 2019. State in the results the model changes communicated.</p> <p>(3) Obtain a management representation letter that asserts that all monthly model changes have been reported to the SEC.</p>	<p>G.3 We obtained from management:</p> <p>(1) The current year list of Value-at-Risk (“VaR”) Basel 2.5 models that have been approved by SEC to be used in the calculation of market risk for JPMS LLC.</p> <p>(2) Obtained all communications of model changes from management to the SEC in 2019 and note the model changes communicated are as follows:</p> <p>(i) 2/5/2019 - Change to the aggregation methodology for Rates ATM Volatility risk. 55236 (Rates – Volatility (ATM) – Simulation VaR).</p> <p>(ii) 2/5/2019 - Change to VaR Model ID 3483 (Non-Agency RMBS and Loans VaR) and 4775 (ABS, Subprime Securities, CDS on ABS and ABX VaR) to include post-crisis non-AAA RMBS bonds and loans to VBM calculation instead of using max-loss capital add-on.</p> <p>(iii) 2/15/2019 - Change to VaR Model ID 3428 (Credit – Basis – Index CDS – Simulation VaR) to change the time series mapping for MCDX index positions from OTR MCDX 5Y index basis to CDX IG 5Y basis.</p> <p>(iv) 2/15/2019 - Change to VaR Model ID 4775 (ABS, Subprime Securities, CDS on ABS and ABX VaR) to include post-crisis non-agency subprime RMBS bonds and loans to VBM calculation instead of using max-loss capital add-on.</p> <p>(v) 4/29/2019 - Change to VaR Model ID 4775 (ABS, Subprime Securities, CDS on ABS and ABX VaR) to include post-crisis non-agency subprime RMBS bonds and loans to VBM calculation instead of using max-loss capital add-on.</p> <p>(vi) 5/28/2019 - Change to VaR model IDs 3483 (Non-agency RMBS and Loans VaR) and 4775 (ABS Subprime Securities, CDS on ABS, and CMBX VaR) for US Non-Agency Pre-Crisis RMBS.</p> <p>(vii) 9/5/2019 - Change to VaR Model ID 55227, 55229, 3461, 55230, and 60114 which would result in changes to the VaR risk representation for public sector and covered bonds, change in time series, change in proxy for Eurobonds, and change from sensitivity based to full revaluation.</p> <p>(viii) 10/3/2019 - Change to the VaR Models ID 55227, 55229, 3461, 55230, and 60114 which would result in changes to the VaR risk representation for public sector and covered bonds, change in time series, change in proxy for Eurobonds, and change from sensitivity based to full revaluation.</p> <p>(3) Obtained management’s representation that all monthly model changes</p>



Area	Covered Area	Procedures	Results
			have been reported to the SEC.
G	The incorporation of principal positions and counterpart exposures into the computation of capital requirements under Appendices E and F.	<p>G.4 Obtain from management:</p> <p>(1) The Firmwide Market Risk Management Policy and inspect that it includes VaR as a risk and limit management tool for JPMC.</p> <p>(2) The JPMS LLC Market Risk Management Policy and inspect that it includes VaR as a risk and limit management tool for JPMS LLC.</p> <p>(3) The VaR Backtesting Operating model document and the most recent backtesting report to confirm that the VaR model backtesting process exists, is documented and its results are reported at least quarterly identifying any breaches along with their impact on JPMS LLC's capital.</p> <p>(4) The name of the group responsible for calculating VaR and the market risk charge.</p> <p>(5) The VaR Based Model ("VBM") Overarching document which includes the methodology for VaR and sVaR. Indicate in the results the date the document was last revised and the frequency at which the models are reviewed.</p> <p>(6) The backtesting report outlining the backtesting results for the period ended December 31, 2019. Specify the number of exceptions and current multiplier. Obtain the FOCUS report as of December 31, 2019 and specify the multiplication factor. Note in the results whether the multiplication factor in the backtesting report and FOCUS report corresponds with the multiplication factor based on table 5 of SEC rule 240.15c3-1.</p>	<p>G.4 We obtained from management:</p> <p>(1) The Firmwide Market Risk Management Policy and inspected Section 2 (Scope), Section 4 (Policy Statements) and Section 6 (Market Risk Control) and it includes VaR as a risk and limit management tool for JPMC.</p> <p>(2) The JPMS LLC Market Risk Management Framework and inspected Section 6 (Market Risk Measures) and it includes VaR as a risk and limit management tool for JPMS LLC.</p> <p>(3) The VaR Backtesting Operating Model and the December 2019 quarterly backtesting report. We inspected the backtesting report and noted that the report noted no backtesting exceptions for the month of December.</p> <p>(4) Obtained from management, via an email, the name of the group responsible for calculating VaR. As noted in the management's email, the group responsible for VaR model development is the Market Risk Quantitative Research (MRQR). The reporting of VaR, including filling out the relevant SEC reporting schedules, is the responsibility of the Capital and Liquidity Management (CLM) group.</p> <p>(5) The VaR Based Model ("VBM") Overarching document which includes the methodology for VaR and sVaR. We noted the document was last reviewed on January 15, 2019. The document states that models are monitored for any key model limitations, assumptions and any associated risks on a semi-annual or quarterly basis.</p> <p>(6) Obtain the backtesting report outlining the backtesting results for the period ended December 31, 2019. There were no exceptions noted in the backtesting report for the period ended December 31, 2019 and it was noted that the current multiplier was 3. We obtained the FOCUS report as of December 31, 2019 and noted the multiplication factor was 3, which corresponds with the backtesting results.</p> <p>(7) We obtained management's representation that VaR is calculated using contained value of 99% one tailed confidence interval.</p> <p>(8) We obtained the VBM Overarching Document. The VaR-based measure</p>



Area	Covered Area	Procedures	Results
		<p>(7) A representation letter and note that VaR / Stressed-VaR is calculated using 99% one tailed confidence interval.</p> <p>(8) The VBM Overarching Document. Indicate in the results the effective observation period used and whether historical data sets and used and how often they are re-assessed. Note in the results whether the observation period for the VaR measure is at least one year.</p> <p>(9) Obtain the ARS and Restricted Equity document and review the calculation for the charge related to residual positions and haircut calculations. Specify the source of the data.</p> <p>(10) Obtain the ARS and Restricted Equity document and inspect the calculation for the charge relating to non-marketable securities and note source of data. Obtain management representation letter noting that the capital charge is not calculated in the VaR model.</p> <p>(11) Obtain and inspect the Credit Risk JPMS LLC Consolidated document which details the following components of the credit risk capital charge:</p> <ul style="list-style-type: none"> -Maximum Potential Exposure -Current Exposure -Concentration charge -Portfolio and charge <p>(12) Obtain and inspect the Market Risk Limit</p>	<p>must be based on a historical observation period of at least one year. As noted in the conclusion section, quality and integrity of data is monitored and where/ if needed remediated on an ongoing basis.</p> <p>(9) Obtained the ARS and Restricted Equity document and reviewed the calculation for the charge related to residual positions and haircut calculations and noted the source of the data is IMPACT per inquiry with Harsh Katara.</p> <p>(10) Obtain the ARS and Restricted Equity document and inspected the calculation for the charge relating to non-marketable securities and noted the source of the data is Scala per inquiry with Irina Zubkova. We obtained management's representation noting that the capital charge is not calculated in the VaR model.</p> <p>(11) Obtained and inspected the Credit Risk JPMS LLC Consolidated document noting the following components of the credit risk capital charge were included:</p> <ul style="list-style-type: none"> -Current Exposure -Concentration charge -Portfolio concentration charge <p>(12) Obtained and inspected the Monthly JPMS LLC Risk Packs for the months of March, June, and November 2019 noting the packs include information on JPMS LLC limit breaches.</p> <p>(13) Obtained the Market Risk Management, J.P. Morgan Securities LLC Framework</p> <ul style="list-style-type: none"> -Section 7.3 (Adherence to Limits) states Business units should not exceed their market risk limits unless expressly authorized by a TLA. A market risk valid limit breach requires that the business take immediate steps to reduce exposure so as to be within limit, unless a TLA is granted. Market risk limits may be kept at levels close to utilizations which may cause brief periods of market risk limit breaches among a small proportion of the total number of limits. - Section 7.5 (Limit Breach Notification and Escalation) states limit utilizations and notifications of market risk limit breaches are sent to appropriate JPMS LLC limit signatories and the JPMS LLC MRO daily. Limit breach notifications

