

THE GOLDMAN SACHS GROUP, INC. RESOLUTION PLAN 2016 SUBMISSION

Public Document

September 30, 2016

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Abbreviations

When we use the terms “Goldman Sachs,” “GS Group,” “the firm,” “we,” “us” and “our” in this document, we mean The Goldman Sachs Group, Inc. (Group Inc. or the parent company) and its consolidated subsidiaries.

When we use the term “the Agencies,” we mean the Board of Governors of the Federal Reserve System (the “Federal Reserve Board”) and the Federal Deposit Insurance Corporation (the “FDIC”).

For convenience, we have compiled the following list of abbreviations; they have also been defined at their first instance in this document.

Affiliates:	
GS&Co.	Goldman, Sachs & Co. (<i>U.S. broker-dealer</i>)
GSAF	Goldman Sachs (Asia) Finance (<i>market-making entity in Hong Kong</i>)
GSALLC	Goldman Sachs (Asia) L.L.C. (<i>broker in Hong Kong, Taiwan & South Korea</i>)
GSAM	Goldman Sachs Asset Management, L.P. (<i>U.S. investment advisor</i>)
GSAMI	Goldman Sachs Asset Management International (<i>UK investment advisor</i>)
GS Bank USA	Goldman Sachs Bank USA (<i>FDIC-insured U.S. bank</i>)
GSI	Goldman Sachs International (<i>U.K. broker-dealer</i>)
GSIB	Goldman Sachs International Bank (<i>U.K. bank</i>)
GSJCL	Goldman Sachs Japan Co. Ltd. (<i>Japanese broker-dealer</i>)
GSLPtnrs	Goldman Sachs Lending Partners L.L.C. (<i>U.S. lending entity</i>)
Group Inc.	The Goldman Sachs Group, Inc. (<i>our parent company</i>)
JANY	J. Aron & Company (<i>U.S. commodity & foreign exchange market maker</i>)

Other Acronyms Used:	
FHLB	Federal Home Loan Bank
FMU	Financial Market Utility
GCLA	Global Core Liquid Assets
HQLA	High Quality Liquid Assets (<i>as defined under the LCR regulations</i>)
IDI	Insured Depository Institution
ISDA	International Swaps and Derivatives Association
LCR	Liquidity Coverage Ratio

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LESS Steering Group	Legal Entity Structure and Strategy Steering Group
MBD	Merchant Banking Division
MIS	Management Information Systems
OTC	Over-the-counter
RCAP	Resolution Capital Adequacy and Positioning
RCEN	Resolution Capital Execution Need
RLAP	Resolution Liquidity Adequacy and Positioning
RLEN	Resolution Liquidity Execution Need
RWAs	Risk-Weighted Assets
SPOE	Single Point of Entry
TLAC	Total Loss-Absorbing Capacity

Other Abbreviations Used:	
2015 Resolution Plan	Plan for the rapid and orderly resolution of Goldman Sachs under the Bankruptcy Code that we submitted to the Agencies on June 30, 2015
2016 Submission	Submission due on October 1, 2016, containing certain information about our resolution plan as required by the Agencies in their April 2016 letter
2017 Guidance	<i>Guidance for 2017 §165(d) Annual Resolution Plan Submissions by Domestic Covered Companies that Submitted Resolution Plans in July 2015</i> , a guidance document issued by the Agencies in April 2016
2017 Resolution Plan	Plan for the rapid and orderly resolution of Goldman Sachs under the Bankruptcy Code that we will submit to the Agencies by July 1, 2017
Dodd-Frank Act	U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act
our Board	The Board of Directors of Group Inc.

Cautionary Note on Forward-Looking Statements

The Resolution Plan is based on a series of hypothetical scenarios and assumptions about future events and circumstances. Accordingly, many of the statements and assessments in the Resolution Plan constitute “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements include statements, other than historical information or statements of current conditions, that relate to our future plans, objectives and resolution strategies (including our expectations and projections regarding the implementation of those strategies), among other things, and to the objectives and effectiveness of our risk management, capital and liquidity policies. The Resolution Plan is based on many significant assumptions, including assumptions about the actions of regulators and creditors, the ability of Group Inc. to advance funds to and re-capitalize the material operating subsidiaries, the state of the capital markets and the economy and the impact of a significant loss event on Goldman Sachs. None of these assumptions may prove to be correct in an actual resolution situation. The Resolution Plan is not binding on a bankruptcy court, the Agencies or any other resolution authority, and the scenarios that we describe and the assumptions that we make in the Resolution Plan are hypothetical and do not necessarily reflect events to which we are or may become subject. In the event of the resolution of Goldman Sachs, the strategies implemented by Goldman Sachs, the Agencies or any other resolution authority could differ, possibly materially, from the strategies we have described. As a result, our actual resolution strategies, or the outcomes of our resolution strategies, could differ, possibly materially, from those we have described.

We have also included information about projects we have undertaken, or are considering, in connection with the shortcomings identified by the Agencies in our 2015 Resolution Plan, the 2017 Guidance, and resolution planning generally. Some of these projects are in process or under development. The statements with respect to these projects and their impact and effectiveness are also forward-looking statements, based on our current expectations regarding our ability to complete and implement those projects and any actions that third parties must take, or refrain from taking, to permit us to complete those projects. As a result, the timing of those projects may change, possibly significantly, from what is currently expected and these projects may not be effective or have the impact we anticipate.

1. Introduction and Summary

Introduction

We believe that resolution planning is a critical building block in addressing the “too big to fail” problem, an objective we fully support. We also support the goal that all financial institutions, regardless of size or complexity, should be able to be resolved without cost to the taxpayer. We have devoted substantial resources across the firm to our resolution planning process, and we have found this to be a useful exercise, not only to improve the resilience and resolvability of Goldman Sachs, but also to reduce complexity in our structure and to drive efficiencies across the organization. The Board of Directors of Group Inc. (our “Board”) and GS Group’s senior management are committed to enhancing our resolvability and have taken an active role by giving direction and providing resources for the many projects that have been undertaken to further improve our resolvability.

In a letter to Goldman Sachs dated April 12, 2016, the Agencies noted improvements in our 2015 Resolution Plan over previous submissions. While they did not find our plan to be deficient¹, they nevertheless identified a number of shortcomings. If the Agencies jointly decide that these shortcomings are not satisfactorily addressed in our 2017 Resolution Plan, they may jointly determine that the 2017 Resolution Plan is not credible or would not facilitate an orderly resolution of our firm under the U.S. Bankruptcy Code. We found all of the Agencies’ findings to be helpful and constructive, and we have devoted substantial resources to addressing each of the identified shortcomings.

The Agencies determined that the informational content of our 2016 annual resolution plan will be satisfied by submission of the following two items:

- a status report on our actions to address the shortcomings; and
- a public section that explains, at a high level, the actions that we plan to take to address the shortcomings.

Section 2 of this Public Document addresses the second of these requirements; however, in the interests of transparency, we include in this document more information about our resolution planning efforts than that required by the Agencies.

¹ When we say that the Agencies did not find our 2015 Resolution Plan to be deficient, we mean that they did not make a joint determination that it was not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code.

Our 2016 Submission has been prepared under the Agencies' final rule (the "Final Rule") implementing the requirement in the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") that we prepare resolution plans. It has also been prepared in light of subsequent guidance and feedback letters from the Agencies, including most recently the "Guidance for 2017 §165(d) Annual Resolution Plan Submissions by Domestic Covered Companies that Submitted Resolution Plans in July 2015" (the "2017 Guidance"). Section 3 of this document describes the actions we have taken to address the 2017 Guidance.

We do not underestimate the complexity of resolving a financial institution such as ours. In order to ensure that we are positioned to execute our resolution strategy should it ever be required in practice, we have considered a wide variety of factors and interdependencies, including many financial, legal, regulatory, organizational, governance and operational matters.

We recognize that resolution planning is about more than merely the creation of a formal resolution plan. It is also about ensuring a strong planning process that is flexible as conditions change, and taking measures so that our resolution strategy is fully operational and embedded in our day-to-day business decisions. The circumstances of a real-world resolution of a complex financial institution are likely to be different from those envisioned in any specific plan. Therefore, as we undertook various initiatives to make Goldman Sachs more resolvable, we chose flexible solutions that could be adapted to a range of failure scenarios and market conditions. Our resolution strategy therefore contains a considerable degree of flexibility, and we believe that the orderly resolution of our firm could be achieved in many different scenarios.

Summary of Actions to Address Shortcomings and 2017 Guidance

This summary describes, at a high level, the actions we have taken to address the shortcomings identified by the Agencies in their April 2016 letter to Goldman Sachs and the matters discussed in their 2017 Guidance. These matters are described in more detail in Sections 2 and 3 of this document, respectively.

In our 2015 Resolution Plan, we described many of the initiatives that we had undertaken in order to make our firm more resolvable, and the Agencies noted several of these in their April 2016 letter. In particular, they noted improvements in the following areas:

- We improved our funding structure and increased our loss-absorbing capacity by increasing our balance of high-quality liquid assets;
- We improved our overall capital position and complied with the Agencies' clean holding company guidance on the parent company's activities;

- We strengthened our service entities and their arrangements with affiliates for continuity of shared services, reduced affiliates' reliance on other affiliates for access to Financial Market Utilities ("FMUs"), and advanced our collateral management processes;
- We took steps to provide for a more rational, less complex legal entity structure, including by grouping similar businesses together under intermediate holding companies, separating operating entities from investing entities, and reducing the overall number of legal entities;
- We simplified our booking model and adhered to the ISDA 2015 Universal Resolution Stay Protocol (the "ISDA Protocol").

Nevertheless, the Agencies also identified a number of shortcomings in our 2015 Resolution Plan that must be addressed in our 2017 Resolution Plan. These, together with the actions we have taken to address them, are described in Section 2. The following is an abbreviated summary of our actions to address the shortcomings:

- Resolution Liquidity Execution Need ("RLEN"): We have substantially enhanced the model² used to estimate the liquidity needed to stabilize our surviving material entities after the parent company's bankruptcy filing. Our enhanced model takes account of intraday liquidity needs, as well as detailed sources and uses of cash underlying our material entities' peak funding needs. These projections include estimated daily inflows and outflows of liquidity, by entity, broken out into intercompany and external flows.
- Wind-Down of Derivatives Portfolios: We have greatly expanded our analysis of the wind-down pathway for segmenting and packaging our derivative portfolios, and have provided detail on the target reduction levels for over-the-counter ("OTC") derivatives.
- Playbooks and Triggers: We have re-assessed our framework of triggers and alerts, and will re-calibrate it to ensure that we would trigger subsidiary funding and recapitalization actions at a time when the firm would still have sufficient liquidity and capital in the relevant entities to conduct an orderly wind-down. We will also update our "Directors' Resolution Playbook," so that the various resolution-related triggers are tied to specific actions.
- Pre-Bankruptcy Parent Support: We have prepared an initial analysis that identifies potential legal obstacles to our parent company's provision of financial support to certain

² "Model" refers to the set of calculations used to estimate the net liquidity surplus (or deficit) at each legal entity and for the firm in aggregate, based on assumptions regarding available liquidity, e.g., high-quality liquid assets (HQLA), and third party and inter-affiliate net outflows.

material entities, and explains how we could seek to ensure that it would be provided as planned. We are also considering certain mitigants specified in the 2017 Guidance (contractually binding mechanisms, pre-positioning of financial resources in material entities and one or more intermediate holding companies) and will implement those we conclude will most effectively withstand potential challenges to the planned financial support.

- Runway Period: We have reviewed the tasks that would need to be completed during the runway period and will ensure that our 2017 Resolution Plan envisions a runway that is long enough to carry them out. We will also prepare a “Bankruptcy Playbook” that contains anticipated first-day and emergency motions. We are further considering our approach to coordinating with regulators in all relevant jurisdictions to support our preferred resolution strategy, with the understanding that cooperation would serve the best interests of local stakeholders.
- Bankruptcy Legal Issues: We have engaged external counsel and prepared legal support for the applicable mechanism we would seek to employ under Section 2 of the ISDA Protocol (i.e., elevation of credit enhancement obligations of Group Inc.) so that derivatives terminations at our surviving operating entities would be stayed. We have prepared a draft emergency motion and proposed form of order detailing the issues a bankruptcy court would likely consider and our best arguments in support of the requested relief.

The 2017 Guidance sets out the Agencies’ expectations with regard to a number of additional resolution planning topics. The additional actions we are taking to address the 2017 Guidance are described in more detail in Section 3, and are summarized below³:

- Resolution Capital Adequacy and Positioning (“RCAP”): We have positioned loss-absorbing instruments at our parent company equal to more than 30% of its risk-weighted assets⁴. In addition, we have pre-positioned significant balances of internal Total Loss-Absorbing Capacity⁵ (“TLAC”) at our material entities, and retain further recapitalization resources at our parent company to meet unanticipated losses at material entities. We strive to balance the certainty associated with pre-positioning internal TLAC directly at material entities with

³ Note that several topics in the 2017 Guidance are the subject of one of the shortcomings described above; in such cases, this summary does not include a further discussion of the same topic.

⁴ Risk-weighted assets are calculated under the Standardized Capital Rules. Loss-absorbing instruments are in the form of common equity, preferred equity, subordinated debt and senior unsecured debt. Estimates are as of December 31, 2015 and assume that senior unsecured debt with traditional covenant default provisions count as eligible TLAC.

⁵ Internal TLAC is in the form of equity and intercompany debt (including certain bank deposits).

the flexibility provided by holding additional recapitalization resources at the parent company.

- Resolution Capital Execution Need (“RCEN”): We have developed a conservative methodology for estimating how much capital our material entities would need so that they could continue operating after the parent company’s bankruptcy filing and be wound down in an orderly manner, while meeting all applicable regulatory capital requirements.
- Resolution Liquidity Adequacy and Positioning (“RLAP”): We have estimated the stand-alone liquidity position of each material entity over a stressed period of 30 days, taking into account the daily contractual mismatches between inflows and outflows, the effect of inter-affiliate frictions, and the daily stressed liquidity flows and potential trapped liquidity as a result of actions that could be taken by third parties. We will hold sufficient liquidity at the parent company to cover the sum of all stand-alone material entity net liquidity deficits, if any.
- Payment, Clearing and Settlement Activities: Where appropriate, we have developed additional points of access to those FMUs that are critical to the successful execution of our preferred resolution strategy.
- Managing, Identifying and Valuing Collateral: We continue to enhance our systems and processes for managing, identifying and valuing the securities collateral we receive and post. We have invested in a technology platform designed to contain all of our Qualified Financial Contracts⁶ and associated metadata, for all our legal entities, in a searchable format and on a single platform. In addition, we are developing a comprehensive collateral management policy that outlines our approach to collateral and serves as a single source for governance.
- Management Information Systems: We undertook an assessment of our ability, in a resolution situation, to prepare timely, accurate and reliable information, by legal entity. We concluded that most of this information can be readily produced, either because it is already used by the firm in the ordinary course of its business or because it could be prepared quickly on an ad-hoc basis.

⁶ As defined in the Federal Deposit Insurance Act.

- Shared and Outsourced Services: We have undertaken numerous initiatives to ensure that, even in a resolution scenario, affiliates and third parties would continue to provide services to any subsidiaries that have the capacity to pay. Examples of such initiatives include the development of legal agreements that provide for continuity of intercompany services even if a contracting entity enters some form of insolvency, a technology platform that stores and visually represents service level agreements, documentation that provides for ongoing access to intellectual property and information technology in a resolution scenario, and employee retention plans for staff who have been pre-identified as essential in a resolution scenario.
- Service Entities: We have re-structured the ownership of our service entities and created new service entities, where appropriate. The result is that, across the firm, we now have a consistent model of operationally and financially resilient service entities that are contractually obligated to continue providing services after the insolvency of our parent company. In addition, we have implemented a project to ensure that inter-affiliate provisions of services are identified, documented and reflect arm's-length pricing considerations, and that they are linked to core business lines and critical operations. Our service entities are operationally and financially resilient because they have their own operational and governance infrastructure, and they will maintain working capital for six months or through the period of stabilization, as required under our preferred resolution strategy.
- Legal Obstacles Associated with Emergency Motions: We are preparing a Bankruptcy Playbook that will include sample emergency and first-day motions substantially in the form expected to be presented to the bankruptcy court. We are preparing an analysis of the issues likely to be raised at the hearing and the best arguments in support of the motion. We have also engaged legal counsel to consider the steps the firm could take to provide key domestic and foreign authorities necessary assurances to avoid objections to the emergency motion. We are considering the impact on our preferred resolution strategy and contingency arrangements in the event regulatory authorities do object or the bankruptcy court does not grant the emergency motion.
- Legal Entity Rationalization Criteria: We established a set of criteria for a less complex, more rational legal entity structure, and then proceeded to simplify our corporate structure to conform our firm to these criteria. We have reduced the number of consolidated entities,

reduced transactional interconnectedness and grouped legal entities with common features into separate ownership chains under intermediate holding companies.