Area	Covered Area	Procedures	Results
		<p>Breach Reports</p> <p>(13) Obtain the Market Risk Management, J.P. Morgan Securities LLC Framework and describe how limit violations are dealt with and note who limit violations are reported to.</p>	<p>are also sent to the Global LE MR Head.</p> <p>Aged or significant market risk limit breaches are escalated to the JPMS LLC CEO, JPMS LLC CRO, NA CRO, FRE Market Risk, JPMS LLC MRO and the Global LE MR Head. Criteria for escalation requirements of aged or significant market risk limit breaches, as well as definitions of market risk valid limit breach categories, are set out in the firmwide Market Risk Management Procedures.</p> <p>Periodic reporting of limit breaches is provided to the JPMS LLC Risk Management Group (RMG) as established in the Special Purpose Risk Management Standard Operating Procedure.</p>
G	<p>The incorporation of principal positions and counterparty exposures into the computation of capital requirements under Appendices E and F.</p>	<p>G.5 Obtain from management VaR methodology documents for a sample of three VaR models and inspect that the VaR methodology documents include in either the first or the second, or in a combination of the first or the second, methodology document, the following:</p> <p>(1) risk arising from the non-linear price characteristics of derivatives (for example, equity vanilla options) and the sensitivity of the market value of those positions to changes in the volatility of the derivatives' underlying instruments;</p> <p>(2) empirical correlations (for example, historical simulation) with and across risk factors; and</p> <p>(3) spread risk, where applicable, and segments of the yield curve sufficient to capture differences in volatility and imperfect correlation for securities and derivatives that are sensitive to different volatilities (for</p>	<p>G.5 We obtained from management VaR methodology documents for the following two VaR models and inspected the following in the respective sections of the document, as follows:</p> <p><u>Equity Risk Volatility Simulation VaR methodology and validation documents(VaR Model ID 55249):</u>In the methodology document, following sections discuss the key aspects of this model</p> <p>(1) Section 1 -Scope and Background, of the methodology document includes the sensitivity of the market value of equity vanilla options.</p> <p>(2) Section 1.2.1 – “Risk Factor Scope” of the methodology document, includes the following risk factors:</p> <p>(i) ATM Volatility</p> <p>(ii) Volatility Skew</p> <p>(3) Section 2.2 – “Risk Factor Simulation” describes the simulated returns in mathematical terms, given the backbone choice. For ATM volatility, the equity Vega VaR uses the log return of ATM volatility across 15 tenors. The equity skew VaR uses the absolute return of skew across 15 tenors as the backbone. Section - 2.3.5 “Aggregation with Other Risk Factors” provides a high level summary of the P&L simulation for ATM volatility and skew.</p> <p><u>EQUITY MULTI-ASSET MCHYBIMP PRODUCT VAR :</u></p> <p>(1) Section 1.4.3 –“Valuation Model Output”, section of the methodology</p>



Area	Covered Area	Procedures	Results
		<p>example, skew risk).</p> <p>Obtain the VBM Overarching model document and note where it discusses how the VaR models capture risk factors sufficient to measure the market risk inherent in all covered positions, including commodity price risk. Interest rate risk, equity price risk, and foreign exchange rate risk.</p>	<p>document is concerned with the outputs from the valuation models that are consumed by the VaR Pricer, which include:</p> <p>Equity Spot Delta, Equity Spot Gama, Equity Dividend Delta, Equity Borrow Delta, Equity Volatility Vega, Equity Volatility Skew, IR Spot Delta, IR Tenor Basis, IR XCCY Basis, FX Spot Delta, Commodity Spot Delta, and Cross Gamma (EQ/EQ, EQ/non-EQ)</p> <p>(2) Section 1.4.2 – “Valuation Model Inputs” of the methodology document, includes the following risk factors, which drive the P&L used in VaR:</p> <p>Equity Spot, Borrow Curve, Discount Curve, Funding Curve, Dividend Lis, Equity Implied Vol Surface, FX Spot, FX Implied Vol Surface, Asset Correlation (EQ-EQ, EQFX, EQ-IR, EQ-COMM), Commodity Spot, Commodity Implied Vol Surface and IR Implied Vol Surface</p> <p>(3) Section 2.1 – “Model selection” section of the methodology document describes the VaR simulation model is historical simulation based supplemented with a Monte-Carlo simulation of the equities residual specific risk (ESR) between the benchmark index and the stock where the single name time-series for spot and volatility are not used. Historical simulation is responsive to changes in market regime. It empirically captures the cross-dependence of financial assets.</p> <p><u>Equity Multi-Asset MCHYBIMP Product VaR</u></p> <p>(1) Section 1.4.3 - Scope and Background, of the methodology document includes the following sensitivities as key outputs from the valuation model:</p> <p>Equity Spot Delta, Equity Spot Gamma, Equity Dividend Delta, Equity Borrow Delta, Equity Volatility Vega, Equity Volatility Skew, IR Spot Delta, IR Tenor Basis, IR XCCY Basis, FX Spot Delta, Cross Gamma (EQ/EQ, EQ/non-EQ), and IR Libor-OIS basis</p> <p>(2) Section 2.2.1.1. - “Risk Factor Scope” of the methodology document, includes the following risk factors: In current production, the risk sensitivities Equity Delta, Equity Gamma and Cross Gamma, Equity Volatility Vega, Equity Volatility Skew, Equity Dividend Delta, Equity Borrow Delta, FX Delta, FX Gamma and IR Delta and IR Basis Delta (i.e., tenor basis, XCCY basis, Libor-OIS basis) are in scope for the sensitivity based method.</p>



Area	Covered Area	Procedures	Results
			<p>(3) Section 2.1 & Section 2.1.2.1 - The VaR simulation model is a historical simulation based supplemented with a Monte Carlo simulation of the equities residual specific risk. Historical simulation is responsive to changes in market regime. Market Data Statistical risk factors of the methodology document includes the risk factors in the valuation model engines and their corresponding risk variables used in VaR involves some projection of the risk factor to a subset of parameters. Implied volatility surface is a multidimensional object whose dimensions or attributes are represented in VaR by two objects called ATM Volatility Curve and Skew.</p> <p>Obtained and inspected the Overarching VBM Framework. This document provides an overview of the Overarching VBM Framework ("the Overarching Framework" or "the Framework") hosting the production of JP Morgan Chase & Co. ("JPMC", "the Firm") VaR-based derived measures used for the calculation of Regulatory Capital, and ultimately for the calculation of the Trading Book Risk Weighted Assets (RWA) for Market Risk, as well as for Risk Management and financial reporting of the Banking and Trading books activities. The model outputs include, for Regulatory Capital, the Firmwide VaR-based Measure ("VBM") and the Firmwide Stressed VaR-based Measure ("SVBM"). The VBM and SVBM measures are themselves aggregate measures of General Market Risk and some specific risks, representing 99% confidence level losses over a 10-day horizon, including, for VBM, the most recent period (also referred to as "current period"), and for SVBM, a period of significant market stress (also referred to as "stress period")</p>
H	The distribution of risk analyses to senior members of business units and Firm management.	<p>H.1 Obtain from management the names and titles of the senior members of business units and Firm management who received the following report distributions as of September 30, 2019:</p> <ol style="list-style-type: none"> 1. Firmwide Risk EMR (Market Risk); 2. Monthly JPMS LLC Risk Pack 3. Monthly CIB Risk BCC (Credit Risk); 4. JPMS Liquidity Risk Limits and Indicators Summary Report (Liquidity/Funding); 5. Weekly CIB Stress Testing Report (Liquidity/Funding Risk); 6. JPMS Legal Entity Risk Reporting Pack 	<p>H.1 We obtained from management the names and titles of senior members of business units and Firm management to whom the following risk reports were distributed as of September 30, 2019, which are included in the schedule in Appendix B.</p> <ol style="list-style-type: none"> 1. Firmwide Risk EMR (Market Risk); 2. Monthly JPMS LLC Risk Pack 3. Monthly CIB Risk BCC (Credit Risk); 4. JPMS Liquidity Risk Limits and Indicators Summary Report (Liquidity/Funding); 5. Weekly CIB Stress Testing Report (Liquidity/Funding Risk); 6. JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk); 7. JPMS LLC Operating Committee review materials (Operating Risk); and



Area	Covered Area	Procedures	Results
		(JPMS LLC Market & Credit Risk); 7. JPMS LLC Operating Committee review materials (Operating Risk); and 8. CIBRBCC Reports (i.e. CIB Risk Packs)	8. CIBRBCC Reports (i.e. CIB Risk Packs)
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.1 Obtain from management five weekly CIB Risk Packs. Inspect the packs and observe that the reports provide the following market risk information:</p> <p>(1) Level 1 limits for VaR, Stress, Loan Inventory MV, IED Beta Delta, 10% CSW and Norm IR BPV associated with utilizations where applicable.</p> <p>(2) Obtain from Management five weekly Firmwide Market Risk Limit Breach Reports</p> <p>a. Inspect that packs provide breaches of limits and commentary by LOB</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p> <p>(3) Obtain and inspect two JPMS LLC Risk Packs.</p> <p>a. Note the number or breaches</p>	<p>I.1 We obtained from management five monthly JPMS LLC Risk Packs for the months of March, June, October, November and December 2019.</p> <p>(1) The following items related to market risk analysis are included in each of those JPMS LLC Risk Packs:</p> <p>Market risk reporting for the JPMS LLC legal entity:</p> <ul style="list-style-type: none"> - 95% 10Q VaR; - Norm. IR BPV; - 10% CSW ex-EIR - Equity Delta - FX Delta; - Stress <p>(2) The five monthly JPMS LLC Risk Packs obtained provides breaches of limits and commentary See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p> <p>(3) Obtained and inspected two JPMS LLC Risk Packs (i) October 2019; (ii) December 2019;</p> <p>(i) The October 2019 JPMS LLC Risk Pack included a total of 3 level 1 breaches.</p> <p>(ii) the December 2019 JPMS LLC Risk Pack did not include any breaches as there were no reported breaches for the period.</p>