- Separability: We have identified a number of discrete operations that could potentially be sold in a resolution scenario. With the help of the relevant business units and specialized “deal teams,” we have prepared a detailed analysis of the practical actions that would need to be taken to execute such options. We have also taken steps to facilitate due diligence procedures, such as by making relevant information easily available to potential purchasers in a “data room.”
- Stabilization: We have prepared a communication strategy and a series of playbooks to enhance our material entities’ ability to navigate the stabilization period immediately following the parent company’s bankruptcy filing and emerge on a sufficiently stable footing to wind down in an orderly manner.
- Derivatives - Active Wind-Down Analysis: We have modeled our preferred pathway for segmenting, packaging and selling our material operating entities’ derivatives portfolios in a manner that is generally consistent with the active wind-down strategy outlined in the 2017 Guidance⁷. We are calculating the financial resources required to execute this wind-down strategy, and will incorporate the results into the calculation of our RCEN and RLEN estimates. We designed our strategy to ensure that the portfolio remaining at the end of the wind-down period would not present a systemic risk to financial markets.
- Derivatives - Passive Wind-Down Analysis: In order to establish an alternative benchmark and address the possibility that an active wind-down strategy may not unfold as expected, we have also analyzed the effect of a “passive wind-down” of our material operating entities’ derivatives portfolios. By this we mean that our material operating entities would not take active steps to sell their derivatives portfolios, but would instead allow individual derivative contracts to expire upon reaching contractual maturity; they would, however, actively sell their non-derivative inventory positions in an orderly manner.

⁷ The wind-down of our derivatives portfolio envisioned under our preferred resolution strategy differs from the “active wind-down strategy” in the 2017 Guidance because it assumes that certain material operating entities enter bankruptcy proceedings, whereas the 2017 Guidance assumes that all such entities survive.

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- Capabilities - Transparency of Risk: We have strong systems capabilities that allow us to report granular inventory-level information as part of our standard Management Information Systems (“MIS”) both at a firmwide and entity level.
- Capabilities - Prime Brokerage: We have taken numerous steps to help ensure that the clients of our prime brokerage business are ready and able to transfer their business to alternative service providers in a manner that does not disrupt their business or materially worsen the liquidity position of our firm.

2. Actions to Address Shortcomings in Our 2015 Resolution Plan

The Agencies' April 2016 letter to Goldman Sachs described several improvements in our 2015 Resolution Plan over previous submissions but also identified six shortcomings. We found all of the Agencies' findings to be helpful and constructive, and we have devoted substantial resources to address each of them. Remediation of these shortcomings falls under the oversight of our Firmwide Regulatory Findings Remediation Governance Committee to ensure that they are resolved to the satisfaction of senior management, Internal Audit, our Board and, most importantly, the Agencies.

We have summarized (in italics, below) each of the shortcomings that the Agencies identified, and have then described the actions that we have undertaken to address them. In some cases, although we have completed the work required to address the specific shortcoming that was identified by the Agencies, we intend to undertake additional work to incorporate fully the new requirements into our business-as-usual processes. In other cases, we have either completed the required actions or we will complete them over the coming months; and in all cases, we will continue to validate, challenge and refine the assumptions we have made and the actions we have taken to ensure the robustness of our 2017 Resolution Plan. All of the shortcomings will be fully remediated when we submit our 2017 Resolution Plan.

LIQUIDITY - RESOLUTION LIQUIDITY EXECUTION NEED:

Description of Shortcoming in 2015 Resolution Plan:

The Agencies identified a shortcoming regarding our model and process for estimating the liquidity needed to fund our material entities⁸ during resolution. Specifically, the Agencies noted that our 2015 Resolution Plan did not have an appropriately supported liquidity methodology to estimate the amount of liquidity needed in resolution for all material entities.

The Agencies noted that our 2015 Resolution Plan provided estimates of stressed outflows during the runway period and into the postfailure period for key material entities. While these estimates show that key material entities have a certain amount of unencumbered liquid assets through the

⁸ "Material entities" refers to the material entities identified in the 2015 Plan.

resolution period, they did not detail the specific level of liquidity needed by each material entity to operate following Group Inc.'s bankruptcy filing. While the 2015 Resolution Plan illustrated daily projections of ending HQLA for key material entities, these projections were not sufficiently supported because they lacked detailed daily sources and uses of cash schedules. The firm's estimates also did not include a breakout of inter-affiliate flows and arrangements that could impact material entity liquidity forecasts. The Agencies determined that the lack of detail noted above raised questions about our 2015 Resolution Plan's estimates of the peak funding needs of Goldman Sachs' material entities in resolution.

Actions we have taken to address this shortcoming:

We recognize the significance of the shortcoming identified by the Agencies, and have substantially enhanced the model that we use to estimate the liquidity needs of our material entities in resolution. This liquidity model is essential because it allows our parent company to set in motion the process of filing for bankruptcy before our liquidity falls below the amount needed to enable our material operating entities to conduct an orderly wind-down.

Specifically, we have enhanced our model to estimate the liquidity needed after the parent company's bankruptcy filing to stabilize the surviving material entities. The enhancements give us the ability to provide the following information:

- Estimates of the daily inflows and outflows of liquidity in the post-failure stabilization period for all surviving material entities, on an entity-by-entity basis, taking into account each entity's operating expenses, working capital and intraday requirements, as well as our preferred resolution strategy, intercompany frictions, regulatory requirements and market expectations;
- A comprehensive breakout of inter-affiliate liquidity flows and their impact on surviving material entities' RLEN requirements;
- Estimates of the intraday liquidity needs in resolution, by material entity; and
- Detailed sources and uses of cash underlying our material entities' peak funding needs following a Group Inc. bankruptcy filing during the stabilization period.

During the period remaining until we submit our 2017 Resolution Plan, we will continue to refine and enhance the liquidity model used to calculate our RLEN forecasts, which will then become part of our business-as-usual processes.

DERIVATIVES AND TRADING ACTIVITIES:

Description of Shortcoming in 2015 Resolution Plan:

The Agencies identified a shortcoming regarding our plan for winding down our derivatives portfolio. Our 2015 Resolution Plan called for a wind-down of trading activities, including derivatives, in our broker-dealer and banking entities. Although we explored options and potential strategies for winding down the derivative portfolios, the Agencies found that our 2015 Resolution Plan lacked specificity regarding implementation of the wind-down. They noted that our 2015 Resolution Plan also did not address material financial interconnections among the banking entities and the broker-dealers (including associated risks) in the wind-down of the trading portfolios, or provide sufficient detail on the target reduction levels for OTC derivatives and their systemic risk profile. In effect, the Agencies considered that our 2015 Resolution Plan leaves unaddressed a significant volume of derivatives and fails to explain how we would maintain, sell or wind down these exposures to achieve an orderly resolution.

Actions we have taken to address this shortcoming:

Our preferred resolution strategy calls for our derivatives portfolio to be wound down to the point where it is no longer of systemic importance, in a manner that is generally consistent with the active wind-down strategy outlined in the 2017 Guidance. We deployed substantial resources across both our revenue-producing divisions and our independent control and support functions to address the shortcoming identified by the Agencies. This work benefitted significantly from the reporting functionality of our Management Information Systems, which we designed to collect and analyze data in a seamless manner across all legal entities of the firm. The resulting analysis now demonstrates in detail how our derivatives portfolio can be segmented, packaged and wound down. Specifically, we have taken the following steps:

- We have analyzed our derivatives portfolio by underlying asset type and maturity profile;
- We have analyzed the degree of transactional interconnectedness between affiliates of GS Group;
- We have prepared a quantitative and qualitative analysis of the nature, concentration, maturity profile and liquidity of the derivative trading positions at a detailed business segment level;
- We have analyzed the split between cleared and uncleared derivatives, by both business area and counterparty;
- We have demonstrated the effect of contractual maturity roll-offs over the wind-down period;

- We have estimated the cost, at a detailed business segment level, of fully winding down our derivative inventory
- We have run alternate costing approaches to estimate the sensitivity of our calculations to various inputs;
- We have identified less liquid, more bespoke and longer-dated derivative transactions and weighed the resources required to manage them through to contractual maturity against the higher exit costs of an earlier sale or novation;
- We have considered the manner and any additional cost of incentivizing clients to novate; and
- We have incorporated the estimated losses and liquidity required to support the wind-down of the derivatives portfolio into our calculation of RCEN and RLEN.

GOVERNANCE MECHANISMS - PLAYBOOKS and TRIGGERS:

Description of Shortcoming in 2015 Resolution Plan:

The Agencies identified a shortcoming regarding the governance mechanisms necessary to facilitate timely execution of the planned subsidiary funding and recapitalizations. Specifically, they considered that we had failed to demonstrate that key actions would be taken when required to successfully execute the firm's resolution strategy, because:

- *although we developed triggers designed to escalate information to senior management and our Board through multiple phases as the condition of the firm worsens, as well as triggers for the consideration of resolution-related actions, they do not link directly to specific actions;*
- *the triggers may not be appropriately calibrated to facilitate successful execution of our resolution strategy because resolution-related actions may need to be taken earlier in the process than might result from the current triggers; and*
- *although the Board's playbook provided some discussion of resolution-related actions, it lacks objective and timely triggers.*

Actions we have taken to address this shortcoming:

We recognize that governance mechanisms which ensure timely execution of the planned subsidiary funding and recapitalization measures are critically important to a successful execution of our preferred resolution strategy. As the Agencies have noted, we instituted a framework of

triggers and alerts in order to ensure that information is escalated to senior management and our Board through multiple phases of the firm's worsening condition. We have now re-assessed these triggers in light of the Agencies' guidance and the RLEN and RCEN requirements of both our parent company and our material operating entities, and we are re-calibrating our framework to ensure that we would trigger subsidiary funding and recapitalization actions at a time when the firm would still have sufficient liquidity and capital in the relevant entities to conduct an orderly wind-down.

As part of our 2015 resolution planning efforts, we prepared a "Directors' Resolution Playbook," which is designed to assist our Board in making well-considered decisions and taking appropriate actions in the run-up to a bankruptcy filing. We are updating this Playbook so that the various resolution-related triggers are tied to specific actions, thereby ensuring that the associated actions would be carried out in a timely manner. We are also assessing the viability of other structures, such as contractually binding mechanisms or intermediate holding companies, designed to ensure that the parent company would take action to provide sufficient and timely financial resources to its material operating entities.

Our 2017 Resolution Plan will contain an updated Directors' Resolution Playbook that incorporates clearly identified triggers, linked to specific actions, for:

- the taking of recovery actions;
- the recapitalization of certain subsidiaries prior to Group Inc.'s bankruptcy filing;
- the funding of certain subsidiaries prior to Group Inc.'s bankruptcy; and
- the timely execution of a bankruptcy filing and related pre-filing actions.⁹

GOVERNANCE MECHANISMS - PRE-BANKRUPTCY PARENT COMPANY SUPPORT:

Description of Shortcoming in 2015 Resolution Plan:

The Agencies identified a shortcoming in our 2015 Resolution Plan regarding the limited analysis of the range of potential legal challenges that could adversely affect Group Inc.'s approach to providing capital and liquidity to subsidiaries prior to bankruptcy, so that they could remain open and continue operating for a sufficient period to allow their orderly wind-down or other disposition outside of resolution proceedings.

⁹ Key pre-filing actions include the preparation of the emergency motion required to be decided shortly after Group Inc.'s bankruptcy filing, consistent with the ISDA Protocol.

Actions we have taken to address this shortcoming:

A cornerstone of our preferred resolution strategy is that, prior to filing for bankruptcy, our parent company would provide certain subsidiaries with sufficient additional capital and liquidity to allow them to remain open and continue operating for a sufficient period to allow their orderly wind-down or other disposition outside of resolution proceedings. We therefore recognize the importance of remediating this shortcoming in a satisfactory manner.

With the help of external counsel, we have prepared an analysis that identifies potential legal obstacles under both state law and bankruptcy law to the provision of such financial support. This analysis explains how we could seek to ensure that the financial support would be provided as planned, and analyzes potential legal obstacles including, among others, claims of fraudulent transfer, preference, breach of fiduciary duty and equitable claims to enjoin the provision of financial support. The analysis considers each element of the potential obstacles to the financial support, the anticipated timing for commencement and resolution of the potential claims, and the extent to which the adjudication could affect execution of our preferred resolution strategy. We have identified mitigants to withstand potential challenges to the planned financial support, and we continue to evaluate which of them would be most effective. These include contractually binding mechanisms, pre-positioning of financial resources in material entities and the creation of one or more intermediate holding companies.

Over the coming months, we will continue to test and challenge the assumptions that we have made. Our 2017 Resolution Plan will include a detailed legal analysis of the potential state law and bankruptcy law challenges, as well as mitigants to the planned provision of additional capital and liquidity to material entities. It will also include an updated Directors' Resolution Playbook and other relevant governance playbooks reflecting any developments arising from our further consideration of the potential legal challenges to the provision of capital and liquidity to material entities, including any changes in approach that we have implemented.

OPERATIONAL – RUNWAY:

Description of Shortcoming in 2015 Resolution Plan:

The Agencies identified a shortcoming with regard to our operational ability to execute our preferred strategy, given the short duration of the runway assumed in our 2015 Resolution Plan. Specifically, they noted, among other things, that:

- *the proposed recapitalization would place the firm's governance bodies under severe time constraints, leading to the potential risk of insufficient processing of relevant information;*
- *significant global coordination of governance bodies may be required to effectively implement the recapitalization within the suggested timeframes; and*
- *we make the assumption that regulators would support recapitalization in all relevant jurisdictions and would not take actions that could impede the execution of the recapitalization strategy.*

Actions we are taking to address this shortcoming:

Our ability to execute our preferred resolution strategy depends, to a large degree, on our ability to carry out certain actions during the runway period so that our preferred resolution process can unfold in an orderly manner. Recognizing the importance of this shortcoming, we have reviewed the tasks that would need to be completed during the runway period, including the preparation and execution of bankruptcy filings and coordination with various governance bodies within the firm and with regulators in the United States and other jurisdictions. We will carefully assess the amount of time that would be needed to complete each of these tasks.

We will use this analysis to ensure that the runway period is long enough to carry out all of the tasks that must be accomplished during this time, and we will provide further support for the operational feasibility of the strategy that we present. In addition, in order to enhance our ability to meet our projected timetable, we will advance our preparation for the bankruptcy filings we would submit under our preferred resolution strategy, and include in our 2017 Resolution Plan a “Bankruptcy Playbook” that contains anticipated first-day and emergency motions. This advance preparation, together with the re-calibration of our framework of triggers and alerts that we discuss above, are intended to ensure that sufficient time is allowed for the operational execution of our resolution strategy. During the coming months, we will conduct further preparedness testing to ensure that operational aspects of our resolution strategy could be executed in a timely manner, and will consider any challenges faced by a longer runway period.

We have concluded that it is not generally in the interests of regulatory agencies to put material entities into insolvency proceedings if they maintain sufficient capital and liquidity, and if they can demonstrate the ability to meet all their obligations. Consequently, we believe that our preferred resolution strategy is largely aligned with the interests of the regulatory agencies in the three countries where our operations are concentrated (i.e., the United States, the United Kingdom and Japan). In order to give further support to our resolution strategy, we have developed a

comprehensive communications playbook, one objective of which is to coordinate with regulators in all relevant jurisdictions.

OPERATIONAL - BANKRUPTCY LEGAL ISSUES

Description of Shortcoming in 2015 Resolution Plan:

The Agencies noted that, under our preferred resolution strategy, our parent company would provide financial support to certain material entity subsidiaries to allow them to remain open and continue operating following the parent company's bankruptcy filing, as required for their respective sale, transfer or wind-down outside of resolution proceedings. However, they noted that we did not provide sufficient basis for the assumption in our 2015 Resolution Plan that a bankruptcy court would "issue an order meeting the 'DIP Stay Condition,'" as defined in the ISDA 2014 Resolution Stay Protocol, subsequently superseded by the ISDA 2015 Universal Resolution Stay Protocol (the "ISDA Protocol").

Actions we are taking to address this shortcoming:

We have engaged external counsel, and have prepared legal support for the applicable mechanism we would seek to employ under Section 2 of the ISDA Protocol (i.e., elevation of credit enhancement obligations of Group Inc.) so that the termination of derivatives transactions at our surviving operating entities would be stayed. We have prepared a draft emergency motion and proposed form of order detailing the issues a bankruptcy court would likely consider; this includes our best arguments in support of the requested relief.

We will continue to refine and test these assumptions in the coming months, and will present the final legal documentation in our 2017 Resolution Plan.

3. Actions to Address Guidance for Our 2017 Resolution Plan

In April 2016, the Agencies issued “Guidance for 2017 §165(d) Annual Resolution Plan Submissions by Domestic Covered Companies that Submitted Resolution Plans in July 2015” (the “2017 Guidance”). This sets out the Agencies’ expectations with regard to resolution planning on the following topics: capital; liquidity; governance mechanisms; operational matters; legal entity rationalization and separability; derivatives and trading activities. We have refined our preferred resolution strategy in response to this guidance, much of which is consistent with our existing approaches to these topics.

We set out below the main actions we are taking to address the 2017 Guidance:

CAPITAL:

Resolution Capital Adequacy and Positioning

External Total Loss-Absorbing Capacity (“TLAC”): We have positioned significant balances of loss-absorbing instruments at our parent company (equal to more than 30% of our risk-weighted assets (“RWAs”) calculated under the Standardized Capital Rules¹⁰) in the form of common and preferred equity, as well as subordinated and senior unsecured debt¹¹.

Internal TLAC: We have pre-positioned significant balances of internal TLAC at our material entities in the form of equity and intercompany debt (including certain bank deposits). In addition, we hold further recapitalization resources in the form of contributable assets at our parent company in order to meet unanticipated losses at material entities. We strive to balance the certainty associated with pre-positioning internal TLAC directly at material entities with the flexibility provided by holding additional recapitalization resources at the parent company.