Area	Covered Area	Procedures	Results
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.2 Obtain from management:</p> <p>(1) Three monthly CIBRBCC Reports; and</p> <p>a. Inspect that the reports provide credit risk operational metrics, such as: past due annual reviews, aged non- matured over-limits and violations, and unlinked/ungraded exposure.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.2 We obtained from management the CIBRBCC Reporting Packs for the months: (i) April 2019 (ii) October 2019 and (iii) December 2019. Refer to Procedure E.2 (2) for information included.</p>
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.3 Obtain from management:</p> <p>(1) Three JPMS Liquidity Risk Limits and Indicators Summary Reports; and</p> <p>a. Inspect that the reports provide information regarding limit violations for the liquidity risk metrics observed in Section E:</p> <ul style="list-style-type: none"> - JPM Stress - Legal Entity Recovery Limit - JPM Stress - Peak 90D Risk Appetite - JPM Stress – Peak 90D - LAB and Non LAB Tri-party repo haircuts - HoldCo borrowing changes - Pledged Collateral changes - Non LAB secured funding maturity mismatch changes (various horizons) - Internalization changes - Margin Debit changes - Free Credit changes <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.3 (1) We obtained from management the JPMS Liquidity Risk Limits and Indicators Summary for the weeks of: (i) November 08, 2019; (ii) December 02, 2019; and (iii) December 31, 2019. Refer to Procedure E.3. (1) for information included.</p> <p>In addition to the information noted in E.3 (1), we noted the Pledged Collateral changes were included as well.</p>



Area	Covered Area	Procedures	Results
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.4 Obtain from management three monthly Firmwide Risk EMRs.</p> <p>a. Inspect that the EMR reports provide: Limit Metrics, 95% 10Q VaR, and worst case Stress testing results by scenario.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.4 We obtained from management the Firmwide Risk EMRs for the months of: (i) June 2019; (ii) August 2019; (iii) December 2019; Refer to Procedure E.1. (1) for information included.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.5 Obtain from management and inspect three monthly JPMS Legal Entity Risk Reporting Packs.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.5 We obtained from management the JPMS Legal Entity Risk Reporting Packs for the months of: (i) March 2019; (ii) June 2019; and (iii) December 2019. Refer to Procedure E.2 (1) for information included.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.6 Obtain from management and inspect Three JPMS Weekly Stress Testing Reports.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.6 We obtained from management the JPMS Weekly Stress Testing Reports for the weeks of: (i) November 07, 2019; (ii) November 14, 2019; (iii) November 22, 2019. Refer to Procedure E.3 (2) for information included.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>
I	Information regarding limit violations with respect to market, credit and liquidity and funding risks provided to senior members of business units and Firm management.	<p>I.7 Obtain from management and inspect three JPMS Operating Committee review materials.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>	<p>I.7 We obtained from management the JPMS LLC Operating Committee review materials for the months of: (i) September 2019; (ii) November 2019; and (iii) December 2019. Refer to Procedure F.3 (1) for information included.</p> <p>See procedure H.1 above with respect to the distribution of this report to senior members of business units and Firm management.</p>



Area	Covered Area	Procedures	Results
J	The resolution of limit violations.	<p>J.1 Obtain from management the most recent JPMC Market Risk Management Procedures and Market Risk Management Policy.</p> <p>a. Inspect that the policy and/or procedures includes requirements that the LOBs and Business Areas:</p> <ol style="list-style-type: none"> 1. Must be generally aware of their intra-day risk levels; 2. Take immediate steps to reduce exposure in the case of a Limit Breach, unless a Temporary Limit Approval is granted; 3. Request Temporary Limit Approvals in writing to MR which describe the risks and include: <ul style="list-style-type: none"> - Size and tenor of the business opportunity or specific transaction; - Limit(s) that would be breached and expected duration of the breach; - Exit strategy, where appropriate. 4. Contact Market Risk ("MR") in a timely manner if close of business limits are breached for brief periods intra-day to facilitate client trades or to manage delivered risk and are not expected to be fully hedged or de-risked within the trading session in accordance with prevailing market volumes. Pre- trade Transaction Guidelines may apply; and 5. Enforce the Market Risk Management policy. 6. Describe how limit violations are dealt with and note what reports are issued to whom. 	<p>J.1 We obtained from management the most recent Firmwide Market Risk Management Procedures and Market Risk Management Policy and inspected that the procedures included the following requirements for LOBs and Business Areas:</p> <ol style="list-style-type: none"> 1. Section 10.3.2 (Front Office Responsibilities) states that Front Office must be generally aware of their intraday risk levels. 2. Section 10.4.2 (Front Office Responsibilities) states that A Valid Limit Breach requires that the Front Office take immediate steps to reduce exposure so as to be within limit, unless a limit increase or TLA is granted. 3. Section 10.4.2 (Front Office Responsibilities) states that 'Front Office may request a TLA from Market Risk. The TLA request should describe the risks and include: <ul style="list-style-type: none"> - Size and tenor of the business opportunity or specific transaction - Limit(s) that would be breached and expected duration of the breach - Exit strategy, where appropriate 4. Section 10.3.2 (Front Office Responsibilities) states that Front Office must contact Market Risk in a timely manner if close of business limits are breached for brief periods intra-day to facilitate client trades or to manage delivered risk and are not expected to be fully hedged or de-risked within the trading session in accordance with prevailing market volumes. 5. Per Section 14 (Market Risk Management Roles and Responsibilities Grid) the Front Office is responsible for enforcing the Market Risk Management Policy. 6. Per Section 10.3.1 (Market Risk Reporting Related Responsibilities) Finance/Product Control and/or Business Middle Office provide risk information to MRR for exposure calculation and monitoring against limits. Where this information is not available, risk information may be obtained from non-independent sources, i.e. trading-desk originated reporting, but only where necessary. MRR and Product Control provide daily limit reporting to senior management, tailored to meet the requirements of the intended recipients. <p>MRR monitors limit utilizations for data quality; in cases of suspected data quality issues, MRR should seek guidance from MR prior to distributing limit utilization reports. MRR reports Limit Breach trends and the total number of Limit Breaches reported during a period to the relevant LOB Risk Committee,</p>



Area	Covered Area	Procedures	Results
			LOB Business Control Committee or Risk Business Control Committee, as appropriate. MRR maintains an inventory of reports including description of content, frequency and distribution.
J	The resolution of limit violations.	<p>J.2 Obtain from management the most recent Credit Approval Principles Policy</p> <p>a. Inspect that Section 7(a) of the Credit Approval Principles Policy Sales/Trading Capital Markets Overlimits includes requirements that:</p> <p>1) Monitoring and reporting overlimits be performed by personnel independent of the business trading unit;</p> <p>2) Overlimits require review and approval by individuals with sufficient credit authority; and</p> <p>3) Credit Officers action overlimits according to a set of standard categories (e.g. Violation – High; Violation- Medium)</p>	<p>J.2 We obtained from management the most recent Credit Approval Principles Policy, and inspected that Section 7(a) of the Credit Approval Principles Policy Sales/Trading Capital Markets Overlimits includes the following:</p> <p>(1) Monitoring and reporting overlimits must be performed by personnel independent of the business trading unit.</p> <p>(2) Overlimits require review and approval by individuals with sufficient credit authority in accordance with:</p> <p>(i) LOB credit authority grids for Primary and Operating Exposure; or</p> <p>(ii) Under the Incremental Special Authority policy terms.</p> <p>(3) Reference to “Overlimits procedure” which covers protocols for violation escalations, closing overlimits as pre-approved and general guidance on addressing active and passive overlimits.</p>
J	The resolution of limit violations.	<p>J.3 Obtain from management the most recent Liquidity Risk Oversight Policy. Inspect that the policy includes requirements that:</p> <p>a. Any valid indicator breach requires Global Treasury or respective LOBs to provide feedback/commentary on the reason for breach and assessment of current and/or potentially changing liquidity status, which will be included within breach notifications.</p>	<p>J.3 We obtained from management the Liquidity Risk Oversight Policy, which includes requirements that:</p> <p>a. Any valid end of day Level 1, Level 2 and Level 3 liquidity risk limit breach (as defined in the Liquidity Risk Limits and Indicators Standard) requires Corporate Treasury to actively direct LOBs or take steps to bring utilization within limits. Any valid indicator breach requires Corporate Treasury or respective LOBs to provide feedback and commentary to LRO on the reason for the breach and assessment of current and/or potentially changing liquidity status, which will be included within breach notifications. Limits and indicators must be tracked and reported daily.</p>
K	The monitoring of operational risks and the dissemination of information regarding events to	<p>K.1 Obtain from management the most recent version of the JPMC Compliance, Conduct and Operational Risk (CCOR) policy.</p> <p>State in the Results section the duties and responsibilities listed in the aforementioned</p>	<p>K.1 We obtained from management the Compliance, Conduct and Operational Risk (CCOR) policy and observed the following duties and responsibilities:</p> <p>a. Global Chief Compliance Officer (CCO) & Firmwide Risk Executive (FRE) Operational Risk Management, a direct report to the Firm’s Chief Risk Officer (CRO), must establish and define the CCOR Management Framework.</p>



Area	Covered Area	Procedures	Results
	senior members of business units and Firm management.	policy for risk measurement and monitoring functions with respect to operational risk.	Additionally, LOBs and function CCOs and Operational Risk Officers (OROs), reporting to the Firm's Global CCO & FRE Operational Risk Management, must oversee execution of the CCOR Management Framework for each LOB and function. Control Managers within LOBs and functions must manage the overall execution of the CCOR Management Framework.
K	The monitoring of operational risks and the dissemination of information regarding events to senior members of business units and Firm management.	<p>K.2 Obtain from management the CIB Finance Control Forum deck (also known as F&BM BCC, CIB F&BM FCC and CIB F&BM Control Committee). Obtain Materials distributed for three months; and</p> <p>(1) Inspect the materials and observe in the Results section whether topics related to internal and external operational risk were included; and</p> <p>(2) Obtain the distribution list of the materials as of this year and inspect the titles of senior members of business units and Firm management who received the materials.</p>	<p>K.2 We obtained from management the CIB Financial Control Forum Review materials for the following months of: (i) September 2019;</p> <p>(ii) November 2019; and (iii) December 2019 and inspected:</p> <p>(1) The monthly reports included internal and external operational risks included in the section titled, "Operational Risk Metrics - Risk Events" for the months of September and November. We inspected the report in December 2019, the aforementioned "Operational Risk Metrics - Risk Events" section is titled "Operational Risk Metrics - Risk Acceptances and Events" with the same pertinent metrics.</p> <p>(2) Obtain the distribution list of the materials as of this year and inspect the titles of senior members of business units and Firm management who received the materials in Appendix B.</p>
K	The monitoring of operational risks and the dissemination of information regarding events to senior members of business units and Firm management.	<p>K.3. Obtain from management the CIB Finance Control Forum deck (also known as F&BM BCC, CIB F&BM FCC and CIB F&BM Control Committee). Obtain Materials distributed for three months (the same three months as procedure K.2); and</p> <p>a. Inspect the deck for reference to the Control Forum Charter, and inquire that the Control Forum Charter has been reviewed within the past year. Inspect that either the deck includes a page outlining the escalation standards that must be followed as part of the overall operational risk framework or reference the most current version of the CIB Operational Risk Event Reporting Procedures that include timing and economic recording thresholds.</p>	<p>K.3 We obtained from management the CIB Finance Control Forum deck (also known as F&BM BCC, CIB F&BM FCC and CIB F&BM Control Committee) for the months of: (i) September 2019; (ii) November 2019; and (iii) December 2019.</p> <p>a. We inquired with Si Whittington, CIB Finance Control Office, and inspected the CIB Finance Control Forum deck for December 2019. The charter included a last updated date of November 27, 2018. Si explained that the charter was last reviewed on November 27, 2018 and the charter was included in the deck presented on 12/18/2019. Additionally, we inspected the CIB Finance Control Forum meeting decks for September 2019, November 2019, and December 2019 and note that they include the escalation standards that must be followed as part of the overall operational risk framework.</p>



Area	Covered Area	Procedures	Results
L	The procedures for the verification of the prices of both principal and customer positions.	<p>L.1 Obtain from management the most recent JPMorgan Chase Independent Valuation Control Policy, Firmwide; and</p> <p>a. Inspect the policy and observe in the Results section the section of that policy that lists the procedures for performing and the methodology for escalating pricing disputes.</p>	<p>L.1 We obtained from management the most recent JPMorgan Chase Independent Valuation Control Policy, Firmwide, and noted the following procedures for performing and the methodology for escalating pricing disputes:</p> <p>Section 14 - Appendix – Front Office Valuation Principles included that Valuation Control Group (VCG) is a control function, independent of the Front Office, whose responsibility is to:</p> <p>(i) independently verify the Front Office marks, and</p> <p>(ii) determine any Pricing and/or Valuation Adjustments required to the Front Office marks to ensure that assets and liabilities are recorded at fair value as defined by US GAAP.</p> <p>(iii) VCG also has sole responsibility for documenting and executing any valuation adjustments required to record positions at fair value.</p> <p>However, it is expected that Front Office personnel are fully aware of (and understand) the relevant methodologies used by VCG to independently assess their positions. This includes methodologies relating to both pricing and valuation adjustments.</p> <p>(iv) In the event there is a difference of opinion around fair value between the Front Office and VCG, the burden of proof rests with the Front Office to support its opinion and VCG will ultimately determine the Fair Value to be recorded in the US GAAP books and records of the Firm (section 14 and section 4)</p>
L	The procedures for the verification of the prices of both principal and customer positions.	<p>L.2 Obtain from management the most recent JPMorgan Chase Independent Valuation Control Policy, Firmwide.</p> <p>(1) Inspect the policy document for a hierarchy of sources of pricing for customer positions.</p> <p>(2) Obtain from management the JPMorgan Chase Independent Valuation Control Policy and inspect the inclusion of the following:</p> <ul style="list-style-type: none"> - Independence of the price verification group - Documentation requirements - Acceptable Price Verification methodologies, including the Evaluation and use of third-party pricing sources - Trader Challenge and override 	<p>L.2 We obtained from management the most recent JPMorgan Chase Independent Valuation Control Policy Firmwide and inspected that it includes the following:</p> <p>(1) Hierarchy of sources of pricing for customer positions (Section 6.1)</p> <p>(2) We obtained from management the most recent JPMorgan Chase Independent Valuation Control Policy Firmwide and inspected that it includes the following:</p> <p>a. Independence of the price verification group - (Section 5.2)</p> <p>b. Documentation Requirements - (Section 5.5, 6.1, 9.1)</p> <p>c. Acceptable Price Verification methodologies, including the evaluation and</p>



Area	Covered Area	Procedures	Results
		<p>criteria/procedures</p> <ul style="list-style-type: none"> - Valuation adjustments standards - Reporting and escalation requirements <p>(3) Inspect the Valuation Control Group standards and state in the Results section that the control document includes Alternative Price Verification procedures for less liquid inventory.</p> <p>(4) Inspect the JPM Chase Firm-Wide Valuation Reports for three months to determine if they were sent, at a minimum, to the firm CEO, firm CFO, Firm-wide Controller, Head of Firm-wide Risk and Head of Model Review, the CIO Business Head, CIO Controller and CIO Market Risk Head.</p>	<p>use of third-party pricing sources - (Section 5.3, 6.1)</p> <p>d. Trader Challenge and override criteria/procedures - (Section 6.1)</p> <p>e. Valuation adjustments standards - (Section 7)</p> <p>f. Reporting, Governance, and Escalation - (Section 4)</p> <p>(3) We obtained from management the most recent JPMorgan Chase Valuation Control Group Standards, and observed the control standards document and noted that it included Alternative Price Verification procedures for less liquid inventory. (Section 6.2). We also noted that the terminology had been adjusted to "Independently Reviewed".</p> <p>(4) We obtained from management the JPMorgan Chase Firm-Wide Valuation Reports for August 2019, October 2019 and December 2019 and inspected that they were distributed, at a minimum, to the following:</p> <ul style="list-style-type: none"> (i) Jamie Dimon (CEO); (ii) Jennifer Piepszak (CFO); (iii) Nicole Giles (Firm-wide Controller); (iv) Ian Green (Head of Firm-wide Risk); (v) Andy McGee (Head of Model Review); (vi) Matthew Cherwin (not included in the August report) (CIO Business Head); (vii) Brendan McGovern (CIO Controller) and; (viii) Chetan Bhargiri (CIO Market Risk Head).



Area	Covered Area	Procedures	Results
L	The procedures for the verification of the prices of both principal and customer positions.	<p>L.3 Obtain from management the most recent JPMorgan Global Fund Services Pricing Policy.</p> <p>a. Inspect the policy document and observe that the policy document contains pricing principles and governance, client pricing policy standards, principles on vendor selection, asset specific pricing practices, and policies governing the customer and investment manager price challenge process.</p>	<p>L. 3 We obtained from management the most recent Wealth Management (WM) Pricing Policy and inspected that it includes the following:</p> <p>a. Pricing Principle and Governance - (Policy Statements Section 5(a))</p> <p>b. Client pricing policy standards - (Sections 1, 4, 5)</p> <p>c. Principles on Vendor Selection - (Appendix A and B)</p> <p>d. Asset Specific Pricing Practices - (Section 5 and Appendix B)</p> <p>e. Policies governing the customer and investment manager price challenge process - (Section 5(i))</p>