Clean distribution lines for internal TLAC: We have defined the criteria for pre-positioned internal TLAC that is in the form of intercompany debt when there are one or more intermediate holding companies between the material entity and the parent company (which may include, for example, matching the seniority and tenor of intercompany debt between all entities in the chain). These

¹⁰ The Standardized Capital Rules are set out in the Federal Reserve Board’s risk-based capital rules.

¹¹ Estimates are as of December 31, 2015 and assume that existing instruments with traditional covenant default provisions count as eligible TLAC.

criteria are intended to mitigate the uncertainty related to potential creditor challenge. We intend to conform our practices to the new criteria in the coming months.

Resolution Capital Execution Need

RCEN Methodology: We have developed a methodology for regularly estimating the amount of capital that would be needed to support the material entities that survive under our preferred resolution strategy, so that they could be wound down in an orderly manner following the parent company's bankruptcy filing. Our methodology uses conservative forecasts for losses and RWAs, and incorporates estimates of potential additional capital needs through the resolution period, consistent with our preferred resolution strategy. We have calibrated our RCEN methodology such that surviving material entities exceed all applicable regulatory capital requirements for "well-capitalized" status, that they meet estimated additional capital needs throughout resolution, and that they have sufficient capital to maintain market confidence as required in order to carry out our preferred resolution strategy.

During the period remaining until we submit our 2017 Resolution Plan, we will continue to refine our enhanced model and the platform to calculate our RCAP and RCEN requirements, which will then become part of our business-as-usual processes.

Governance Mechanisms: As discussed in Section 2, we have re-assessed our framework of triggers and alerts in light of the Agencies' guidance and our RCEN estimates, and will calibrate it at levels which ensure that we would trigger resolution at a time when the firm still has sufficient capital at the relevant entities to conduct an orderly wind-down.

Consistent with our governance processes and controls for the use of models and methodologies, we plan to have our RCEN methodology independently reviewed before submission of our 2017 Resolution Plan.

LIQUIDITY:

Resolution Liquidity Adequacy and Positioning

Granularity of RLAP Calculations: We have estimated the stand-alone liquidity position of each material entity over a stressed period of 30 days in accordance with the RLAP section in the 2017 Guidance, which includes taking into account the daily contractual mismatches between inflows and outflows, the effect of inter-affiliate frictions, and the daily stressed liquidity flows and trapped liquidity as a result of potential actions taken by clients, counterparties, FMUs and regulatory

authorities. We will demonstrate that we hold sufficient liquidity at the parent company to cover the sum of all stand-alone material entity net liquidity deficits, if any. The stand-alone net liquidity position of each material entity is measured using our internal liquidity stress test assumptions, and treats inter-affiliate exposures in the same manner as third-party exposures. It assumes that a net liquidity surplus at one material entity cannot be moved to meet net liquidity deficits at other material entities or to augment our parent company's resources.

During the period remaining until we submit our 2017 Resolution Plan, we will continue to refine and enhance the model used to calculate our liquidity forecasts, which will then become part of our business-as-usual processes.

Resolution Liquidity Execution Need ("RLEN")

RLEN Methodology: We have developed a methodology for estimating the minimum operating liquidity needed at each surviving material entity in order to stabilize these entities and allow them to operate post-filing in support of our wind-down strategy. Our methodology captures surviving material entities' liquidity needs to cover intraday requirements, operating expenses and working capital; it also incorporates day-by-day estimates of peak funding needs based on daily cash flow forecasts by material entity, taking into account the effect of inter-affiliate transactions. We have calibrated our RLEN methodology such that the surviving material entities could operate post-filing consistent with regulatory requirements, market expectations and our preferred resolution strategy.

Governance Mechanisms: As discussed in Section 2, we have re-assessed our framework of triggers and alerts in light of the Agencies' guidance and our RLEN estimates, and will calibrate it at levels which ensure that we would trigger resolution at a time when the firm still has sufficient liquidity and capital to conduct an orderly wind-down.

Consistent with our governance processes and controls for the use of models and methodologies, we plan to have our RLEN methodology independently reviewed before submission of our 2017 Resolution Plan.

GOVERNANCE MECHANISMS:

Governance Playbooks and Triggers

We believe that advance preparation is a valuable tool to ensure that processes are in place and people are in a position to respond quickly in the event of a rapidly unfolding situation. To that end, we have prepared a series of playbooks to enable our Board, the boards of our material entities,

senior management and staff to make well-considered decisions and take appropriate actions across functional departments and legal entities. Where appropriate, the playbooks incorporate the triggers that are discussed more fully in Section 2. We have also prepared a communication strategy to facilitate the timely provision of information to regulators, staff, clients and other stakeholders in a resolution scenario; and we have prepared playbooks that outline how cross-jurisdictional intercompany shared services could be maintained in a resolution scenario.

Pre-Bankruptcy Parent Company Support

As discussed in Section 2, we have prepared an analysis that identifies potential legal obstacles to the provision of financial support to subsidiaries and explains how we could seek to ensure that such support would be provided as planned. The potential legal obstacles in the analysis include, among others, claims of fraudulent transfer, preference, breach of fiduciary duty and equitable claims to enjoin the provision of financial support. We are also considering the mitigants to potential challenges to the planned financial support specified in the 2017 Guidance, which include a contractually binding mechanism, pre-positioning of financial resources in material entities, and creation of one or more intermediate holding companies. Before we file our 2017 Resolution Plan, we will implement those that we conclude will most effectively withstand creditor challenge.

OPERATIONAL:

Payment, Clearing and Settlement Activities

We have identified those Financial Market Utilities, including agent banks, that are critical to the successful execution of our preferred resolution strategy and, where appropriate, we have developed additional points of access to them. Our estimated liquidity requirements in a stressed scenario assume a reduction in intraday credit provided to our material entities and the imposition of substantially higher margin requirements. We have provided optionality to our operating entities to maintain access to these FMUs following the bankruptcy of our parent company or other affiliates, and have prepared playbooks to support the operationalization of the necessary actions.

Managing, Identifying and Valuing Collateral

We continue to enhance our systems and processes for managing, identifying and valuing the securities collateral received from and posted to both external parties and affiliates in order to ensure that collateral flows can be properly managed in a timely manner, even against the backdrop of spikes in volume during a period of stress. After undertaking an assessment of our ability to prepare timely, accurate and reliable information, by legal entity, as required in a

resolution situation, we concluded that our systems already identify the main data attributes that are essential to manage the sources and uses of securities collateral effectively, including the valuation of the collateral, the supporting documentation relating to it, and the legal enforceability, segregation and re-hypothecation status of the collateral. In addition, the functionality provided by our systems enables us to:

- track sources and uses of collateral;
- provide information on cross-entity and cross-contract netting;
- identify CUSIP and asset-class information on collateral pledged to specific counterparties on a T+1 basis; and
- track and report on inter-affiliate collateral pledged and received.

We have also invested in a technology platform that is designed to contain all of our Qualified Financial Contracts and associated metadata, for all our legal entities, in a searchable format and on a single platform. Further, we are developing a comprehensive collateral management policy that outlines our approach to collateral and serves as a single source for governance.

Management Information Systems

In order to ensure that we have resolution-ready management information systems, we undertook an assessment of our ability to prepare timely, accurate and reliable information, by legal entity, as required in a resolution situation. We concluded that most such information can be readily produced, either because it is already used by the firm in the ordinary course of its business or because it could be prepared quickly on an ad-hoc basis. We believe that we are well positioned to have the Management Information Systems needed to provide the range of information that might be required in order to make appropriate decisions both before and during a resolution situation.

Shared and Outsourced Services

Shared Services: We have devoted significant resources to ensure the readiness of affiliates and third parties, following a bankruptcy of Group Inc., to continue providing services to any of Group Inc.'s subsidiaries that have the capacity to pay. Specifically:

- we have established the firmwide Shared Services Governance Group to oversee the operational continuity of shared services in both a business-as-usual context and in the context of the resolution of the firm;
- we have identified the staff functions that are essential to maintaining the firm's critical operations and developed options to ensure the retention of the relevant employees;

- we are revising the documentation supporting our intercompany services to ensure that they provide for continuity of service even if a contracting entity enters some form of insolvency;
- we have implemented a project to ensure that inter-affiliate provisions of services are identified, documented and reflect arm's-length pricing considerations, and that they are linked to core business lines and critical operations;
- we have developed a technology platform that stores service level agreements and allows them to be represented visually;
- we have enhanced the legal agreements between our material entities to enable continued access to intellectual property and information technology in a resolution scenario;
- we have transferred all of our shared technology fixed assets into service entities;
- we have identified all resolution-critical external vendors and are seeking to negotiate modifications of our legal agreements with them to provide for the continuity of service for surviving entities, even if a contracting entity enters some form of insolvency proceedings; and
- we have created a series of playbooks that describe the arrangements made to safeguard against the loss of access to employees, vendors, technology, intellectual property or facilities in the event that any of our subsidiaries providing material intercompany services enters into insolvency proceedings.

Service Entities: Following a study to determine the corporate structure for affiliated service entities that would most effectively support our needs in resolution, we proceeded to re-structure the ownership of our service entities so that, across our firm globally, we now have a consistent model that provides for the continuity of services after the insolvency of our parent company. We have developed a number of criteria for an effective service delivery model that enables our material operating entities to continue to function for a period of time after the parent company enters insolvency proceedings.

Our service entity subsidiaries would provide continuity of services after the insolvency of our parent company primarily because they are contractually obligated to do so and they are operationally and financially resilient. They are contractually obligated by intercompany services agreements which stipulate that affiliated shared service providers may neither terminate the agreements nor suspend or delay performance of their obligations to provide services due to the insolvency of the service recipient or other affiliates. In addition, they are operationally and financially resilient because they have their own operational and governance infrastructure, and they will maintain working capital for six months or through the period of stabilization, as required under our preferred resolution strategy.

Legal Obstacles Associated with Emergency Motions

First-Day Issues: We have prepared an analysis of issues that are likely to be raised at the hearing on the first-day emergency relief motion¹² and the best arguments in support of the motion. Issues that we have considered include, among others, possible assertions by creditors that they had insufficient opportunity to respond to the emergency motion, given that a creditors' committee is unlikely to have been appointed by this time. Because our preferred strategy assumes that the parent company would seek to remain obligated on its guarantees, our analysis considers the legal basis upon which it would do so, the ability of the bankruptcy court to prevent third parties from interfering with the parent company or its subsidiaries in bankruptcy, and the interplay of public policy concerns (such as the need to preserve financial stability) with the bankruptcy court's decisions.

Regulatory Implications: We have engaged legal counsel to consider the steps the firm could take to provide key domestic and foreign authorities necessary assurances to avoid objection to the emergency motion, and are considering the potential impact on our preferred resolution strategy if they do object.

Contingency Plans: We are considering contingency arrangements in the event the bankruptcy court does not grant the emergency motion, including alternative ways of satisfying the conditions of the ISDA Protocol.

Format: We will prepare a "Bankruptcy Playbook," which will include a sample emergency motion and first day motions substantially in the form they would be presented to the bankruptcy court.

LEGAL ENTITY RATIONALIZATION AND SEPARABILITY:

Legal Entity Rationalization Criteria

We have made significant progress towards the goal of a less complex and more rational legal entity structure. Even before submission of our 2015 Resolution Plan, we had established a set of criteria with the objective of ensuring the safety and soundness of the firm under a range of conditions, protecting our insured depository institution from losses incurred by non-bank affiliates, supporting our preferred resolution strategy and minimizing risk to U.S. financial stability. We then

¹² This is the hearing at which an affiliate in Chapter 11 proceedings seeks court approval of an order to stay all contracts under the ISDA Protocol, subject to the condition either that the claims are elevated to administrative priority status or that the contracts are transferred to a bankruptcy bridge company.

evaluated the firm's existing corporate structure against these criteria and identified almost 100 individual projects designed to conform our structure to them. We set ambitious goals for implementing these projects, and have completed most of them.

We have now greatly simplified our corporate structure, including by reducing the number of consolidated entities and intermediate holding companies. Importantly, in order to simplify the sale of businesses in a resolution scenario, we have completed several "business-in-a-box" initiatives, whereby legal entities that would likely be sold together in resolution are grouped into separate ownership chains. For further discussion of this work and for the criteria, see Section 6: "Material Entities and their Operational Interconnectedness."

Separability

We have identified a number of discrete operations that could potentially be sold in either a recovery or resolution scenario. The criteria described above, and the steps taken to conform our legal entity structure to them, have greatly facilitated our ability to carry out such sales and have made a broader range of alternatives available to us in both recovery and resolution. With the help of the relevant business units and specialized "deal teams," we have prepared a detailed analysis of the practical actions that would need to be taken to execute such options, and have taken steps to facilitate due diligence procedures, such as by making relevant information easily available in a "data room" to potential purchasers.

Governance

We recognize that the introduction of any new business activity or significant change to existing business activity creates the potential to add complexity and make resolution more difficult. To address this, we have updated our new activity process so that, as part of each approval, the impact on our resolution strategy is considered and resolved. We are also updating other broader corporate governance procedures to ensure that all relevant governance committees of the firm specifically address resolution matters as part of their approval process.

DERIVATIVES AND TRADING ACTIVITIES:

Stabilization Period

We have taken a number of steps designed to enhance the ability of our material entities to navigate the stabilization period (i.e., the period of days or weeks immediately following the parent

company's bankruptcy filing) and emerge on a sufficiently stable footing to begin the process of winding down in an orderly manner. In particular:

- we have prepared a communication strategy to facilitate the timely provision of information to regulators, staff, clients, key FMUs and agent banks in a resolution scenario;
- we have prepared a series of communication playbooks for regulators, clients, key FMUs, and clearing and settlement agent banks; and
- although our preferred resolution strategy does not call for specific credit ratings for our material operating entities following our parent company's bankruptcy filing, we have nevertheless prepared rating agency playbooks for certain material operating entities in order to facilitate the stabilization of these entities and to introduce a further degree of flexibility to our resolution planning.

Active Wind-Down Analysis

We have modeled a wind-down of our material operating entities' derivatives portfolios in a manner that is consistent with the "active wind-down" strategy outlined in the 2017 Guidance. We recognize that the wind-down of derivatives portfolios is a critical component of a resolution strategy, and we have paid particular attention to developing a credible pathway for segmenting, packaging and selling ours.

We are calculating the financial resources required to execute this wind-down strategy, and will incorporate the results into the calculation of our RCEN and RLEN estimates. Our analysis assumes that our material operating entities are unable to access bilateral OTC markets, and their hedging activities are limited to exchange-traded and centrally-cleared instruments. As noted in Section 2, we deployed substantial resources across both our revenue-producing divisions and independent control and support functions in order to enhance the granularity of our analysis. Our efforts benefitted significantly from the reporting functionality of our MIS, which have been designed to collect and analyze data in a rapid, seamless manner across the entire firm, at both an aggregate and an individual legal entity level. Our analysis now demonstrates, on an entity-by-entity basis, how our derivatives portfolio could be wound down, taking into account the effect of intercompany derivatives.

We have also prepared a detailed analysis of the derivatives portfolio remaining at the end of the active wind-down period. This residual portfolio would no longer present a systemic risk to financial markets.

Passive Wind-Down Analysis

In order to establish an alternative benchmark and address the possibility that an active wind-down strategy may not unfold as expected, we have also performed a preliminary analysis of the effect of a “passive wind-down” of our material operating entities’ derivatives portfolios. By this we mean that our material operating entities would not take active steps to sell their derivatives portfolios, but would instead allow individual derivative contracts to expire upon reaching contractual maturity; they would, however, actively sell their non-derivative inventory positions in an orderly manner.

As in our active wind-down analysis, we assume under this scenario that all our material operating entities are unable to access bilateral OTC markets, and their hedging activities are limited to exchange-traded and centrally-cleared instruments. We have performed a detailed calculation of the material operating entities’ capital and liquidity needs until the point when they are fully depleted, taking into account the cost of maintaining sufficient staff and infrastructure to support the strategy; we have also prepared an analysis of the residual portfolio at this point, and have determined that it does not present systemic risk to financial markets. This calculation has been performed at the same level of granularity as our active wind-down analysis, and has involved inputs from our revenue-producing divisions and independent control and support functions.

Capabilities

Transparency of Risk: As noted above, we have strong systems capabilities that allow us to report granular inventory-level information as part of our standard MIS both at a firmwide and entity level. These systems allow us to track and monitor market, credit and liquidity risk and regulatory capital requirements on both an aggregate and a legal entity basis, and to monitor transfers of risk between legal entities.

We also have well-developed derivatives booking practices, and have devoted substantial resources to simplify intercompany transaction flows and reduce the number of open contracts, including by clearing additional transactions through central counterparties.

Prime Brokerage: We have taken numerous steps to help ensure that the clients of our prime brokerage business are ready and able to transfer their business to alternative service providers in a manner that does not disrupt their business or exacerbate the liquidity position of our firm. The following are among the steps we have taken:

- we have actively encouraged clients to maintain multiple prime brokerage relationships and the vast majority of them now do so;

- we have built automated tools to enable streamlined transfers of assets across legal entities and custody platforms; and
- we have developed plans to help ensure that all prime brokerage clients' cash can be transferred to third parties during the wind-down phase.