Appendix A: Committee Meeting Dates

Meeting Dates - 2019	Committee Names						
	Board Risk Committee ("BRC")s;	Treasury Committee;	Firmwide Risk Committee ("FRC");	CIO, Treasury, & Corporate Risk Committee ("CTC RC");	Corporate & Investment Bank ("CIB") Risk Committee ("CIBRC"); and	CIB Risk Business Control Committee ("CIBRBCC").	JPMS Board of Managers
January	1/15/2019	1/23/2019	1/11/2019	1/10/2019, 1/24/2019, 1/31/2019	1/3/2019, 1/10/2019, 1/17/2019	1/28/2019	
February	n/a	2/22/2019	n/a	2/14/2019, 2/21/2019	2/7/2019, 2/14/2019, 2/21/2019, 2/28/2019	2/21/2019	2/27/2019
March	3/18/2019, 3/19/2019	n/a	3/7/2019	3/21/2019	3/7/2019, 3/21/2019	3/25/2019	
April	4/15/2019, 4/16/2019	4/17/2019	4/8/2019	4/11/2019, 4/25/2019	4/4/2019, 4/18/2019	4/23/2019	
May	5/8/2019	5/17/2019	5/13/2019	5/2/2019, 5/16/2019, 5/23/2019	5/2/2019, 5/9/2019, 5/16/2019, 5/23/2019, 5/30/2019	5/23/2019	5/1/2019
June	n/a	6/21/2019	6/28/2019	6/6/2019, 6/13/2019, 6/27/2019	6/6/2019, 6/20/2019, 6/27/2019	6/21/2019	
July	7/15/2019, 7/16/2019	7/19/2019	n/a	7/18/2019	7/11/2019	7/25/2019	7/25/2019
August	n/a	8/16/2019	n/a	8/8/2019	8/1/2019, 8/15/2019		
September	9/16/2019, 9/17/2019	9/20/2019	9/13/2019	9/5/2019, 9/12/2019, 9/19/2019	9/5/2019, 9/12/2019, 9/19/2019, 9/26/2019	9/20/2019	
October	10/14/2019, 10/15/2019	10/18/2019	10/7/2019	10/3/2019, 10/17/2019	10/3/2019, 10/10/2019, 10/17/2019, 10/24/2019, 10/31/2019	10/24/2019	
November	n/a	11/22/2019	n/a	11/14/2019, 11/21/2019	11/14/2019	11/1/2019	11/1/2019
December	12/9/2019, 12/10/2019	n/a	12/5/2019	12/12/2019	12/12/2019, 12/5/2019		



Appendix B: Risk Material Distribution List

Senior Members of Management		Risk Reports
Name	Title	Committee
Ashley Bacon	JPMC Chief Risk Officer	Firmwide Risk EMR (Market Risk)
Lori Beer	JPMC Chief Information Officer	Firmwide Risk EMR (Market Risk)
Jean-Francois Bessin	Risk & Compliance CFO	Firmwide Risk EMR (Market Risk)
Chetan Bhargiri	Chief Investment Office, Global Treasury and Corporate CRO	Firmwide Risk EMR (Market Risk)
Mark Brucker	CCB CRO	Firmwide Risk EMR (Market Risk)
Matthew L Cherwin	Treasurer and Chief Investment Officer	Firmwide Risk EMR (Market Risk)
Jamie Dimon	JPMC Chairman & CEO	Firmwide Risk EMR (Market Risk)
Mary Ellen Egbert	CB CRO	Firmwide Risk EMR (Market Risk)
Stephen Eichenberger	Firmwide Risk Executive, Wholesale Credit Risk	Firmwide Risk EMR (Market Risk)
Mary Erdoes	AM CEO	Firmwide Risk EMR (Market Risk)
Stacey Friedman	General Counsel	Firmwide Risk EMR (Market Risk)
Ian Green	Firmwide Risk Executive Market Risk	Firmwide Risk EMR (Market Risk)
Gregg Gunselman	AM CRO	Firmwide Risk EMR (Market Risk)
Marianne Lake	Consumer Lending CEO	Firmwide Risk EMR (Market Risk)
Andy Mcgee	Head of Model Risk Governance & Review	Firmwide Risk EMR (Market Risk)
Jeremy McKay	Head of Risk Governance and Strategy within Risk CFO	Firmwide Risk EMR (Market Risk)
Lori Pape	JPMC Chief Control Officer	Firmwide Risk EMR (Market Risk)
Frank Pearn	JPMC Chief Compliance Officer and Operational Risk Executive	Firmwide Risk EMR (Market Risk)
Douglas Petno	CB CEO	Firmwide Risk EMR (Market Risk)
Jennifer Piepszak	JPMC CFO	Firmwide Risk EMR (Market Risk)
Daniel Pinto	CIB CEO	Firmwide Risk EMR (Market Risk)
Louis Rauchenberger	General Auditor	Firmwide Risk EMR (Market Risk)
Donna Reino	Firmwide Risk Executive, Country Risk Management and Reputation Risk	Firmwide Risk EMR (Market Risk)
Gordon Smith	CCB CEO	Firmwide Risk EMR (Market Risk)
Steinar Zinke	CIB CRO	Firmwide Risk EMR (Market Risk)



Senior Members of Management		Risk Reports
Name	Title	Committee
Ian Green	Managing Director Market Risk Coverage	Monthly JPMS LLC Risk Pack
John Ward	Managing Director Risk Reporting	Monthly JPMS LLC Risk Pack
Laura Cumming	Managing Director Country Risk	Monthly JPMS LLC Risk Pack
Michael Murray	Managing Director Credit Risk	Monthly JPMS LLC Risk Pack
Leo Lai	Executive Director Credit Risk	Monthly JPMS LLC Risk Pack
Vincent LaVecchia	Managing Director Business Management	Monthly JPMS LLC Risk Pack
Lily Chan	Executive Director Credit Risk	Monthly JPMS LLC Risk Pack
Mary Ann Donohue	Executive Director Risk Reporting	Monthly JPMS LLC Risk Pack
Syed Riaz Ali	Managing Director Associate General Counsel	Monthly JPMS LLC Risk Pack
Henry Taveras	Associate Market Risk Coverage	Monthly JPMS LLC Risk Pack
Alefiya Tarvadi	Associate Trade Support Manager	Monthly JPMS LLC Risk Pack
Liane Ren	Associate Risk Reporting	Monthly JPMS LLC Risk Pack
Simon Bishop	Vice President Transaction Processing Manager	Monthly JPMS LLC Risk Pack
Shane Cole	Vice President Risk Reporting	Monthly JPMS LLC Risk Pack
Charles DiVuolo	Executive Director Controller	Monthly JPMS LLC Risk Pack
Yujiao Wang	Executive Director Liquidity Risk	Monthly JPMS LLC Risk Pack
Matthew Gibson	Executive Director Controller	Monthly JPMS LLC Risk Pack
Wayne Lee	Executive Director Country Risk	Monthly JPMS LLC Risk Pack
Sam Mahapatra	Executive Director Risk Reporting	Monthly JPMS LLC Risk Pack
Angela Mann	Vice President bus Analyst & Reporting Manager	Monthly JPMS LLC Risk Pack
Steve Wu	Vice President Risk Reporting	Monthly JPMS LLC Risk Pack
John McKesson	Vice President Credit Risk	Monthly JPMS LLC Risk Pack
Michale Chalker	Executive Director Country Risk	Monthly JPMS LLC Risk Pack
Irina Zubkova	Vice President Controller	Monthly JPMS LLC Risk Pack
Nadine Loney	Vice President Client Service Manager	Monthly JPMS LLC Risk Pack
Richard Morrill	Executive Director Market Risk Coverage	Monthly JPMS LLC Risk Pack



Senior Members of Management		Risk Reports
Name	Title	Committee
Alejandro M Alvarez Comotti	Executive Director Operations Manager	Monthly JPMS LLC Risk Pack
William Ness	Vice President Transaction Processing Manager	Monthly JPMS LLC Risk Pack
Noelby Pena	Vice President Risk Reporting	Monthly JPMS LLC Risk Pack
Matt Sowerby	Vice President Information Security Management	Monthly JPMS LLC Risk Pack
Michael Reifer	Executive Director Operations Manager	Monthly JPMS LLC Risk Pack
Henry Myers	Vice President Legal Entity Risk	Monthly JPMS LLC Risk Pack
Joseph Schafer	Managing Director IT Organizational Management	Monthly JPMS LLC Risk Pack
Mike Sebaski	Executive Director Legal Entity Risk	Monthly JPMS LLC Risk Pack
Siddiqui, Yousuf	Executive Director Assistant General Counsel	Monthly JPMS LLC Risk Pack
Sillett, Andrew X	Executive Director Information Security Management	Monthly JPMS LLC Risk Pack
Matthew Smith	Trade Support Analyst	Monthly JPMS LLC Risk Pack
Ali Zeshan	Executive Director Operations Manager	Monthly JPMS LLC Risk Pack
Richard Mendonca	Vice President Collateral	Monthly JPMS LLC Risk Pack
Nicole Olech	Associate Information Security Management	Monthly JPMS LLC Risk Pack
Sean Donovan	Associate	Monthly JPMS LLC Risk Pack
Kevin P Krabbenhoeft	Executive Director Collateral	Monthly JPMS LLC Risk Pack
Poonam Tandon	Vice President Collateral	Monthly JPMS LLC Risk Pack
Thomas Murphy	Vice President Risk Reporting	Monthly JPMS LLC Risk Pack
Julia Kan	Vice President Assistant General Counsel	Monthly JPMS LLC Risk Pack
Zachary Mulhaul	Associate Risk Reporting	Monthly JPMS LLC Risk Pack
Gary Patterson	Executive Director Applications Support	Monthly JPMS LLC Risk Pack
Megan Pontillo	Executive Director Client Processing Manager	Monthly JPMS LLC Risk Pack
Tammy Botsford	Executive Director Assistant General Counsel	Monthly JPMS LLC Risk Pack
Amr El-Sabbagh	Executive Director Legal Entity Risk	Monthly JPMS LLC Risk Pack
Stephanie Thompson	Legal Entity Risk	Monthly JPMS LLC Risk Pack
James Hong	Associate Transaction Processing Manager	Monthly JPMS LLC Risk Pack



Senior Members of Management		Risk Reports
Name	Title	Committee
Andres Balboni	Analyst Transaction Processing	Monthly JPMS LLC Risk Pack
Evgenia Solovey	Associate Controller	Monthly JPMS LLC Risk Pack
Daniela D Ilieva	Associate Transaction Processing Manager	Monthly JPMS LLC Risk Pack
Natalie Browne	Executive Director	Monthly JPMS LLC Risk Pack
Benjamin Armbrust	Executive Director Credit Risk	Monthly JPMS LLC Risk Pack
Lucy Nguyen	Associate Risk Reporting	Monthly JPMS LLC Risk Pack
John Chen	Associate Legal Entity Risk	Monthly JPMS LLC Risk Pack
Desiderio Berdin	Associate	Monthly JPMS LLC Risk Pack
Matthew Guiney	Vice President Controller	Monthly JPMS LLC Risk Pack
Christopher Laveck	F&BM Analyst	Monthly JPMS LLC Risk Pack
Jason Sippel	Managing Director	Monthly JPMS LLC Risk Pack
Silas Williams	CIB Risk Control Manager	Monthly CIB Risk BCC (Credit Risk)
Stephen Eichenberger	Firmwide Risk Executive – Wholesale Credit Risk	Monthly CIB Risk BCC (Credit Risk)
Erin O'Rourke	CIB Risk Executive – Operational Risk Officer (ORO)	Monthly CIB Risk BCC (Credit Risk)
Julian Liau	CIB Risk Chief Financial Officer	Monthly CIB Risk BCC (Credit Risk)
Adam Lipnick	CIB Risk Compliance Officer	Monthly CIB Risk BCC (Credit Risk)
John Ward	Head of Firmwide Risk Reporting & Middle Office	Monthly CIB Risk BCC (Credit Risk)
Angelo Curreli	CTO for Risk & Forecasting Solutions (RFS)	Monthly CIB Risk BCC (Credit Risk)
John Vollkommer	Legal Executive	Monthly CIB Risk BCC (Credit Risk)
Ellen Yormack	CIB Risk Audit Senior Director	Monthly CIB Risk BCC (Credit Risk)
Mark Malloy	CIB Credit Review Director	Monthly CIB Risk BCC (Credit Risk)
Ian Green	CIB Risk Executive – Market Risk	Monthly CIB Risk BCC (Credit Risk)
Olivier Robert	CIB Risk Executive - Quantitative Research	Monthly CIB Risk BCC (Credit Risk)
Mark Astbury	Head of Country Risk Methodology & Governance	Monthly CIB Risk BCC (Credit Risk)
Jena Cohen	Human Resources Executive	Monthly CIB Risk BCC (Credit Risk)
Kathryn Punke	Co-Risk Chief Data Officer (CDO)	Monthly CIB Risk BCC (Credit Risk)



Senior Members of Management		Risk Reports
Name	Title	Committee
Mark Leach	CIB Risk Business Management – Risk Air Traffic Control (RATC)	Monthly CIB Risk BCC (Credit Risk)
Iris Gabrielli	Head of Risk Management Policy Group	Monthly CIB Risk BCC (Credit Risk)
Cheryl Tabrett	Head of Finance & Risk Data Operations	Monthly CIB Risk BCC (Credit Risk)
Donna Reino	Firmwide Risk Executive, Country Risk Management, Reputation Risk, Head of Environmental & Social Risk Management	Monthly CIB Risk BCC (Credit Risk)
Mitchell Smith	Firmwide Risk Executive – Principal Risk	Monthly CIB Risk BCC (Credit Risk)
Christian Walsh	Chief Risk Officer Latin America / Canada	Monthly CIB Risk BCC (Credit Risk)
Angela Rokkos	Credit Risk and Wholesale Credit Risk Business Management	Monthly CIB Risk BCC (Credit Risk)
Steiner Zinke	CIB Risk Chief Risk Officer (CRO)	Monthly CIB Risk BCC (Credit Risk)
Jason Sippel	Legal Entity CEO	JPMS Liquidity Risk Limits and Indicators Summary Report
Benjamin Armbrust	Legal Entity Risk Manager	JPMS Liquidity Risk Limits and Indicators Summary Report
Matthew Cherwin	Regional Treasurer	JPMS Liquidity Risk Limits and Indicators Summary Report
Scott Rodger	Head of LOB LRO	JPMS Liquidity Risk Limits and Indicators Summary Report
Matthew Cherwin	Global Treasurer	JPMS Liquidity Risk Limits and Indicators Summary Report
Chetan Bhargiri	CTC CRO	JPMS Liquidity Risk Limits and Indicators Summary Report
Jason Sippel	Legal Entity CEO	JPMS Liquidity Risk Limits and Indicators Summary Report
Benjamin Armbrust	Legal Entity Risk Manager	JPMS Liquidity Risk Limits and Indicators Summary Report
Jason Sippel	Legal Entity CEO	Weekly CIB Stress Testing Report
Benjamin Armbrust	Legal Entity Risk Manager	Weekly CIB Stress Testing Report
Matthew Cherwin	Regional Treasurer	Weekly CIB Stress Testing Report
Scott Rodger	Head of LOB LRO	Weekly CIB Stress Testing Report
Matthew Cherwin	Global Treasurer	Weekly CIB Stress Testing Report
Chetan Bhargiri	CTC CRO	Weekly CIB Stress Testing Report
Jason Sippel	Legal Entity CEO	Weekly CIB Stress Testing Report



Senior Members of Management		Risk Reports
Name	Title	Committee
Benjamin Armbrust	Legal Entity Risk Manager	Weekly CIB Stress Testing Report
MaryAnn Lamendola	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Cecilia Orchard	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Mary Tohlen	Vice President	JPMS LLC Operating Committee review materials (Operating Risk)
Laura Wilson	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Jason Sippel	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
David Salaverry	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Paul Brannan	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Jeremy Bell	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Joseph Cerullo	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Eileen Sherrick	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Howard Sklar	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Jeremy Warren	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Matthew Altadonna	Vice President	JPMS LLC Operating Committee review materials (Operating Risk)
Samuel Palmer	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Joseph Rondinelli	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Sean Swift	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Charles DiVuolo	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Joseph Fusco	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
James Collins	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)



Senior Members of Management		Risk Reports
Name	Title	Committee
Patrick Dempsey	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Adam Perry	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Joel Baker	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Todd Cook	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Bill Freilich	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Judith Romaine	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Mike Sebaski	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Richard Morrill	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
James Coleman	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Mitchell Harris	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Roger Klion	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Amanda Winkelman	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Nancy Dennery	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Andrew Chalnack	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Ross Friedman	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Christopher Galiani	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Peter Jepson	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Prem Krishnamoorthy	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Nicholas Milazzo	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)



Senior Members of Management		Risk Reports
Name	Title	Committee
Binita Narang	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Evan Rutigliano	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Jeffrey Schade	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Justin Zaglio	Executive Director	JPMS LLC Operating Committee review materials (Operating Risk)
Balaji Krishnamurthy	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Edward Bradley	Managing Director	JPMS LLC Operating Committee review materials (Operating Risk)
Steiner Zinke	CIB Risk Chief Risk Officer (CRO)	CIBRBCC Reports (i.e. CIB Risk Packs)
Silas Williams	CIB Risk Control Manager	CIBRBCC Reports (i.e. CIB Risk Packs)
Stephen Eichenberger	Firmwide Risk Executive – Wholesale Credit Risk	CIBRBCC Reports (i.e. CIB Risk Packs)
Erin O'Rourke	CIB Risk Executive – Operational Risk Officer (ORO)	CIBRBCC Reports (i.e. CIB Risk Packs)
Julian Liao	CIB Risk Chief Financial Officer	CIBRBCC Reports (i.e. CIB Risk Packs)
Adam Lipnick	CIB Risk Compliance Officer	CIBRBCC Reports (i.e. CIB Risk Packs)
John Ward	Head of Firmwide Risk Reporting & Middle Office	CIBRBCC Reports (i.e. CIB Risk Packs)
Angelo Curreli	CTO for Risk & Forecasting Solutions (RFS)	CIBRBCC Reports (i.e. CIB Risk Packs)
John Vollkommer	Legal Executive	CIBRBCC Reports (i.e. CIB Risk Packs)
Ellen Yormack	CIB Risk Audit Senior Director	CIBRBCC Reports (i.e. CIB Risk Packs)
Mark Malloy	CIB Credit Review Director	CIBRBCC Reports (i.e. CIB Risk Packs)
Ian Green	CIB Risk Executive – Market Risk	CIBRBCC Reports (i.e. CIB Risk Packs)
Olivier Robert	CIB Risk Executive - Quantitative Research	CIBRBCC Reports (i.e. CIB Risk Packs)
Mark Astbury	Head of Country Risk Methodology & Governance	CIBRBCC Reports (i.e. CIB Risk Packs)
Jena Cohen	Human Resources Executive	CIBRBCC Reports (i.e. CIB Risk Packs)
Kathryn Punke	Co-Risk Chief Data Officer (CDO)	CIBRBCC Reports (i.e. CIB Risk Packs)
Mark Leach	CIB Risk Business Management – Risk Air Traffic Control (RATC)	CIBRBCC Reports (i.e. CIB Risk Packs)
Iris Gabrielli	Head of Risk Management Policy Group	CIBRBCC Reports (i.e. CIB Risk Packs)