Private Wealth Management: We have prepared a model and a methodology that identifies how our private wealth management clients could be transferred to other service providers in an orderly manner. This detailed analysis outlines two separate options for transferring client accounts and assets. The primary plan considers the operational capabilities and considerations for transferring client accounts, positions and collateral to a single buyer. A contingency scenario is also outlined if no single buyer is identified and client accounts and assets must be moved away from Goldman Sachs to multiple alternative suppliers. Our plan leverages a tried and tested approach for transferring client assets used in previous industry transactions, identifies how we could support the volume and pace of transfers, and discusses considerations relevant to our business, our clients, the potential acquirer(s) of the business, and the custodians.

4. Summary of Our Preferred Resolution Strategy

Our Preferred Resolution Strategy

Our preferred resolution strategy is to ensure that, even after a very significant idiosyncratic loss event and severe liquidity outflows, our material operating entities could continue to operate for a sufficient period to allow their orderly wind-down despite the failure of our parent company. As a result of the preparations that we have made, we believe that we could achieve this goal by focusing capital and liquidity resources on our principal material entities (our major banks, broker-dealers and service entities), so they could be sold or wound down in an orderly fashion outside of formal resolution proceedings.

Our strategy is consistent with a single point of entry (“SPOE”) strategy, under which the parent company of a failing institution is resolved, while other key entities of the institution, including operating subsidiaries, are left to continue their activities outside of resolution proceedings. In general, SPOE relies on there being sufficient capital or debt at the top-level parent to absorb the institution’s losses, so that only shareholders and creditors of the parent would suffer losses. The abundant TLAC positioned at our parent company in the form of equity, subordinated debt and senior unsecured debt, in combination with our significant liquidity and our long-dated and diversified funding, should enhance our ability to execute an SPOE-type strategy at Goldman Sachs, thereby avoiding fire-sales of assets, minimizing losses and permitting the transfer of client positions in an orderly fashion.

The Sequence of our Strategy

After a loss event and significant liquidity outflows, but in advance of commencing a bankruptcy filing, our parent company would:

- provide certain material entities with additional liquidity, to the extent needed, to support ongoing operations outside of insolvency proceedings;
- extend the maturity of intercompany loans to subsidiaries; and
- re-capitalize certain material entities by contribution of assets or by forgiving intercompany debt.

The parent company would then enter bankruptcy proceedings, along with a small number of less significant entities that have insufficient capital or liquidity to survive without parent support, and that would not impact our orderly resolution.

RESOLUTION PLAN 2016 SUBMISSION

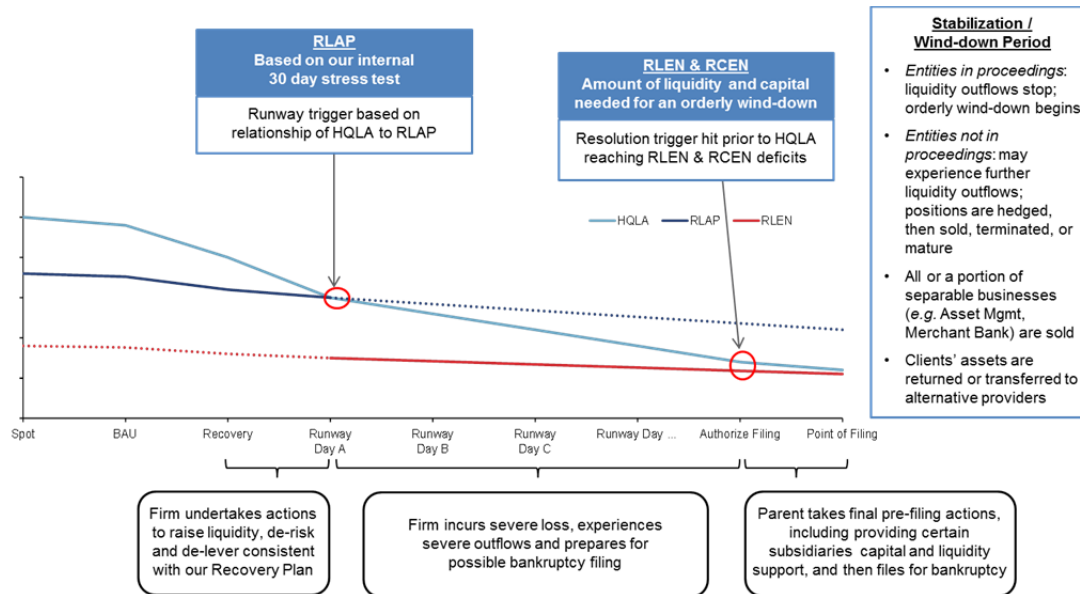
After the parent company enters bankruptcy proceedings, the boards and management of the material operating entities and material service entities that are not in proceedings (as well as any other subsidiaries that are not in proceedings) would take steps to ensure the survival of these entities for long enough to allow their assets to be sold without resorting to fire-sales, and their businesses either to be sold or wound down in an orderly manner. In order to facilitate this, detailed plans have been created, among other things, to:

- retain those staff who have been identified as critical to an orderly wind-down;
- activate a communication strategy to ensure that regulators, staff, clients and other stakeholders are aware that the entities are still solvent and operating;
- provide for seamless operational continuity and continued access to FMUs and other vendors and infrastructure;
- cease revenue-generating activity, except to the extent necessary to maintain critical operations pending their assumption by other market participants, and hedge inventory to a risk-neutral position, or as close as possible;
- facilitate client transfers to alternative service providers;
- sell or close down certain businesses; and
- wind down our derivatives portfolio.

Under the direction of their respective administrators, material operating entities that are in proceedings would sell their inventory positions, and we expect that their derivative counterparties would terminate open transactions. We also expect that third-party creditors of these entities would be repaid in full.

The chart below illustrates the different phases over which our preferred resolution strategy would operate:

RESOLUTION PLAN 2016 SUBMISSION



Given the long weighted average maturity of our secured funding book, we believe asset dispositions could take place in an orderly fashion to minimize losses and the impact of sales on asset prices in the market. In addition, derivatives could be wound down through a combination of portfolio sales, novations, bilateral terminations and contractual maturities. After the market-making and client positions are wound down and separable businesses (such as asset management and merchant banking) are sold, the firm's resulting balance sheet would largely be comprised of cash and fixed assets, financed by a combination of debt and equity.

Preferred Resolution Strategy for our Material Entities

The table below summarizes potential actions we could take in the lead-up to resolution to bolster the financial strength of our material operating entities and the range of options for the resolution of these entities. The amount of liquidity and capital injected into each entity is a function of both entity need and resource availability at the parent company under the assumption of severe loss and significant liquidity outflows. Each of the options for resolution set forth below is theoretically available for all of our entities; however, we have highlighted those that are, in our opinion, the most reasonable and executable alternative options.

RESOLUTION PLAN 2016 SUBMISSION

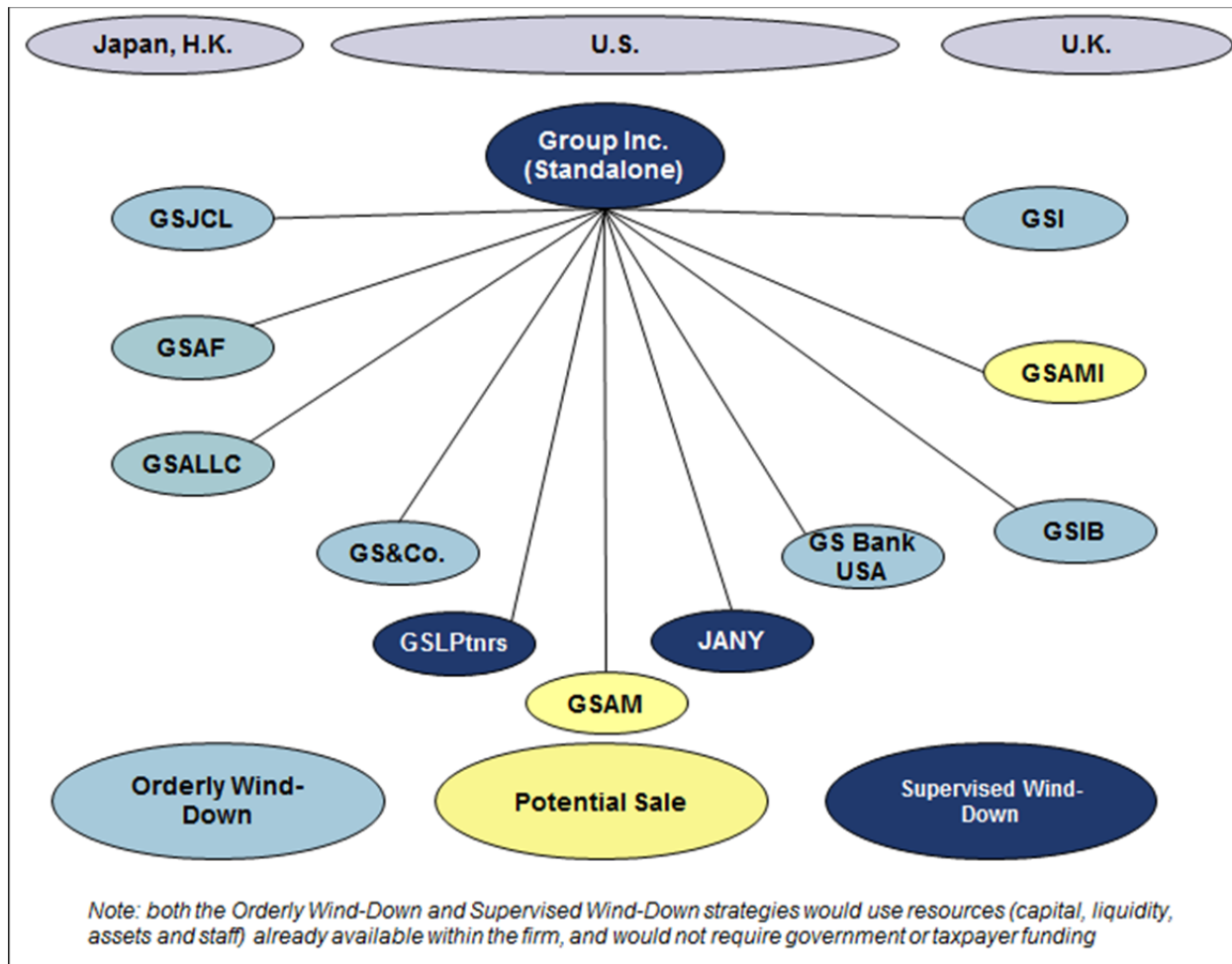
Material Entity	Resolution Approach		
	Potential Sale	Orderly Wind-down Outside of Proceedings	Supervised Orderly Wind-down in Proceedings
Group Inc.	x	x	✓
GS&Co.	x	✓	x
GSI	x	✓	x
GS Bank USA	x	✓	x
GSJCL	x	✓	x
GSIB	x	✓	x
JANY	✓ ¹	✓ ²	✓ ²
GSLPtrns	x	✓ ²	✓ ²
GSAF	x	✓	x
GSALLC	x	✓	x
GSAM	✓	x	x
GSAMI	✓	x	x

NR = Not Required

Note 1: The sale of the underlying business is also contemplated as an alternative to the sale of entity itself.

Note 2: Alternative options are available but, to be conservative, a Supervised Orderly Wind-down in Proceedings is included in our Resolution Plan.

The chart below shows how we expect our material operating entities to be treated under our preferred resolution strategy.



Please see Section 6 for a further discussion of our material entities, the full names of each, key financial data, a description of their businesses and interconnectedness, and details on their preferred resolution strategy.

Flexibility in our Strategy

We have built a degree of flexibility into our resolution planning process so that satisfactory resolution of our firm could still be achieved, even if some elements of our strategy did not materialize as we have envisioned. For example, we have considered the impact of a larger loss, larger liquidity outflows, and alternate timing of events. Depending on the severity of these alternate circumstances, it is possible that several (or all) of our material entities would enter insolvency proceedings. These proceedings could include: FDIC receivership for GS Bank USA, a liquidation under the Securities Investor Protection Act for our U.S. broker-dealers; relevant broker-

dealer or bank resolution regimes in the United Kingdom and Japan; and bankruptcy or various other proceedings for our other material entities.

We have also considered an alternative scenario where one or more additional entities remain outside proceedings, and are exploring the possibility of introducing a contractually binding mechanism to ensure that capital and liquidity support would be provided and a bankruptcy filing would be triggered in a timely manner, even if the losses and liquidity outflows unfold differently than envisioned in our preferred resolution strategy. However, in all these alternative scenarios, the firm's strategy has been designed with the goal of ensuring that it would wind down over a period of time in an orderly manner, without reliance on extraordinary government support or taxpayers' funds, and without any loss to the FDIC's Deposit Insurance Fund.

Conclusion of our Resolution

At the conclusion of the resolution of GS Group, the firm would have sold or wound down all of its assets, and third-party creditors of our material entities, other than parent company stakeholders, would have been repaid in full. The only surviving businesses would be the asset management and merchant banking businesses, which would have been sold (these businesses are small in terms of balance sheet, but they have significant assets under supervision). All our other assets would have been sold or wound down.

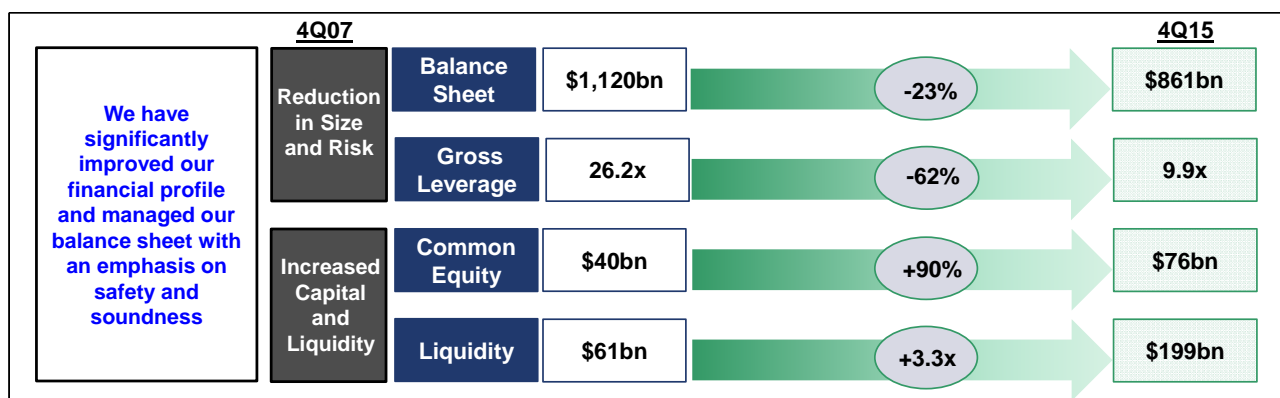
5. Why We Believe Our Resolution Strategy Works

Operationalization of our Plan

A particular challenge of resolution planning is that, although we hope our plan will never be tested in reality, it must be operationally feasible in practice. We are conscious that mistaken assumptions or unaddressed issues could impact important aspects of the plan in the pressurized circumstances of an actual resolution. In order to mitigate this risk, it was essential for numerous subject matter experts, dispersed across the business and operational areas of the firm and supported by external experts, to assist with resolution planning and contribute their specialized “real world” knowledge.

Financial Profile¹³

Since 2007, Goldman Sachs has taken many actions that have materially strengthened our financial profile, improved our resiliency and reduced the possibility of our causing a systemic disruption to the US financial system.



To Decrease our Size and Risk Levels, we have:

- reduced our balance sheet by 23% (from \$1.12 trillion to \$861 billion);
- lowered our level 3 assets¹⁴ by more than 50% (from \$69 billion to \$24 billion); and
- significantly increased the volume of our derivatives that are centrally cleared.

To Increase Capital and Liquidity, we have:

- grown our common shareholders’ equity by 90% (from \$40 billion to \$76 billion);

¹³ Unless otherwise stated, all financial data is as of December 31, 2015.

¹⁴ See “Fair Value Measurements” Note 5 of the Group Inc.’s Annual Report on Form 10-K for the year ended December 31, 2015.

- increased our Global Core Liquid Assets (“GCLA”)¹⁵ to 23% of our balance sheet from 5% at year-end 2007 (a \$138 billion increase to \$199 billion);
- increased the term of our non-GCLA secured funding book to more than 120 days; and
- significantly reduced our leverage ratio from 26 times to less than 10 times.

To Reduce Complexity, we have:

- closed all of our proprietary trading businesses;
- sold our investment in Industrial and Commercial Bank of China (a Chinese bank);
- sold several businesses and activities including:
 - our Americas reinsurance and European insurance businesses¹⁶;
 - our hedge fund administration business;
 - our electronic trade management platform;
 - our mortgage servicing business; and
 - our investments in several commodities-related businesses that hold physical infrastructure, including a metals warehouse, a coal extraction facility and a power generation plant.
- discontinued our bespoke credit correlation trading activities;
- simplified our corporate structure and significantly reduced the number of legal entities;
- rationalized our intercompany transactions to reduce interconnectedness; and
- made progress on exiting a substantial portion of our investments in “covered funds” under the provisions of the Dodd-Frank Act referred to as the “Volcker Rule” (including in private equity and hedge funds).

Attributes of our Structure that are Key to our Resolution Strategy

Several attributes of the GS Group structure are key to our resolution strategy. For example:

We have abundant Total Loss-Absorbing Capacity: We have positioned significant balances of loss-absorbing instruments¹⁷ at our parent company (equal to more than 30% of our risk-weighted assets (“RWAs”) calculated under the Standardized Capital Rules) in the form of common and preferred equity, as well as subordinated and senior unsecured debt. These significant balances stand ready to absorb any losses that our banks and broker-dealers

¹⁵ GCLA refers to unencumbered, highly liquid securities and cash.