Senior Members of Management		Risk Reports
Name	Title	Committee
Cheryl Tabrett	Head of Finance & Risk Data Operations	CIBRBCC Reports (i.e. CIB Risk Packs)
Donna Reino	Firmwide Risk Executive, Country Risk Management, Reputation Risk, Head of Environmental & Social Risk Management	CIBRBCC Reports (i.e. CIB Risk Packs)
Mitchell Smith	Firmwide Risk Executive – Principal Risk	CIBRBCC Reports (i.e. CIB Risk Packs)
Christian Walsh	Chief Risk Officer Latin America / Canada	CIBRBCC Reports (i.e. CIB Risk Packs)
Angela Rokkos	Credit Risk and Wholesale Credit Risk Business Management	CIBRBCC Reports (i.e. CIB Risk Packs)
Jason Sippel	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Christopher Harvey	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Matthew Cherwin	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Paul Davidson	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Jeremy Geller	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
James Collins	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Benjamin Armbrust	Executive Director Credit Risk	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Joseph Cerullo	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Liam Sargent	Managing Director	JPMS Legal Entity Risk Reporting Pack (JPMS LLC Market & Credit Risk)
Jeremy Barnum	CIB CFO	CIB Finance Control Forum deck
Rob Dapice	CIB Global Controller	CIB Finance Control Forum deck
Amy Kearney	CIB Finance Control Manager	CIB Finance Control Forum deck
John Healy	Global Controller	CIB Finance Control Forum deck
Ed Grospe	Global Controller	CIB Finance Control Forum deck
David Alexander	Global Controller	CIB Finance Control Forum deck
Justin Page	Regional Controller	CIB Finance Control Forum deck
Fernando Rioja	Regional Controller	CIB Finance Control Forum deck
Jim Collins	Regional Controller	CIB Finance Control Forum deck



Senior Members of Management		Risk Reports
Name	Title	Committee
Matt Melling	Regional Controller	CIB Finance Control Forum deck
Jeff New	CIB Financial Controller	CIB Finance Control Forum deck
Josh Nasella	ORO	CIB Finance Control Forum deck
Craig Sweeney	Internal Audit	CIB Finance Control Forum deck
Julia Lantsman	Internal Audit	CIB Finance Control Forum deck
Olga Potapova	CIB External Reporting	CIB Finance Control Forum deck
Steve Luxton	VCG	CIB Finance Control Forum deck
Phil Karg	Technology	CIB Finance Control Forum deck

Appendix C: Committee Members

Senior Members of Management				
Name	Title	Committee	Title in Directory	LOB of Employees Direct Manager
Linda Bammann	Chair	BRC	Members outside organization	N/A
James Crown	Director	BRC	Members outside organization	N/A
Melody Hobson	Director	BRC	Members outside organization	N/A
Michael Neal	Director	BRC	Members outside organization	N/A
Jamie Dimon	Chair (JPMC Chairman and CEO)	FRC	Chairman & CEO	Board of Directors
Ashley Bacon	Co-Chair (JPMC Chief Risk Officer)	FRC	EVP - Chief Risk Officer	Chairman & CEO



Senior Members of Management

Name	Title	Committee	Title in Directory	LOB of Employees Direct Manager
Daniel Pinto	CIB CEO	FRC	Co-President & COO, CEO CIB	Chairman & CEO
Mary Erodes	AWM CEO	FRC	AWM CEO	Chairman & CEO
Doug Petno	CB CEO	FRC	CB CEO	Chairman & CEO
Gordon Smith	CCB CEO	FRC	Co-President & COO, CEO CCB	Chairman & CEO
Marianne Lake	Consumer Lending CEO	FRC	Consumer Lending CEO	CCB CEO
Stacey Friedman	General Counsel	FRC	Executive Vice President, General Counsel	Chairman & CEO
Jennifer Piepszak	JPMC CFO	FRC	Executive Vice President, CFO	Chairman & CEO
Steinar Zinke	CIB CRO	FRC	Managing Director, CIB CRO	EVP - Chief Risk Officer
Gregg Gunselman	AWM CRO	FRC	Managing Director, AWM CRO	EVP - Chief Risk Officer
Mary Ellen Egbert	CB CRO	FRC	Managing Director, CB CRO	EVP - Chief Risk Officer
Chetan Bhargiri	CIO, Treasury & Corporate CRO	FRC	Managing Director, CIO CRO	EVP - Chief Risk Officer
Mark Brucker	CCB CRO	FRC	Managing Director, CCB CRO	EVP - Chief Risk Officer
Frank Pearn	JPMC Chief Compliance Officer	FRC	Managing Director, Global Chief Compliance Officer	EVP - Chief Risk Officer
Matthew Cherwin	Global CIO and Treasurer	FRC	Managing Director	Executive Vice President, CFO
Lori Beer	Global Chief Information Officer	FRC	Managing Director, Chief Information Officer	CIB CEO
JF Bessin	Firmwide Risk and Compliance CFO	FRC	Managing Director, CFO	EVP - Chief Risk Officer
Jennifer Piepszak	JPMC CFO	CTC RC	Executive Vice President, CFO	Chairman & CEO
Chetan Bhargiri	CIO, Treasury & Corporate CRO	CTC RC	Managing Director, CIO CRO	EVP - Chief Risk Officer
Matthew Cherwin	Global CIO and Treasurer	CTC RC	Managing Director	Executive Vice President, CFO
Arnaldo Furiani	CTC Head of Market Risk	CTC RC	Managing Director, Market Risk Coverage	CIO CRO
Marie Nourie	CTC CFO	CTC RC	Managing Director, CFO	Executive Vice President, CFO
Mark Catana	CTC Head of Compliance	CTC RC	Managing Director, Compliance Managing Director	CIB Compliance Managing Director
Erik Bisso	Global Head of Investment Portfolio	CTC RC	Managing Director	CIO MD
Bill Cikin	EMEA/APAC Treasurer	CTC RC	Managing Director	CIO MD



Senior Members of Management				
Name	Title	Committee	Title in Directory	LOB of Employees Direct Manager
Andy McGee	Firmwide Risk Executive of Model Risk Governance and Review	CTC RC	Managing Director, Model Risk Governance & Review	EVP - Chief Risk Officer
Nick Conron	CTC Head Credit Risk	CTC RC	Managing Director, Credit Risk	CIO MD
Roger Bongiovanni	Head of Firmwide Structural Interest Rate	CTC RC	Managing Director, Structural Interest Rate Risk	CIO MD
Srini Ramaswamy	Head of ALM Strategy & Analytics	CTC RC	Managing Director, Strategy	CIO MD
Joe Fusco	Head of Regulatory Capital and Liquidity Risk	CTC RC	Managing Director, Credit Risk	CIO MD
Emilio Jimenez	Associate General Counsel of Corporate & Regulatory Law	CTC RC	Managing Director, Associate General Counsel	CIB General Counsel
Paul Brannan	NA Treasurer	CTC RC	Managing Director, NA Treasury	CIO MD
David Beck	Head of Corporate Financial Analytics	CTC RC	Managing Director, Financial Analysis	Executive Vice President, CFO
Daniel Pinto	CIB CEO	CIBRC	Co-President & COO, CEO CIB	Chairman & CEO
Steinar Zinke	CIB CRO	CIBRC	Managing Director, CIB CRO	EVP - Chief Risk Officer
Stephen Eichenberger	Firmwide Risk Executive for Wholesale Credit Risk	CIBRC	CIB Managing Director, Credit Risk	CIB MD
Donna Reino	Firmwide Risk Executive for Country Risk/Risk Management Policy	CIBRC	Managing Director, Country Risk	EVP - Chief Risk Officer
Ian Green	CIB Head of Market Risk & Firmwide Risk Executive for Market Risk	CIBRC	Managing Director, Market Risk Coverage	CIB MD
Andrew Cox	Head of Credit Risk, Europe, Co-CRO EMEA	CIBRC	Managing Director, Reputation Risk	EVP - Chief Risk Officer
Troy Rohrbaugh	Co-Head of Global Rates, FX, Commodities and Emerging Markets	CIBRC	Managing Director, Global Rates	CIB CEO
Carlos Hernandez	Head of Global Banking	CIBRC	Managing Director, Global Coverage	CIB CEO
Takis Georgakopoulos	Head of Treasury Services	CIBRC	Managing Director, Treasury Services	CIB CEO
Jeremy Barnum	CIB CFO	CIBRC	Managing Director, CIB CFO	CIB CEO
Christina Dugger	Head of CIB Compliance	CIBRC	Managing Director, Compliance Managing Director	Managing Director, Global CCO, Corporate Sector
Cyrus Amir-Mokri	General Counsel, CIB Head of Legal	CIBRC	Managing Director, CIB General Counsel	EVP - General Counsel