¹⁶ We retain a minority stake in these businesses.

¹⁷ Estimates assume that existing instruments with traditional covenant default provisions count as eligible TLAC.

might incur, thereby insulating taxpayers from risk of loss and providing the ultimate resources necessary for re-capitalizing the material operating entities.

We have significant liquidity, and long-dated and diversified financing: In order to pre-fund our estimated potential cash and collateral needs during a liquidity crisis, we maintain a significant balance of unencumbered, highly liquid securities and cash, which we call our GCLA, much of which is pre-positioned at material operating entities. We have also extended the maturity of our external liabilities so that they are long-dated in comparison to our assets. As a result, we have reduced the likelihood of having to take economically inefficient actions in the face of sudden liquidity pressures:

- our GCLA balance was \$199 billion as of December 2015;
- the weighted average maturity of our unsecured long-term borrowings as of December 2015 was approximately 9 years;
- as of December 2015, our banks had deposits of \$98 billion, of which \$43 billion were time deposits with a weighted average maturity of approximately three years; and
- the weighted average maturity of our secured funding, excluding funding collateralized by highly liquid securities that are eligible for inclusion in our GCLA, exceeded 120 days as of December 2015. The vast majority of our secured funding transactions do not feature cross-default provisions, and therefore would not terminate early as a result of a parent company event of default.

For further information, see “Liquidity Risk Management and Funding Sources” in the Supporting Information Section SI 2 of this document.

Our organizational structure lends itself to our proposed form of resolution: We believe that our organizational structure lends itself to our preferred resolution strategy which is to keep certain material operating and service entities (which house the vast majority of the firm’s assets, most of its staff and most of its critical operations) out of proceedings:

- our parent company has discontinued the practice of issuing debt with an original maturity of less than one year;
- we do not have and do not permit upstream guarantees of the parent company by its subsidiaries, so the contagion of losses across the firm is avoided;

- significant pre-positioned intercompany loans from our parent company to material operating entities act as internal TLAC by permitting swift and comprehensive re-capitalization of those entities via debt forgiveness where needed;
- our parent company, acting as a source of strength to GS Bank USA, our insured depository institution, must provide capital and liquidity to that entity as required;
- we hold substantial liquidity in many of our material operating entities; and
- we operate primarily through subsidiaries rather than branches, many of which are regulated in their own right so capital is available locally to support exposures in the relevant jurisdictions.

The entities that would be kept out of proceedings account for the vast majority of our assets and activities: These entities account for 88% of the firm's assets, 97% of its derivatives (by notional), 86% of its staff and substantially all of the firm's core business lines and critical operations. By keeping them out of proceedings, we would be able to facilitate a gradual and orderly wind-down of these entities in order to avoid the disruption that could be caused by a sudden cessation of their activities.

Our other entities would be highly unlikely to present systemic risk to the financial markets or threaten the continuity of critical operations: Our other entities do not represent a large percentage of the firm's assets, and we do not, in any case, expect that all of them would enter resolution or other insolvency proceedings. For example, we have a large number of smaller investing entities, most of which we expect would remain out of proceedings.

Our systemic footprint is limited: Goldman Sachs does not participate to any significant degree in many of the types of activity that are core to some financial services firms, such as broad-based retail banking, credit cards, debit cards, broad-based retail brokerage, or significant payment and transaction services (e.g., custody banking or payment services). The lack of a significant presence in these activities likely reduces the systemic impact of a resolution event involving Goldman Sachs, given the critical role such services play in the global financial system.

We have sought to mitigate the effect of cross-default provisions: We have taken action to make our firm substantially less vulnerable to the effect of cross-default provisions. Substantially all our legal entities that engage in external derivatives activity signed the ISDA 2014 Resolution Stay Protocol. In November 2015, ISDA published the ISDA Protocol, which superseded the ISDA 2014 Resolution Stay Protocol and extended its application to include

industry-standard repo and securities lending contracts. Once again, substantially all our legal entities that engage in external derivatives or in-scope securities financing activity signed the ISDA Protocol. Further, the firm has actively participated in the development of the ISDA Resolution Stay Jurisdictional Modular Protocol, which is designed to facilitate compliance with individual jurisdictions' rules on contractual recognition of resolution stays.

Our accounting practices give transparency into our true exposures: Our practice of marking assets to market (as of year-end 2015, 97% of our balance sheet was carried at fair value or at amounts that approximate fair value) means that write-downs are immediately identified and reflected in net revenues and in risk management systems. Further, the discipline of marking exposures to market (and the supporting discipline of a rigorous price verification process) gives us ongoing transparency into our true exposures and greatly reduces the likelihood that significant unrecognized losses would come to light during a resolution process.

Our inventory of financial instruments is highly diversified and most of it is in the form of liquid securities or cleared derivatives: Our inventory of financial instruments is used to facilitate our role as a market maker and enables us to execute client transactions across multiple products, markets and geographies. We do not have one-directional market exposures that are disproportionate to our capital and liquidity resources. Consequently, we believe that an orderly wind-down of these positions could be completed with minimal disruption to the financial markets:

- Given the significant tenor in our secured funding book, dispositions of securities inventory could take place in an orderly fashion over time, avoiding fire-sales and disruption to financial markets.
- We have considered the method and the financial consequences of winding down our OTC derivatives portfolio. We expect that only a small portion of our derivatives would terminate due to cross-default provisions because most of them are subject to the ISDA Protocol, which (once it and its supporting regulation come into effect) is designed to impose a stay on certain cross-default and early termination rights in standard ISDA derivatives contracts in the event of resolution. A portion of the derivatives contracts in our surviving entities would unwind naturally because they reach contractual maturity within a short period of our parent company entering bankruptcy proceedings. We would then expect to exit the remaining derivative positions either through sale of portfolios, novations, negotiated terminations or allowing positions to reach contractual maturity. We have modeled a

number of different scenarios which support our belief in the viability of our preferred resolution strategy and the potential to use different exit strategies for derivatives. Our expectation of an orderly unwind is further enhanced by the fact that, at December 31, 2015, 55% (by notional) of all our derivatives are either cleared or exchange traded.

Our resolution strategy requires relatively little cross-jurisdictional coordination: Cross-jurisdictional issues are reduced by the high concentration of our operations in only three countries (the United States, the United Kingdom and Japan).

Conclusion

As discussed in this and the preceding sections, we believe that we have:

- a) either remediated, or have detailed plans to remediate in the near future, all the shortcomings that the Agencies identified in our 2015 Resolution Plan;
- b) adequately addressed, or have detailed plans to address in the near future, the Agencies' expectations with regard to the matters set out in the 2017 Guidance;
- c) taken numerous other actions to make our firm more resilient and more resolvable; and
- d) benefitted from several advantages that are inherent in our group structure and risk-management practices.

We have designed our strategy with the goal of minimizing systemic risk to the U.S. financial system and ensuring that the shareholders and creditors of Group Inc. (rather than taxpayers) would bear losses resulting from the failure of our parent company. In our view, re-capitalizing our largest subsidiaries after an idiosyncratic loss event and before the failure of the parent company, and then winding them down outside of formal proceedings, would greatly reduce the systemic disruption that a disorderly sell-down of assets or a sudden closure of critical operations might otherwise cause. This strategy has also been designed to allow clients, counterparties and depositors of those entities to recover their assets in full, to protect our insured depository institution, GS Bank USA, and to minimize overall losses.

Specifically, our preferred resolution strategy has been designed to enable what we consider are key tenets of a successful resolution of Goldman Sachs:

Avoid Disorderly Sell-Down of Assets: When operating entities remain out of proceedings, the early termination of their secured funding transactions and the resulting seizure and sell-down of collateral by lenders can be avoided. Taking into account the ISDA Protocol, we can also avoid early termination of the large majority of our OTC derivative contracts. As a result,

we would be able to sell our assets in an orderly manner over a reasonable period of time, avoiding any fire-sales, while our clients, counterparties and depositors would be able to recover their assets in full, outside of proceedings. Further, the risk of complications or value destruction caused by multiple competing insolvencies would be greatly limited.

Ensure Continuity of Critical Operations: Because most of our critical operations are carried out by our material operating entities, which would continue to benefit from access to technology, intellectual property, shared intragroup services, vendors and FMUs, they should be able to continue to function after the bankruptcy of Group Inc. Clients could therefore continue to rely on critical operations either until the business is sold or wound down, or the clients themselves decide to transfer their business to alternative service providers.

Protect GS Bank USA: By re-capitalizing GS Bank USA to the extent necessary, either by means of the forgiveness of intercompany loans or through a direct infusion of equity, Group Inc. acts as a source of strength to that entity.

We have also prepared the strategy for our Resolution Plan with the goal of ensuring that the firm would not require any external support. Our Resolution Plan does not rely on emergency financial support from government sources, such as the Federal Reserve discount window. In addition, our Resolution Plan does not require any taxpayer support because losses, which we believe could be minimized under our strategy, are borne by parent company shareholders and creditors utilizing the abundant loss-absorbing capacity we have available.

In the event of the actual resolution of Goldman Sachs, we do not expect to depend on buyers of the entirety (or even significant components) of the firm, but instead assume orderly disposals of individual assets or businesses. However, potential purchasers of our businesses or individual assets could include private equity funds, hedge funds, insurance companies, sovereign wealth funds or certain other financial institutions.

An important step towards ending the moral hazard of financial institutions that are perceived to be too big to fail is ensuring that large financial firms can be resolved safely, without taxpayer support or systemic disruption to financial markets or global economies. We know that our Resolution Plan is an important component of that effort, and we believe that the strategy we have developed, and the operational changes we have made so that it can be implemented, achieve that goal.

6. Material Entities and their Operational and Financial Interconnectedness

As defined in the Final Rule, a “Material Entity” is a subsidiary or foreign office of Group Inc. that is significant to the activities of a critical operation or core business line. We identify and present below those subsidiaries that meet these criteria. For purposes of our Resolution Plan, we have distinguished between material operating entities (those that are engaged in an operating business) and material service entities (those that provide services to other material entities). Group Inc. is, itself, a material entity. The remaining material operating entities and material service entities for our Resolution Plan are as follows.

Jurisdiction	Material Operating Entities	Material Service Entities
United States	<ul style="list-style-type: none"> ▪ Goldman, Sachs & Co. (GS&Co.) (U.S. broker-dealer) ▪ Goldman Sachs Bank USA (GS Bank USA) (FDIC-insured U.S. bank) ▪ J. Aron & Company (JANY) (U.S. commodity & foreign exchange market maker) ▪ Goldman Sachs Asset Management L.P. (GSAM) (U.S. investment advisor) ▪ Goldman Sachs Lending Partners, LLC (GSLPtnrs) (U.S. lending entity) 	<ul style="list-style-type: none"> ▪ Goldman Sachs Services L.L.C. (GSSLLC) (U.S. staffing service entity) ▪ Goldman Sachs Property Management USA LLC. (technology assets)
United Kingdom	<ul style="list-style-type: none"> ▪ Goldman Sachs International (GSI) (U.K. broker-dealer) ▪ Goldman Sachs International Bank (GSIB) (U.K. bank) ▪ Goldman Sachs Asset Management International (GSAMI) (U.K. investment advisor) 	<ul style="list-style-type: none"> ▪ Goldman Sachs Services Limited (GSSL) (U.K. staffing service entity) ▪ Goldman Sachs Property Management (GSPM) (U.K. facilities service entity)
Other	<ul style="list-style-type: none"> ▪ Goldman Sachs Asia L.L.C. (GSALLC) (Delaware L.L.C. which acts as a broker in Hong Kong, Taiwan & South Korea) ▪ Goldman Sachs (Asia) Finance (GSAF) (Mauritian market-making entity in Hong Kong) ▪ Goldman Sachs Japan Co., Ltd. (GSJCL) (Japanese broker-dealer) 	<ul style="list-style-type: none"> ▪ Goldman Sachs Services Private Limited (GSSPL) (Indian staffing service entity) ▪ Goldman Sachs Japan Holdings, Ltd. (GSJH) (Japanese staffing and facilities service entity) ▪ Goldman Sachs Services (Asia) Limited (technology assets) ▪ Goldman Sachs Services (Singapore) Pte. Ltd (technology assets)

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Financial Information by Material Entity as of December 31, 2015

Material Entity	Description	Total Assets \$bn	Total Liabilities (excludes capital and unsecured intercompany debt) \$bn	Capital and unsecured intercompany debt ¹ \$bn	Revenues \$bn Net Income (Pre-tax) \$bn
The Goldman Sachs Group, Inc.	Parent holding company	\$288.1	\$196.8	\$86.7	\$5.9 \$5.3
Goldman, Sachs & Co.	U.S. broker-dealer	452.5	417.9	34.7	11.7 (0.5)
Goldman Sachs International	U.K. broker-dealer	337.9	255.6	82.2	6.7 2.6
Goldman Sachs Bank USA	FDIC-insured U.S. bank	134.5	103.0	31.5	3.3 2.5
Goldman Sachs Japan Co., Ltd.	Japanese broker-dealer	57.6	53.4	4.2	0.8 0.3
Goldman Sachs International Bank	U.K. bank	39.1	32.8	6.4	0.3 0.2
J. Aron & Co.	U.S. market-making entity	22.5	19.8	2.7	1.1 0.5
GS Lending Partners LLC	U.S. lending entity	10.6	2.7	7.9	0.4 0.2
Goldman Sachs (Asia) Finance	Mauritian market-making entity whose operations are based in Hong Kong	6.7	1.7	5.0	0.3 0.2
Goldman Sachs (Asia) L.L.C.	Delaware LLC which acts as a broker-dealer in Hong Kong, Taiwan and South Korea	3.0	1.3	1.7	1.5 0.4
Goldman Sachs Asset Management L.P.	U.S. investment advisor	0.8	0.3	0.6	1.5 0.3
Goldman Sachs Asset Management International	U.K. investment advisor	0.4	0.2	0.2	0.5 0.1
Material service entities		3.8	2.6	1.3	- 0.1

Note 1: The figure quoted for The Goldman Sachs Group, Inc. does not include unsecured intercompany debt.

Information in the table above has been prepared in accordance with U.S. Generally Accepted Accounting Principles on a stand-alone entity basis.

Interconnectedness of Material Entities

Both the nature of our businesses and our corporate legal entity structure give rise to financial and operational interconnectedness among subsidiaries within our group and between the parent company and subsidiaries. We have identified the following areas of interconnectedness among subsidiaries and between the parent company and subsidiaries:

Intercompany Transactions. GS Group subsidiaries enter into transactions with each other for risk management, client facilitation or other reasons. In these situations, the transactions are based on agreed terms in intercompany agreements, entered into on an arms' length basis and collateralized as appropriate on a next day basis. In order to facilitate transactions with clients in other countries, our material operating entities offer introducing arrangements for other affiliates; this practice would cease in resolution when we stop entering into new transactions with counterparties.

As of December 31, 2015, the principal intercompany transactional or hedging relationships between our material operating entities are set out below:

	Group Inc.	GS&Co.	GSI	GS Bank USA	GSJCL	GSIB	JANY	GSLPtnrs	GSAF	GSALLC	GSAM	GSAMI
Group Inc.		X	X	X			X		X			
GS&Co.	X		X	X	X	X	X	X	X			X
GSI	X	X		X	X	X	X	X	X			X
GS Bank USA	X	X	X		X	X	X	X	X			
GSJCL		X	X	X			X		X			
GSIB		X	X	X			X					
JANY	X	X	X	X	X	X		X	X			
GSLPtnrs		X	X	X			X					
GSAF	X	X	X	X	X		X					
GSALLC												
GSAM												
GSAMI		X	X									

x = Transactional or Hedging relationship

As shown in the table above, several of our Material Operating Entities have inter-affiliate transactional or hedging relationships with each other. However, the vast majority of inter-affiliate

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derivative transactions (86% by notional) take place between just three of these entities: GS&Co., GSI and GS Bank USA.

We have devoted substantial resources to reducing this aspect of interconnectedness, primarily through clearing of intercompany transactions, trade compressions (whereby offsetting and near-offsetting OTC derivative transactions are matched and bi-laterally terminated at mutually agreed prices), collateralization of exposures and better alignment of client transactions and risk-management entities.

Subsidiary Capital and Funding Policies. Equity capital and most of our unsecured funding is raised by Group Inc., which downstreams capital and liquidity to its subsidiaries to meet their capital, funding and liquidity needs (including, in the case of our regulated subsidiaries, their regulatory capital and liquidity requirements). Group Inc. has provided substantial amounts of equity and subordinated and unsubordinated indebtedness, directly or indirectly, to its regulated subsidiaries. The benefits of a centralized approach to subsidiary capitalization and funding include enhanced control and greater flexibility to meet our subsidiaries' changing requirements. Funding is also raised at the subsidiary level through a variety of products, including secured funding, unsecured borrowings and deposits. The table below reflects material unsecured funding relationships between material operating entities.¹⁸

Material Entity	Borrows from Parent	Borrows from Material Entities	Lends to Material Entities
Group Inc.	x	✓	✓
GSCO	✓	x	x
GSI	✓	✓	x
GS Bank	✓	x	x
GSJCL	✓	x	x
GSIB	✓	✓	✓
JANY	x	x	✓
GSLPtnrs	✓	x	✓
GSAF	✓	x	✓
GSALLC	x	x	x
GSAM	x	x	x
GSAMI	x	x	x

¹⁸ Information is as of December 31, 2015. Balances of more than \$500 million are considered material.

To mitigate the risk of disruption to our intercompany funding, we have pre-positioned liquidity and intercompany debt at material entities; we also hold substantial liquidity at our parent company, which gives us the flexibility to place additional liquidity at affiliates in the event that it is required.

Our intercompany funding policies assume that, unless legally provided for, a subsidiary's funds or securities are not freely available to its parent company or other subsidiaries. In particular, many of our subsidiaries are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Group Inc. Regulatory action of that kind could impede access to funds that Group Inc. needs to make payments on its obligations. Accordingly, we assume that the capital provided to our regulated subsidiaries is not available to Group Inc. or other subsidiaries and any other financing provided to our regulated subsidiaries is not available until the maturity of such financing.

Secured Funding. Many of the firm's material operating entities lend to and borrow from each other on a secured basis, generally as a mechanism for collateral realignment, cash reinvestment, or sourcing securities for an entity's GCLA. The majority of these transactions are collateralized by GCLA-eligible securities, which are highly liquid. A significant portion of the remainder relates to the covering of short positions, which allows the lending entity to manage risk, or is used for collateral and funding optimization.

Cross-default Provisions. Historically, documents that govern our OTC derivative transactions have typically contained cross-default provisions, which provide counterparties the right to terminate their transactions with one Goldman Sachs legal entity, even if it is solvent and performing its obligations under the transaction, because of certain credit-related events at certain other Goldman Sachs legal entities.

We have taken actions to mitigate the effect of cross-default provisions, including by signing the ISDA Protocol; these are described above under "Summary of our Preferred Resolution Strategy."

Guarantees of Subsidiaries. Group Inc. has guaranteed the payment obligations of GS&Co. and GS Bank USA, in both cases subject to certain exceptions. Group Inc. also provides guarantees to clients in respect of certain transactions entered into by subsidiary companies. Group Inc. subsidiaries provide guarantees to other subsidiary companies on a very limited basis. We do not have and do not permit upstream guarantees of the parent company by its subsidiaries. Group Inc. guarantees do not contain cross-default provisions, and do not on their own trigger early termination rights.

In order to mitigate this aspect of interconnectedness, we have obtained at least one stand-alone rating from a major credit rating agency for each of our five largest material operating entities. The resolution-related benefit of this is to reduce the number of transactional guarantees that Group Inc. is required to issue.

Access to Market Infrastructure. Certain Group Inc. subsidiaries provide other affiliates with access to various FMUs such as exchanges, clearing houses, custodians and agent banks. Such transactions are governed by intercompany agreements and charged at arms' length pricing. See Supporting Information Section SI 4 for further information on our memberships in material clearing, payment and settlement systems.

The table below shows our material operating entities' relationships with the twenty FMUs that are most important to them. Entities with direct membership in an FMU are marked with an "X," while those accessing the FMU indirectly through another material entity are marked with the material entity providing access to the FMU. For example, GS&Co. provides access to GSI at the Chicago Mercantile Exchange Clearing, Inc. Note that none of the entities that provide other material operating entities access to FMUs and agent banks are projected to go into proceedings.

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Material Operating Entities' Access to Financial Market Utilities

	Group Inc.	GS&Co.	GSI	GS Bank USA	GSJCL	GSIB	JANY	GSLPtnrs	GSAF	GSALLC	GSAM	GSAMI
Chicago Mercantile Exchange Clearing, Inc.	X	A	A	A	A	A		A				
Citibank, N.A.	X	X	X		B			X	X			
CLS Bank Limited	X	A	A	A	A							
The Depository Trust Company	X	A	X									
Eurex Clearing AG	B	X	B		X							
Euroclear	X	X	X	X	X							
European Central Counterparty Ltd.	B	X										
Fixed Income Clearing Corporation	X	A	A									
HSBC	X	X	X					X				
ICE Clear Credit LLC	X	X	B									
ICE Clear Europe	X	X				B						
ICE Clear U.S.	X	A	A	A		A		A				
Japan Securities Clearing Corporation	C	C	C	X								
Japan Securities Depository	C	C	C	X								
LCH Clearent Ltd.	X	X	X		X	A/B						
National Securities Clearing Corporation Ltd.	X	A	A									
Options Clearing Corporation	X	A	A	A		A						
Standard Chartered Bank	X	X	X					X	X			
SWIFT	X	X	X	X	X	X	X	X	X	X	X	X
The Bank of New York Mellon	X	X	X		X							

X - Direct Access; A - Access via GS&Co.; B - Access via GSI; C - Access via GSJCL

In order to reduce reliance on single points of access to critical FMUs, we are undertaking a project to ensure either that more than one GS entity has membership in each FMU, or that we have tried-and-tested alternative access via a third party.

Operational Services. GS Group subsidiaries regularly provide services to each other based on intercompany agreements for which arms' length fees are paid. Such services may relate to: employee services; technology or intellectual property; facilities and other fixed assets; and vendor services.

The table below illustrates the services provided and received by material entities:

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Material Entity Shared Services Relationships

		RECEIVES																				
		All Entities	Group Inc.	GS&Co.	GSI	GSBank USA	GSJCL	GSIB	JANY	GSLPtnrs	GSAF	GSALLC	GSAM	GSAMI	GSSPL	GSJH	GSSL	GSSLLC	GSPM	GSPMU	GHKL	GPMS
P R O V I D E S	Group Inc.	IP, V		F		F			F											F		
	GS&Co.	IP, V	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
	GSI	IP, V	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P, F	P	P
	GSBank USA	IP																				
	GSJCL	IP	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
	GSIB	IP																				
	JANY	IP																				
	GSLPtnrs	IP																				
	GSAF	IP										F										F
	GSALLC	IP, V	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P	P
	GSAM	IP																				
	GSAMI	IP																				
	GSSPL		P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P
	GSJH	V	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T	P,T		P,T	P,T	P	P	P	P
	GSSL																					
	GSSLLC		P	P		P			P	P		P									P	
	GSPM		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			
	GSPMU		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T				
	GHKL		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T				
	GPMS		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T				

P = PERSONNEL, IP = INTELLECTUAL PROPERTY, T = TECHNOLOGY ASSETS, F = FACILITIES, V= VENDORS

We have reduced the risks relating to affiliates’ dependency on other affiliates for the provision of shared services by documenting such services in legal agreements that provide for continuity of service, even if a contracting entity enters some form of insolvency proceeding.

Criteria for a more rational, less complex legal entity structure:

We have established a set of criteria to reduce interconnectedness, mitigate its effect and ensure a more rational, less complex legal entity structure. We believe that, taken together, these criteria establish a framework for an organizational structure that facilitates the execution of our preferred resolution strategy yet is efficient in a business-as-usual environment.

Senior management has set the expectation that these criteria will be respected to the extent possible. We recognize, however, that legal, regulatory, business efficiency or other considerations may occasionally impede our ability to meet these criteria in every respect, and have therefore established governance mechanisms by which our organizational structures are evaluated against the criteria, and any exceptions are assessed to ensure they do not have a material impact on the effectiveness of our preferred resolution strategy. Several firmwide governance committees act as a first line of defense in this respect, and our Resolution Planning Steering Group is the ultimate arbiter with regards to such matters.

The criteria for a more rational, less complex legal entity structure are set out below:

1. Separation of Core from Non-Core Businesses:

- Core business activities and critical operations should be conducted in a small number of large, well-capitalized and well-funded entities (i.e. material operating entities);
- Market Risk of core business activities should be centrally managed within a limited number of material operating entities;
- Non-core business activities that are likely to be sold in a resolution scenario should be conducted in separate legal entity groups that facilitate separability in resolution;
- Entities with common roles should be grouped into separate ownership chains under common holding companies (e.g., Operating Entity groups, Service Entity groups and Investing Entity groups); and
- The domicile of legal entities should be aligned with their principal place of business.

In resolution, the separation of core from non-core businesses allows the firm to concentrate its financial resources where they would have the greatest impact (i.e. on the core business lines and critical operations), and simplifies the spin-off of non-core businesses because they do not need to be “unraveled” from the rest of the business.

2. As Few Entities as Possible:

- Our core businesses and critical operations should be conducted in the smallest number of operating entities that legal, regulatory, risk and resolvability considerations will allow;
- Unless specific circumstances warrant, there should not be more than one of the following category of operating entity in any jurisdiction:
 - i. a bank;
 - ii. a broker-dealer; and
 - iii. an asset manager.
- Our investing businesses should be conducted in as few legal entities as legal, regulatory, co-investing and other business efficiency considerations will allow; and
- Redundant and dormant entities should be wound down.

A reduction in the number of legal entities reduces the complexity of resolution, reduces the likelihood of conflicting resolution regimes, and reduces the likelihood that part of a business activity goes into insolvency proceedings and part remains out of proceedings.

3. Short, Clean Entity Ownership Lines:

- Operating entities should not have cross-holdings in each other;

- Material operating and material service entities should not be owned by another material operating or material service entity;
- There should be as few intermediate holding companies as regulatory or other considerations permit; and
- Fractional or split ownership of material entities should be avoided.

Short, simple lines of ownership not only reduce the complexity of resolution, but also reduce the likelihood that the parent company's provision financial support to material entities will be impeded at an intermediate step in the ownership chain.

4. Clean Funding Pathways:

- External TLAC should only be issued by the parent company;
- Internal TLAC from the parent company to material operating entities, whether directly or through intermediate holding companies (or other affiliate funding providers), should be provided in a manner that preserves flexibility and efficiency of deployment;
- Pre-positioned intercompany debt should:
 - i. Provide comfort on the commitment to recapitalize in a resolution scenario;
 - ii. Mitigate potential conflicts of interest involved in forgiveness or conversion of the debt; and
 - iii. Mitigate uncertainty related to potential creditor challenge.
- One or more of the following mechanisms should be considered in order to achieve these objectives:
 - i. A contractually binding mechanism between the parent company and material entities;
 - ii. Contractual triggers for a debt write down;
 - iii. Explicit subordination at the intermediate holding company level; and
 - iv. Matching seniority and tenor of intercompany debt between all entities in a funding chain.

The resolution benefit of these criteria is that they increase the speed with which the parent company is able to provide financial support to material entities and reduce the likelihood that creditor challenge will impede the process.

5. Intercompany Arrangements That Mitigate Interconnectedness:

- Intercompany guarantees should emanate only from the parent company and flow downstream to subsidiaries;

- Derivative and secured funding contracts with external third parties should not contain certain cross-default provisions;
- The number of intercompany derivative transactions should be reduced to the extent practicable:
 - i. Where possible, clients should transact with the legal entity that manages the related market risk, thereby reducing the volume of intercompany derivative transactions; and
 - ii. Where such alignment of clients with risk-management entities is not possible, intercompany transactions should be minimized using intercompany clearing or internal compression techniques, where available, they should be booked and risk managed in a manner consistent with external derivative transactions, they should be collateralized on a daily basis and, in the event of default by one affiliate party, they should close out at mid-market prices.
- Intercompany receivables of whatever nature should be settled regularly.

Intercompany arrangements that mitigate interconnectedness reduce the likelihood that the failure of one legal entity will bring about the failure of its affiliates.

6. Alignment of Resources with the Entities They Serve:

- Staff should normally be employed by the entity for which they work;
- To the extent that staff are not employed by the entity for which they work (for example, because they are employed by service entities, because they live in a different country, or because they work for several legal entities), the service they provide should be documented in a service-level agreement that allows for the continued provision of services in a resolution scenario;
- The entity that benefits from technology, intellectual property or facility fixed assets should hold these assets on its own balance sheet;
- To the extent that technology, intellectual property or facility fixed assets benefit more than one legal entity, or where they are owned by service entities, the use of such assets should be documented in an agreement that allows for the continued provision of services in a resolution scenario; and
- Entities that have a critical dependency on another group entity for access to an FMU should have contingency arrangements in place for alternative access.

These criteria are designed to ensure that our major operating entities are not forced into premature liquidation because of inadequate non-financial resources such as staff, technology, intellectual property, physical assets or access to critical FMUs.

7. Protection of our Insured Depository Institution (“IDI”):

- The parent company should act as a source of strength for the IDI;
- The IDI should hold sufficient capital and liquidity to meet its regulatory requirements in a business-as-usual context;
- The parent company should be willing to provide the IDI with additional capital or liquidity required to meet its RCEN and RLEN requirements in a resolution event;
- The parent company should hold a sufficient quantity of additional contributable assets to meet any shortfall in the internal TLAC held in the IDI compared to its RCAP requirement;
- The parent company should hold sufficient excess liquidity to meet any shortfall in the amount of liquidity held by the IDI compared to its RLAP requirement;
- The provisions of Regulation W should be met in all respects;
- Intercompany transactions involving the IDI should be booked and risk-managed in a manner consistent with external transactions; and
- Shared services of which the IDI is a beneficiary should be comprehensively documented.

We acknowledge that there is inherent subjectivity in identifying whether or not an entity structure or transaction flow is complex, and recognize the need for senior and knowledgeable stakeholders to apply judgment in considering all factors that influence our corporate structure.

Resolution Strategy by Material Entity

The Goldman Sachs Group, Inc.

Description of Entity

Group Inc., a Delaware corporation, is a bank holding company and a financial holding company regulated by the Federal Reserve Board. Group Inc. is the firm's "covered company" as defined under Section 165 of the Dodd-Frank Act. Group Inc. shares are traded on the New York Stock Exchange under the symbol GS. Group Inc. raises capital and substantially all of the firm's unsecured funding. Group Inc. provides equity financing and debt financing to the firm's subsidiaries to ensure they hold sufficient capital and have sufficient liquidity in order to support their business activities and meet regulatory requirements, where applicable.

As a holding company, Group Inc. depends on dividends, distributions, and other payments from its subsidiaries to fund dividend payments and to fund all payments on its obligations, including debt obligations. Group Inc. has entered into derivative contracts (substantially all of which are with affiliates) to hedge interest rate, currency, and other market risks related to its third-party borrowings and its equity investments in foreign subsidiaries. Group Inc. no longer enters into third-party OTC derivative transactions, including for the purpose of hedging Goldman Sachs' long-term debt. Apart from its investments in affiliates and loans to them, Group Inc.'s assets are primarily comprised of investments in merchant banking funds, and it is required under the Volcker Rule to substantially divest itself of these by the end of the conformance period. Group Inc. operates in the United States with its principal office in New York, at the firm's global headquarters which is located at 200 West Street, New York, NY.

Summary of Group Inc.'s Resolution Strategy

We believe that the most effective resolution strategy is one that meets the combined goals of facilitating an orderly wind-down of our material operating entities while being minimally disruptive to financial markets. Our strategy is a variant on the SPOE strategy, under which the parent company of a failing institution is resolved while leaving other key entities of the institution, including operating subsidiaries, to continue their activities outside of resolution proceedings. Our preferred resolution strategy calls for Group Inc., before it enters bankruptcy proceedings, to downstream capital and liquidity, to the extent necessary, and extend the maturity of intercompany loans to material operating and service entities to support their ongoing operations and facilitate an orderly wind-down of these entities outside of proceedings. We believe this strategy also ensures the continuity of critical operations at our subsidiaries, and this strategy would result in losses being incurred by equity holders and creditors in accordance with Chapter 11, not by taxpayers.

Goldman, Sachs & Co.

Description of Entity

GS&Co. is the firm's primary U.S. based broker-dealer and Futures Commission Merchant. GS&Co. is a limited partnership, and provides a wide range of services to clients located worldwide. It is regulated by the Securities and Exchange Commission ("SEC"), the Financial Industry Regulatory Authority ("FINRA") and the Commodity Futures Trading Commission ("CFTC"). The Goldman, Sachs & Co. LLC ("GS&Co LLC") is the general partner. The limited partner and ultimate owner is Group Inc. GS&Co. operates primarily in the United States, with its principal office in New York. Client assets are protected under rules set forth by the SEC and CFTC.

GS&Co. receives capital and substantially all of its unsecured funding from Group Inc. GS&Co. also lends and borrows intercompany on a secured basis, primarily with GSI and a limited number of other material entities. GS&Co. does not have material unsecured lending or borrowing relationships with other material entities. Externally, GS&Co. borrows and lends on a secured basis. For further details, please refer to Supporting Information Section SI 2.

Summary of GS&Co.'s Resolution Strategy

Our preferred resolution strategy calls for GS&Co. to be re-capitalized and provided with sufficient liquidity, as needed, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GS&Co. will have flexibility to determine the optimal pace of asset sales and derivative unwinds, thereby avoiding fire-sales, disruptions for clients with cash and securities at GS&Co., and the use of emergency government facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process.

We expect that prime brokerage and other GS&Co. clients would transfer their positions to alternate third-party providers. All securities inventory would be sold, and derivatives would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the market-making and client positions are wound down, GS&Co.'s balance sheet would largely be cash, financed by a combination of debt and equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GS&Co.'s third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs International

Description of Entity

GSI is an unlimited company incorporated in England, with its registered office in London. It is the firm's broker-dealer in Europe, Middle East and Africa. It is authorized by the U.K. Prudential Regulation Authority ("PRA") and regulated by the PRA and the U.K. Financial Conduct Authority ("FCA"). Client assets are protected under rules set forth by the FCA.