Senior Members of Management				
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Erin O'Rourke	CIB Fiduciary Risk Executive	CIBRC	Managing Director, Operational Risk	Managing Director, Global CCO, Corporate Sector
Teresa Heitsenrether	Head of Custody and Fund Services	CIBRC	Managing Director, Securities Services	CIB CEO
Marc Badrichani	Head of Global Sales and Research	CIBRC	Managing Director, Global Sales & Marketing	CIB CEO
Steinar Zinke	CIB CRO	CIBRBCC	Managing Director, CIB CRO	EVP - Chief Risk Officer
Silas Williams	CIB Risk Control Manager	CIBRBCC	Managing Director, Control Manager	Managing Director, Corporate Sector Risk Control Management
Erin O'Rourke	CIB Risk Executive - Operational Risk Officer	CIBRBCC	Managing Director, Operational Risk	Managing Director, Global CCO, Corporate Sector
Julian Liau	CIB Risk CFO	CIBRBCC	Managing Director, CIB	CIB Managing Director, CFO
Adam Lipnick	CIB Risk Compliance Officer	CIBRBCC	CIB/Corporate Sector Executive Director, Compliance Director	CIB/Corporate Sector, Compliance Managing Director
John Ward	Head of Firmwide Risk Reporting & Middle Office	CIBRBCC	Managing Director, Risk Reporting	Managing Director, Corporate Sector Risk Control Management
Angelo Curreli	CTO for Risk & Forecasting Solutions	CIBRBCC	Corporate Sector, Managing Director IT Organizational Management	Corporate Sector, Managing Director IT Organizational Management
John Vollkommer	Legal Executive	CIBRBCC	CIB, Managing Director General Counsel	CIB, Managing Director General Counsel
Jena Cohen	Human Resources Executive	CIBRBCC	CIB, Executive Director HR Business Advisor	Corporate Sector, Managing Director HR Business Advisor
Ellen Yormack	CIB Risk Audit Senior Director	CIBRBCC	Corporate Sector, Managing Director Audit Senior Director	Corporate Sector, Managing Director Chief Auditor
Mark Malloy	CIB Credit Review Director	CIBRBCC	Corporate Sector, Managing Director Credit Review Director	Corporate Sector, Managing Director Global Head of Credit Review
Ian Green	CIB Head of Market Risk & Firmwide Risk Executive for Market Risk	CIBRBCC	Managing Director, Market Risk Coverage	CIB MD
Olivier Robert	CIB Risk Executive - Quantitative Research	CIBRBCC	CIB Managing Director, Quantitative Research	CIB Managing Director, Global Rates and Exotics
Mark Astbury	Head of Country Risk Methodology & Governance	CIBRBCC	CIB Managing Director, Country Risk	CIB Managing Director Country Risk
Stephen Eichenberger	Firmwide Risk Executive for Wholesale Credit Risk	CIBRBCC	CIB Managing Director, Credit Risk	CIB MD
Iris Gabrielli	Head of Risk Management Policy Group	CIBRBCC	Corporate Sector Compliance Managing Director	Corporate Sector Compliance Managing Director



Senior Members of Management				
Name	Title	Committee	Title in Directory	LOB of Employees Direct Manager
Cheryl Tabrett	Head of Finance & Risk Data Operations	CIBRBCC	CIO Managing Director Finance Operations	CIO Managing Director Global Operations
Mark Leach	CIB Executive – Business Management – Risk Air Traffic Control	CIBRBCC	CIB Executive Director Business Management	CIB Managing Director Global Management
Kathryn Punke	Co-Risk Chief Data Officer	CIBRBCC	Corporate Sector Executive Director Corporate Risk Management	Corporate Sector Managing Director Risk Finance
Jason Sippel	Chairman, Manager, and CEO	JPMS Board of Managers	Managing Director, Global Equities	CIB MD
Robert Holmes	Manager	JPMS Board of Managers	Managing Director, Head-Corporate Client Banking	CEO CB
Christopher Harvey	Manager	JPMS Board of Managers	Managing Director	CCB MD Communications Executive
Eric Stein	Manager	JPMS Board of Managers	Managing Director	CIB MD
Jeremy Geller	Manager	JPMS Board of Managers	Managing Director	AWM MD
Eric Tepper	Manager	JPMS Board of Managers	Managing Director, Head-Chase Wealth Management	CCB MD Communications Executive
Amanda Winkelman	Manager	JPMS Board of Managers	Managing Director, Operations Executive	CIB MD Operations Executive
Jason Sippel	Chief Executive Officer of JPMS	JPMS Operating Committee	Managing Director, Global Equities (EMEA)	CIB MD
Michael Sebaski	Risk Management	JPMS Operating Committee	Executive Director, Legal Entity Risk	CIB MD Regional CRO
Shawn Gordon	Risk Management	JPMS Operating Committee	Not found in corporate directory	N/A
Joseph Cerullo	Compliance	JPMS Operating Committee	Managing Director, Compliance Managing Director	CIB MD Compliance
Matt Altadonna	Compliance	JPMS Operating Committee	Vice President, Compliance Manager	CIB ED Compliance
Sean Swift	Business Control Officer	JPMS Operating Committee	Executive Director Control Manager, CIB	CIB MD
Oliver Risso-Gill	Business Control Officer	JPMS Operating Committee	Vice President, Compliance Manager, CIB	CIB MD



Senior Members of Management

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Pablo Semper Calvo	Business Control Officer	JPMS Operating Committee	Vice President, Compliance Manager, CIB	CIB MD
James Collins	CFO	JPMS Operating Committee	Managing Director Controller, CIB	CIB MD
Adam Perry	CFO	JPMS Operating Committee	Executive Director Financial Analysis CIB	CIB MD Financial Analysis
Ben Armbrust	CRO	JPMS Operating Committee	Executive Director CIB Credit Risk	CIB MD Collateral
Richard Morrill	CRO	JPMS Operating Committee	Executive Director Market Risk Coverage CIB	CIB MD Market Risk Coverage
James Colman	Operations	JPMS Operating Committee	Managing Director Operations Executive CIB	CIB MD Operations Executive
Roger Klion	Operations	JPMS Operating Committee	Managing Director Operations Executive CIB	CIB MD Operations Executive
Kevin Long	Operations	JPMS Operating Committee	Executive Director Operations Risk/Control Manager CIB	CIB MD Operations Executive
Cecilia Orchard	Audit	JPMS Operating Committee	Managing Director Audit Senior Director CIB	CIB MD Chief Auditor
Bill Freilich	Legal General Counsel	JPMS Operating Committee	Managing Director Associate General Counsel CIB	CIB MD Associate General Counsel
Judith Romaine	Legal General Counsel	JPMS Operating Committee	Executive Director Assistant General Counsel CIB	CIB MD Associate General Counsel
Evan Rutigliano	Technology	JPMS Operating Committee	Executive Director Business Management CIB	CIB MD Business Management
Christopher Galiani	Technology	JPMS Operating Committee	Managing Director IT Organizational Management CIB	CIB MD IT Organizational Management
Peter Jepson	Technology	JPMS Operating Committee	Executive Director IT Organizational Management CIB	CIB MD IT Organizational Management
Nicholas Milazzo	Technology	JPMS Operating Committee	Managing Director IT Organizational Management AWM	AWM MD IT Organizational Management
Vidhya Subramanian	Technology	JPMS Operating Committee	Associate Software Engineering CIB	CIB VP Software Engineering
Justin Zaglio	Technology	JPMS Operating Committee	Executive Director Software Engineering CIB	CIB ED Software Engineering
Ross Riedman	Technology	JPMS Operating Committee	Associate Technology Operations Corporate Sector	Corporate Sector VP Technology Operations



Senior Members of Management

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Binita Narang	Technology	JPMS Operating Committee	Executive Director IT Organizational Management AWM	AWM MD IT Organizational Management
Howard Sklar	Anti-Money Laundering Officer	JPMS Operating Committee	Executive Director Compliance Director Corporate Sector	Corporate Sector MD Compliance
Mary Tohlen	Business Resiliency	JPMS Operating Committee	Vice President Business Resiliency Manager CIB	CIB ED Business Resiliency
Donna Rabin	Business Resiliency	JPMS Operating Committee	Vice President Business Resiliency Manager AWM	AWM VP Business Resiliency
Laura DY Wilson	Business Resiliency	JPMS Operating Committee	Executive Director Business Management CIB	CIB MD Control Manager
Rishi Chada	NBIA CIB	JPMS Operating Committee	Vice President Control Manager CIB	CIB ED Control Manager
Erick Peck	NBIA AM	JPMS Operating Committee	Vice President Control Manager Corporate Sector	Corporate Sector ED Control Manager
Ariana Dalton	NBIA CB	JPMS Operating Committee	Executive Director Control Manager CB	CB MD Operations Executive
Rhett Mitchell	NBIA CCB	JPMS Operating Committee	Vice President Control Manager CCB	CCB ED Control Manager
Samuel Palmer	NBIA CWM	JPMS Operating Committee	Managing Director Business Executive CCB, CWM	CCB MD Communications Executive
Mimi To	NBIA CTC	JPMS Operating Committee	Vice President Control Manager CTC, CIO	CTC CIO MD Control Manager