GSI receives capital and most of its unsecured funding from Group Inc., either directly or indirectly through intermediate holding companies. It also accesses the market directly for some unsecured funding. It lends and borrows on a secured basis, primarily with GS&Co. and a limited number of other material entities. In addition, GSI borrows on an unsecured basis from a limited number of other material entities, but none of these unsecured borrowings are significant in size. GSI also does not have material unsecured lending relationships with other material entities. Externally, GSI borrows and lends on a secured basis. For further details, please refer to Supporting Information Section SI 2.

Summary of GSI's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GSI to be re-capitalized and provided with sufficient liquidity, as needed, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GSI will have flexibility to determine the optimal pace of asset sales and derivative unwinds, thereby avoiding fire-sales, disruptions for clients with cash and securities at GSI, and the use of emergency government facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

We expect that prime brokerage and other GSI clients would transfer their positions to alternate third-party providers. All securities inventory would be sold, and derivatives would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the market-making and client positions are wound down, GSI's balance sheet would largely be cash, financed by a combination of debt and equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GSI's third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs Bank USA

Description of Entity

GS Bank USA is the firm's U.S. insured depository institution and a wholly-owned subsidiary of Group Inc. GS Bank USA is a New York State-chartered bank and a member of the Federal Reserve System. It is supervised by the Federal Reserve Board, the New York State Department of Financial Services and the Consumer Financial Protection Bureau, and is a member of the FDIC. As a registered swap dealer, GS Bank USA is regulated by the CFTC.

The principal office of GS Bank USA is in New York; it has one domestic branch in Utah and an overseas branch in the United Kingdom. The primary activities of GS Bank USA are deposit taking, private banking and corporate lending, and market-making in interest rate derivative products.

GS Bank USA receives capital and unsecured funding directly from Group Inc. It also lends and borrows on a secured basis primarily with GS&Co. GS Bank USA does not have material unsecured lending or borrowing relationships with other material entities.

Summary of GS Bank USA's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GS Bank USA to be re-capitalized and provided with sufficient liquidity, as needed, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GS Bank USA will have flexibility to determine the optimal pace of asset or business line sales and derivative unwinds, thereby avoiding fire-sales, disruptions for clients, and the use of emergency government facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. Our strategy is designed to ensure that GS Bank USA's depositors will have access to their insured deposits. Certain deposits are assumed to be repaid at contractual maturity dates. Loan inventory would be sold and all uninsured deposits are assumed to be withdrawn, if not otherwise disposed. Derivatives would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. Our strategy is designed with the goal of having sufficient capital and liquidity to pay GS Bank USA's depositors and other third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company. Accordingly, our strategy is designed with the goal of having no impact to the FDIC's Deposit Insurance Fund.

GS Bank is required to submit its own resolution plan to the FDIC by October 1, 2017.

Goldman Sachs Japan Co., Ltd.

Description of Entity

GSJCL is the firm's broker-dealer in Japan. GSJCL provides a wide range of services to clients located worldwide and is regulated by the Japan Financial Services Agency ("JFSA"). GSJCL is incorporated in Japan, and operates in Japan, with its principal office located in Tokyo. Client assets are protected under rules set forth by the JFSA.

GSJCL receives capital and substantially all of its unsecured funding from Group Inc., either directly or indirectly through intermediate holding companies. It borrows on a secured basis primarily from GSI and GS&Co. GSJCL does not have material unsecured lending or borrowing relationships with other material entities.

Summary of GSJCL's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GSJCL to be re-capitalized and provided with sufficient liquidity, if necessary, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GSJCL will have flexibility to determine the optimal pace of asset sales and derivative unwinds, thereby avoiding fire-sales, disruptions for clients, and the use of emergency government facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

GSJCL would sell all securities inventory, and derivatives would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the market-making and client positions are wound down, GSJCL's balance sheet would largely be cash, financed by a combination of debt and equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GSJCL's third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs International Bank

Description of Entity

GSIB is the firm's U.K. registered bank. It operates in Europe under a pan-European services passport pursuant to the Banking Consolidation Directive, and has its registered office in London. It has two branches, one in Germany and one in Korea. GSIB acts as a primary dealer for European government bonds and is involved in bond market-making, lending and deposit taking activities, and agency lending. GSIB is authorized by the PRA and regulated by both the PRA and the FCA. GSIB is an unlimited company incorporated in England. Client assets are protected under rules set forth by the FCA.

GSIB receives capital and some of its unsecured funding from Group Inc., either directly or indirectly through intermediate holding companies. GSIB lends and borrows on a secured basis, primarily with GSI. GSIB also has unsecured borrowing and lending relationships with other material entities, as well as deposits from third parties.

Summary of GSIB's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GSIB to be re-capitalized and provided with sufficient liquidity, if necessary, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GSIB will have flexibility to determine the optimal pace of asset sales and derivative unwinds, thereby avoiding fire-sales, disruptions for clients, and the use of emergency government facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

GSIB would sell all loans and securities inventory, and the limited derivatives held in the entity could be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the market-making positions are wound down and deposits repaid, GSIB's balance sheet would largely be cash, financed by a combination of debt and equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GSIB's third-party creditors (including depositors) in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

J. Aron & Company

Description of Entity

JANY is a New York general partnership, indirectly wholly-owned by Group Inc. JANY provides a range of market-making and advisory services to producers, investors, and other clients and counterparties worldwide. JANY transacts as principal and dealer in currencies, physical commodities and related derivative financial instruments on both exchange-regulated and OTC markets worldwide.

JANY is registered with the CFTC as a swap dealer, and is therefore subject to the CFTC's Swap Dealer rules, including reporting, risk management and clearing. JANY is authorized by the Federal Energy Regulatory Commission ("FERC") to sell wholesale physical power at market-based rates; it is subject to regulation under the U.S. Federal Power Act and FERC regulations, and to the oversight of FERC.

JANY receives capital from Group Inc. indirectly through intermediate holding companies. It also lends on an unsecured basis to a limited number of other material entities. JANY does not have material secured lending or borrowing relationships with other material entities.

Summary of JANY's Resolution Strategy

We have assessed the implications of an orderly wind-down of JANY, both in and out of proceedings, and have concluded, based on our financial projections, that its third-party creditors and counterparties would be paid in full under either option. As an alternative strategy, we have also considered the possibility of selling either JANY itself or the individual business activities that it conducts, and we believe that the latter option is more likely to meet with success.

Orderly Wind-Down in Proceedings: The wind-down in proceedings could occur in a scenario in which JANY is unable to meet its liquidity requirements, causing it to seek Chapter 11 bankruptcy protection. In this scenario, JANY's derivatives would be assumed to close out immediately following the commencement of proceedings, and we assume that we would incur losses upon the unwind of these derivatives. At this time, JANY would also enter the orderly wind-down phase in which the entity would begin selling assets. If losses incurred on the winding down of derivatives and disposition of assets were greater than the capital held in the entity, creditors could be made whole through parent company transactional guarantees. To be conservative, our Resolution Plan assumes JANY enters proceedings. We believe that counterparties and creditors of the entity would not incur any losses and that the termination of their trades would not have a systemic impact.

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Orderly Wind-Down Outside of Proceedings: In this scenario, JANY would be recapitalized, if necessary, and would receive liquidity from Group Inc. to cover assumed liquidity outflows. During the orderly wind-down period, JANY would de-risk and de-lever through asset sales, and derivatives held in the entity would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the positions are wound down, the entity's resulting balance sheet would largely be cash on the asset side and a mix of debt and equity on the liability side. This strategy is designed with the goal of having sufficient capital and liquidity to pay JANY's third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company. In our Resolution Plan we have included this option as an alternate scenario.

Goldman Sachs Lending Partners LLC

Description of Entity

GSLPtnrs primarily makes a market in, originates and syndicates bank loans and commercial and residential mortgage loans. GSLPtnrs hedges risk with credit derivatives, primarily credit default swaps, loan credit default swaps and related indices. GSLPtnrs is a Delaware limited liability company.

GSLPtnrs receives capital and all of its unsecured funding from Group Inc., either directly or indirectly through intermediate holding companies. GSLPtnrs has unsecured lending relationships with a limited number of other material entities, but does not have any material borrowing relationships with other material entities.

Summary of GSLPtnrs' Resolution Strategy

We have considered a range of options for the orderly resolution of GSLPtnrs, including an orderly wind-down outside of proceedings. In this scenario, GSLPtnrs would receive liquidity from Group Inc. to cover assumed liquidity outflows, and capital via the forgiveness of its substantial intercompany debt. To be conservative, in our Resolution Plan we have assumed that this company enters Chapter 11 proceedings. If this were to be the case, we believe that the systemic impact and the specific impact to our clients and counterparties would be limited because the entity holds only a small proportion of GS Group's total lending commitments, and most of its commitments are part of syndicated credit facilities.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

GSLPtnrs would sell all loan inventory, and the limited derivatives held in the entity would be wound down through close-outs. In a scenario where GSLPtnrs is wound down outside of proceedings, the limited derivatives held in the entity would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After these positions are wound down, the entity's resulting balance sheet would largely be cash financed by a combination of debt and equity. In both scenarios, our strategy is designed with the goal of having sufficient liquidity and capital to pay GSLPtnrs's third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs (Asia) Finance

Description of Entity

GSAF is registered as a private company in Mauritius having a principal place of business in Hong Kong and governed by the Financial Services Futures Commission in Mauritius. The ultimate parent company is Group Inc. GSAF facilitates transactions for GS Group entities and directly invests in securities, currencies and other financial products. Currently, GSAF manages market risk for certain Asian assets. The risks are originated from client transactions that are booked in other GS Group entities such as GSI and GS Bank USA. This booking practice is being discontinued, at which point GSAF will cease to be a material entity for resolution planning purposes.

GSAF receives capital and most of its unsecured funding from Group Inc., either directly or indirectly through intermediate holding companies. GSAF borrows and lends on a secured basis, primarily with GSI. GSAF has unsecured lending relationships with a limited number of other material entities, but does not have any material borrowing relationships with other material entities.

Summary of GSAF's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GSAF to be re-capitalized and provided with sufficient liquidity, if necessary, to remain out of proceedings while it winds down in an orderly manner over time. This will result in a better systemic outcome because GSAF will have flexibility to determine the optimal pace of asset sales and derivative unwinds, thereby avoiding fire-sales.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

GSAF is expected to sell all securities inventory, and derivatives would be wound down either through early terminations, contractual maturities, portfolio sales, novations or bilateral terminations. After the market-making positions are wound down, the entity's resulting balance sheet would largely be cash financed by a combination of debt and equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GSAF's third-party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs (Asia) L.L.C.

Description of Entity

GSALLC is the firm's broker-dealer in Hong Kong. GSALLC provides a wide range of services to clients and is regulated by the Securities and Futures Commission in Hong Kong. GSALLC is established in Delaware having a principal place of business in Hong Kong. The ultimate parent company is Group Inc.

GSALLC is primarily funded with capital from Group Inc., indirectly through intermediate holding companies. GSALLC does not have any material borrowing or lending relationships with other material entities.

Summary of GSALLC's Resolution Strategy

Similar to GS&Co., our preferred resolution strategy calls for GSALLC to be re-capitalized and provided with sufficient liquidity, if necessary, to remain out of proceedings while it winds down in an orderly manner over time. GSALLC is in a strong position with regard to capital and liquidity, and it does not hold risk positions. Therefore we believe that it would not require any additional support under our preferred resolution strategy.

A key aspect to our strategy is continued access to both shared services and FMUs. We believe, based on our financial projections, that the steps we have taken and ongoing projects will enable these services to continue throughout the resolution process. See additional details earlier in this section.

GSALLC has no inventory positions and facilitates client transactions on an agency basis. At the end of the resolution process, the entity's balance sheet would largely be cash financed by equity. Our strategy is designed with the goal of having sufficient liquidity and capital to pay GSALLC's third party creditors in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Goldman Sachs Asset Management, L.P. and Goldman Sachs Asset Management International

Description of Entities

GSAM is registered as an investment advisor with the SEC and is registered as a Commodity Pool Operator and a Commodity Trading Advisor with the CFTC. Additionally, GSAM is a member of the National Futures Association. GSAM is also registered with various Canadian Regulators including the Ontario Securities Commission as a Non-Canadian Adviser (Investment Counsel and Portfolio Manager). GSAM, a limited partnership established in Delaware, is an indirectly wholly-owned subsidiary of Group Inc. GSAM operates in the United States, with its principal office in New York. Through its subsidiaries, GSAM has operations in Japan, Brazil and India. The activities of these subsidiaries are similar to that of GSAM and these subsidiaries are established generally in order to comply with local requirements.

GSAMI is an unlimited company, incorporated in England and authorized and regulated by the U.K. FCA. As part of the UK regulated group, it is subject to consolidated supervision by the UK PRA. GSAMI operates in Europe, Middle East and Africa, with its registered office located in London. GSAMI provides services in the European Economic Area under a services passport, pursuant to the Markets in Financial Instruments Directive.

Both GSAM and GSAMI are relatively small legal entities (based on capital and asset size); however, they have a substantial level of assets under supervision (in excess of \$750 billion as of December 2015).

GSAM and GSAMI are primarily funded with capital from Group Inc., either directly or indirectly through intermediate holding companies. These entities do not have any material borrowing or lending relationships with other material entities.

Summary of GSAM and GSAMI's Resolution Strategy

Our asset management business, including GSAM and GSAMI, would be prepared for sale as part of our preferred resolution strategy. These entities, which provide asset management services and offer investment products, have limited connectivity with other affiliates and limited obstacles that would hinder a sale in whole or in part. In addition, we would not expect these entities to require additional capital or liquidity from the parent company. An alternative approach would be to transfer the management of these funds to other fund managers.

Material Service Entities

The firm has designated five entities as material service entities as follows:

Goldman Sachs Services L.L.C.: GSSLLC is a Limited Liability Company, domiciled in Wilmington, Delaware and wholly-owned indirectly by Group Inc. It operates in the United States from its office location in New Jersey. GSSLLC is a staffing service entity that employs non-revenue producing staff and provides operational support services to GS&Co. under a services agreement. The entity earns revenue by charging GS&Co. for its employee-related and non-employee related services.

Goldman Sachs Services Limited: GSSL is a limited company, domiciled in the British Virgin Islands and indirectly wholly-owned by Group Inc. The entity operates in the United Kingdom from its office location in the Isle of Man. GSSL is a staffing service entity that employs both producing and non-revenue producing staff. These individuals are based in the U.K. and are seconded to GSI under a secondment agreement. The entity earns revenue by charging GSI for its employee-related and non-employee related services.

Goldman Sachs Property Management: GSPM is a Private Unlimited Company, domiciled in the United Kingdom and wholly-owned directly by Group Inc. This entity operates from its office location in the United Kingdom. GSPM is a property management company, and its business is to provide affiliated entities with access to the technology assets (e.g. data servers, computer equipment, etc.) and facilities assets (e.g. leasehold improvements, furniture and fixtures) that it owns. The entity earns revenues by charging affiliated entities for use of its fixed assets.

Goldman Sachs Services Private Ltd: GSSPL is a private limited company, domiciled in Bengaluru, India and indirectly wholly-owned by Group Inc. The entity operates in India from its office location in Bengaluru. GSSPL is a staffing service entity that employs predominantly non-revenue producing staff. It provides operational support services to and through material operating entities under a master services agreement. The entity earns revenue by charging affiliates (primarily material operating entities) for its employee-related and non-employee related services.

Goldman Sachs Japan Holdings, Ltd.: GSJH is a Yugen-Kaisha company, domiciled in Tokyo, Japan and indirectly wholly-owned by Group Inc. The entity operates in Japan from its office location in Tokyo. GSJH is both a staffing entity (employing both producing and non-revenue producing individuals) and a property management entity that owns fixed assets in Japan. GSJH seconds producing staff and provides non-revenue producing employees under both secondment

and service arrangements primarily to GSJCL. It also provides operating entities of the firm with access to the technology and facilities assets that it owns. The entity earns revenue by charging affiliated entities for its employee-related and non-employee related expenses.

Goldman Sachs Property Management USA L.L.C.: GSPMLLC is a Limited Liability Company, domiciled in Wilmington, Delaware and wholly owned by Goldman Sachs Service Entities Holding LLC (itself wholly owned directly by Group Inc.) GSPMLLC operates in the United States from its office location in New Jersey. It is a property management company, and its business is to provide operating entities of the firm with access to the technology physical assets that it owns. The entity earns revenue by charging affiliated entities for the use of its fixed assets.

Goldman Sachs Services (Singapore) Pte. Ltd.: GSSSPL is a Limited Liability Company, domiciled in Singapore and wholly owned by Goldman Sachs International Service Entities Holding Limited (itself wholly owned directly by Group Inc.) GSSSPL operates from its office location in Singapore. It is a property management company, and its business is to provide operating entities of the firm with access to the technology assets (e.g. data servers, computer equipment, etc.) and facilities assets (e.g. leasehold improvements, furniture and fixtures) that it owns. The entity earns revenue by charging affiliated entities for the use of its fixed assets.

Goldman Sachs Services (Asia) Ltd.: GSSAL is a Limited Liability Company, domiciled in Hong Kong and wholly owned directly by Goldman Sachs International Service Entities Holding Limited (itself wholly owned directly by Group Inc.) GSSAL operates from its office location in Hong Kong. It is a property management entity, and its business is to provide operating entities of the firm with access to the technology and facilities assets that it owns. The entity earns revenue by charging affiliated entities for the use of its fixed assets.

Summary of Resolution Strategy for the Firm's Material Service Entities

Our strategy would involve material service entities being pre-paid for their operating costs, if necessary, to ensure they have sufficient resources to allow continuity of services. As the material operating entities gradually unwind their positions, the material service entities will reduce their corresponding level of support. Our strategy is designed with the goal of keeping the material service entities in operation during the wind-down period and having sufficient liquidity to pay any creditors of the material service entities in full, with any remaining amounts ultimately returned to the bankruptcy estate of the parent company.

Supporting Information

The following pages contain background information about Goldman Sachs as support and context for our resolution strategy.

SI 1. Description of Core Business Lines

Introduction

Goldman Sachs is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals.

Details about our businesses are included in our Annual Report on Form 10-K for the year ended December 31, 2015 (our “2015 Form 10-K”) and our Quarterly Report on Form 10-Q for the period ended June 30, 2016 (our “June 2016 Form 10-Q”). All references to June 2016 refer to the firm’s period ended, or the date, as the context requires, June 30, 2016. All references to 2015, 2014 and 2013 refer to our years ended, or the dates, as the context requires, December 31, 2015, December 31, 2014 and December 31, 2013, respectively.

Group Inc. is a bank holding company and a financial holding company regulated by the Federal Reserve Board. Our U.S. depository institution subsidiary, GS Bank USA, is a New York State-chartered bank.

Goldman Sachs has a number of important businesses within our four business segments: Investment Banking, Institutional Client Services, Investing & Lending and Investment Management. These businesses are the core of the Goldman Sachs franchise and allow us to serve clients and execute our strategy on a global basis. Recovery planning requires a definition of “core” and “non-core” businesses based on the ability of a firm to separate business lines for sale or closure, to raise or preserve liquidity, increase capital ratios and reduce balance sheet size.

Resolution planning, in contrast, requires a further definition of “core” because certain businesses (i.e., those business lines and associated support operations, services and functions that, upon failure, would result in a material loss of revenue, profit or franchise value) may need to be singled out for specific actions as part of a resolution exercise. We define these business lines, which are primarily included in our Investment Banking and Institutional Client Services segments, as Resolution Core Business Lines. Other businesses in our Investing & Lending and Investment Management segments are important for GS Group, but have not been defined as Resolution Core Business Lines for purposes of the Resolution Plan.

The remainder of this Section describes only the firm’s Resolution Core Business Lines.

Investment Banking

Investment Banking serves public and private sector clients around the world. We provide financial advisory services and help companies raise capital to strengthen and grow their businesses. We seek to develop and maintain long-term relationships with a diverse global group of institutional clients, including governments, states and municipalities. Our goal is to deliver to our institutional clients the entire resources of the firm in a seamless fashion, with investment banking serving as the main initial point of contact with Goldman Sachs.

Financial Advisory. Financial Advisory includes strategic advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings, spin-offs and risk management. In particular, we help clients execute large, complex transactions for which we provide multiple services, including cross-border structuring expertise. Financial Advisory also includes revenues from derivative transactions directly related to these client advisory assignments.

We also assist our clients in managing their asset and liability exposures and their capital.

Underwriting. The other core activity of Investment Banking is helping companies raise capital to fund their businesses. As a financial intermediary, our job is to match the capital of our investing clients — who aim to grow the savings of millions of people — with the needs of our public and private sector clients — who need financing to generate growth, create jobs and deliver products and services. Our underwriting activities include public offerings and private placements, including local and cross-border transactions and acquisition financing, of a wide range of securities and other financial instruments. Underwriting also includes revenues from derivative transactions entered into with public and private sector clients in connection with our underwriting activities.

- **Equity Underwriting.** We underwrite common and preferred stock and convertible and exchangeable securities. We regularly receive mandates for large, complex transactions and have held a leading position in worldwide public common stock offerings and worldwide initial public offerings for many years.
- **Debt Underwriting.** We underwrite and originate various types of debt instruments, including investment-grade and high-yield debt, bank loans and bridge loans, including in connection with acquisition financing, and emerging- and growth-market debt, which may be issued by, among others, corporate, sovereign, municipal and agency issuers. In addition, we underwrite and originate structured securities, which include mortgage-related securities and other asset-backed securities.

Institutional Client Services

Institutional Client Services serves our clients who come to the firm to buy and sell financial products, raise funding and manage risk. We do this by acting as a market maker and offering market expertise on a global basis. Institutional Client Services makes markets and facilitates client transactions in fixed income, equity, currency and commodity products. In addition, we make markets in and clear client transactions on major stock, options and futures exchanges worldwide. Market makers provide liquidity and play a critical role in price discovery, which contributes to the overall efficiency of the capital markets. Our willingness to make markets, commit capital and take risk in a broad range of products is crucial to our client relationships.

As a market maker, we facilitate transactions in both liquid and less liquid markets, primarily for institutional clients, such as corporations, financial institutions, investment funds and governments, to assist clients in meeting their investment objectives and in managing their risks. In this role, we seek to earn the difference between the price at which a market participant is willing to sell an instrument to us and the price at which another market participant is willing to buy it from us, and vice versa (i.e., bid/offer spread). In addition, we maintain inventory, typically for a short period of time, in response to, or in anticipation of, client demand. We also hold inventory in order to actively manage our risk exposures that arise from these market-making activities.

Our results are influenced by a combination of interconnected drivers, including client activity levels, bid/offer spreads, changes in the fair value of our inventory, and interest income and interest expense related to the holding and funding of our inventory. The amount and composition of our net revenues vary over time as these drivers are impacted by multiple interrelated factors affecting economic and market conditions, including volatility and liquidity in the market, changes in interest rates, currency exchange rates, credit spreads, equity prices and commodity prices, investor confidence, and other macroeconomic concerns and uncertainties.

In general, assuming all other market-making conditions remain constant, increases in client activity levels or bid/offer spreads tend to result in increases in net revenues, and decreases tend to have the opposite effect. However, changes in market-making conditions can materially impact client activity levels and bid/offer spreads, as well as the fair value of our inventory. For example, a decrease in liquidity in the market could have the impact of (i) increasing our bid/offer spread, (ii) decreasing investor confidence and thereby decreasing client activity levels, and (iii) wider credit spreads on our inventory positions.

Institutional Client Services activities are organized by asset class and include both “cash” and “derivative” instruments. “Cash” refers to trading the underlying instrument (such as a stock, bond or barrel of oil). “Derivative” refers to instruments that derive their value from underlying asset prices, indices, reference rates and other inputs, or a combination of these factors (such as an option, which is the right or obligation to buy or sell a certain bond or stock index on a specified date in the future at a certain price, or an interest rate swap, which is the agreement to convert a fixed rate of interest into a floating rate or vice versa).

Fixed Income, Currency and Commodities Client Execution. Includes interest rate products, credit products, mortgages, currencies and commodities.

- **Interest Rate Products.** Government bonds (including inflation-linked securities) across maturities, other government-backed securities, repurchase agreements and interest rate swaps, options and other interest rate derivatives
- **Credit Products.** Investment-grade corporate securities, high-yield securities, credit derivatives, exchange-traded funds, bank and bridge loans, municipal securities, emerging market and distressed debt, and trade claims.
- **Mortgages.** Commercial mortgage-related securities, loans and derivatives, residential mortgage-related securities, loans and derivatives (including U.S. government agency-issued collateralized mortgage obligations, and other securities and loans), and other asset-backed securities, loans and derivatives.
- **Currencies.** Currency options, spot/forwards and other derivatives on G-10 currencies and emerging-market products.
- **Commodities.** Commodity derivatives and, to a lesser extent, physical commodities, involving crude oil and petroleum products, natural gas, base, precious and other metals, electricity, coal, agricultural and other commodity products.

Equities. Includes client execution activities related to making markets in equity products and commissions and fees from executing and clearing institutional client transactions on major stock, options and futures exchanges worldwide, as well as OTC transactions. Equities also includes our securities services business, which provides financing, securities lending and other prime brokerage services to institutional clients, including hedge funds, mutual funds, pension funds and foundations, and generates revenues primarily in the form of interest rate spreads or fees.

SI 2. Summary Financial Information: Assets, Liabilities, Capital and Funding

Set out on the following pages is financial information extracted from our 2015 Form 10-K.

Please see Part II, Items 7 and 8 of our 2015 Form 10-K for management's discussion and analysis of financial condition and results of operations and the notes to these consolidated financial statements, respectively.

Please see our June 2016 Form 10-Q for our second quarter 2016 financial information.

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- Set forth below are the consolidated statements of earnings from our 2015 Form 10-K¹⁹:

<i>In millions, except per share amounts</i>	Year Ended December		
	2015	2014	2013
Revenues			
Investment banking	\$ 7,027	\$ 6,464	\$ 6,004
Investment management	5,868	5,748	5,194
Commissions and fees	3,320	3,316	3,255
Market making	9,523	8,365	9,368
Other principal transactions	5,018	6,588	6,993
Total non-interest revenues	30,756	30,481	30,814
Interest income	8,452	9,604	10,060
Interest expense	5,388	5,557	6,668
Net interest income	3,064	4,047	3,392
Net revenues, including net interest income	33,820	34,528	34,206
Operating expenses			
Compensation and benefits	12,678	12,691	12,613
Brokerage, clearing, exchange and distribution fees	2,576	2,501	2,341
Market development	557	549	541
Communications and technology	806	779	776
Depreciation and amortization	991	1,337	1,322
Occupancy	772	827	839
Professional fees	963	902	930
Insurance reserves	—	—	176
Other expenses	5,699	2,585	2,931
Total non-compensation expenses	12,364	9,480	9,856
Total operating expenses	25,042	22,171	22,469
Pre-tax earnings	8,778	12,357	11,737
Provision for taxes	2,695	3,880	3,697
Net earnings	6,083	8,477	8,040
Preferred stock dividends	515	400	314
Net earnings applicable to common shareholders	\$ 5,568	\$ 8,077	\$ 7,726
Earnings per common share			
Basic	\$ 12.35	\$ 17.55	\$ 16.34
Diluted	12.14	17.07	15.46
Average common shares outstanding			
Basic	448.9	458.9	471.3
Diluted	458.6	473.2	499.6

¹⁹ The notes accompanying our consolidated financial statements in our 2015 Form 10-K are an integral part of our consolidated financial statements.

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- Set forth below are the consolidated statements of financial condition from our 2015 Form 10-K²⁰:

<i>\$ in millions, except per share amounts</i>	As of December	
	2015	2014
Assets		
Cash and cash equivalents	\$ 75,105	\$ 57,600
Cash and securities segregated for regulatory and other purposes (includes \$38,504 and \$34,291 at fair value as of December 2015 and December 2014, respectively)	56,838	51,716
Collateralized agreements:		
Securities purchased under agreements to resell and federal funds sold (includes \$119,450 and \$126,036 at fair value as of December 2015 and December 2014, respectively)	120,905	127,938
Securities borrowed (includes \$69,801 and \$66,769 at fair value as of December 2015 and December 2014, respectively)	172,099	160,722
Receivables:		
Brokers, dealers and clearing organizations	25,453	30,671
Customers and counterparties (includes \$4,992 and \$6,944 at fair value as of December 2015 and December 2014, respectively)	46,430	63,808
Loans receivable	45,407	28,938
Financial instruments owned, at fair value (includes \$54,426 and \$64,473 pledged as collateral as of December 2015 and December 2014, respectively)	293,940	312,248
Other assets	25,218	22,201
Total assets	\$ 861,395	\$ 855,842
Liabilities and shareholders' equity		
Deposits (includes \$14,680 and \$13,523 at fair value as of December 2015 and December 2014, respectively)	\$ 97,519	\$ 82,880
Collateralized financings:		
Securities sold under agreements to repurchase, at fair value	86,069	88,215
Securities loaned (includes \$466 and \$765 at fair value as of December 2015 and December 2014, respectively)	3,614	5,570
Other secured financings (includes \$23,207 and \$21,450 at fair value as of December 2015 and December 2014, respectively)	24,753	22,809
Payables:		
Brokers, dealers and clearing organizations	5,406	6,636
Customers and counterparties	204,956	206,936
Financial instruments sold, but not yet purchased, at fair value	115,248	132,083
Unsecured short-term borrowings, including the current portion of unsecured long-term borrowings (includes \$17,743 and \$18,826 at fair value as of December 2015 and December 2014, respectively)	42,787	44,539
Unsecured long-term borrowings (includes \$22,273 and \$16,005 at fair value as of December 2015 and December 2014, respectively)	175,422	167,302
Other liabilities and accrued expenses (includes \$1,253 and \$831 at fair value as of December 2015 and December 2014, respectively)	18,893	16,075
Total liabilities	774,667	773,045
Commitments, contingencies and guarantees		
Shareholders' equity		
Preferred stock, par value \$0.01 per share; aggregate liquidation preference of \$11,200 and \$9,200 as of December 2015 and December 2014, respectively	11,200	9,200
Common stock, par value \$0.01 per share; 4,000,000,000 shares authorized, 863,976,731 and 852,784,764 shares issued as of December 2015 and December 2014, respectively, and 419,480,736 and 430,259,102 shares outstanding as of December 2015 and December 2014, respectively	9	9
Share-based awards	4,151	3,766
Nonvoting common stock, par value \$0.01 per share; 200,000,000 shares authorized, no shares issued and outstanding	-	-
Additional paid-in capital	51,340	50,049
Retained earnings	83,386	78,984
Accumulated other comprehensive loss	(718)	(743)
Stock held in treasury, at cost, par value \$0.01 per share; 444,495,997 and 422,525,664 shares as of December 2015 and December 2014, respectively	(62,640)	(58,468)
Total shareholders' equity	86,728	82,797
Total liabilities and shareholders' equity	\$ 861,395	\$ 855,842

²⁰ The notes accompanying our consolidated financial statements in our 2015 Form 10-K are an integral part of our consolidated financial statements.

Equity Capital Management

We determine the appropriate level and composition of our equity capital by considering multiple factors including our current and future consolidated regulatory capital requirements, the results of our capital planning and stress testing process and other factors such as rating agency guidelines, subsidiary capital requirements, the business environment and conditions in the financial markets. We manage our capital requirements and the levels of our capital usage principally by setting limits on balance sheet assets and/or limits on risk, in each case at both the consolidated and business levels.

We principally manage the level and composition of our equity capital through issuances and repurchases of our common stock. We may also, from time to time, issue or repurchase our preferred stock, junior subordinated debt issued to trusts, and other subordinated debt or other forms of capital as business conditions warrant. Prior to any repurchases, we must receive confirmation that the Federal Reserve Board does not object to such capital actions.

As of December 2015, our total shareholders' equity was \$86.73 billion (consisting of common shareholders' equity of \$75.53 billion and preferred stock of \$11.20 billion). As of December 2014, our total shareholders' equity was \$82.80 billion (consisting of common shareholders' equity of \$73.60 billion and preferred stock of \$9.20 billion).

Consolidated Regulatory Capital

As a bank holding company, the firm is subject to consolidated regulatory capital requirements which are calculated in accordance with the revised risk-based capital and leverage regulations of the Federal Reserve Board, subject to certain transitional provisions ("Revised Capital Framework").

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to RWAs. Failure to comply with these requirements could result in restrictions being imposed by the firm's regulators. The firm's capital levels are also subject to qualitative judgments by the regulators about components of capital, risk weightings and other factors. Furthermore, certain of the firm's subsidiaries are subject to separate regulations and capital requirements as described below.

Capital Framework. The regulations under the Revised Capital Framework are largely based on the Basel Committee's final capital framework for strengthening international capital standards

(“Basel III”) and also implement certain provisions of the Dodd-Frank Act. Under the Revised Capital Framework, the firm is an “Advanced approach” banking organization.

As of December 2015, the firm calculated its Common Equity Tier 1 (CET1), Tier 1 capital and Total capital ratios in accordance with (i) the Standardized approach and market risk rules set out in the Revised Capital Framework (together, the Standardized Capital Rules) and (ii) the Advanced approach and market risk rules set out in the Revised Capital Framework (together, the Basel III Advanced Rules). The lower of each ratio calculated in (i) and (ii) is the ratio against which the firm’s compliance with its minimum ratio requirements is assessed. Each of the ratios calculated in accordance with the Basel III Advanced Rules was lower than that calculated in accordance with the Standardized Capital Rules and therefore the Basel III Advanced ratios were the ratios that applied to the firm as of December 2015. The capital ratios that apply to the firm can change in future reporting periods as a result of these regulatory requirements.

As of December 2014, the firm calculated its CET1, Tier 1 capital and Total capital ratios using the Revised Capital Framework for regulatory capital, but RWAs were calculated in accordance with (i) the Basel I Capital Accord of the Basel Committee, incorporating the market risk requirements set out in the Revised Capital Framework, and adjusted for certain items related to capital deductions and for the phase-in of capital deductions (Hybrid Capital Rules), and (ii) the Basel III Advanced Rules. The lower of each ratio calculated in (i) and (ii) was the ratio against which the firm’s compliance with its minimum ratio requirements was assessed. Each of the ratios calculated in accordance with the Basel III Advanced Rules was lower than that calculated in accordance with the Hybrid Capital Rules and therefore the Basel III Advanced ratios were the ratios that applied to the firm as of December 2014.

Regulatory Capital and Capital Ratios. The table below presents the minimum ratios required for the firm as of December 2015.

	Minimum Ratio
CET1 ratio	4.5%
Tier 1 capital ratio	6.0%
Total capital ratio ¹	8.0%
Tier 1 leverage ratio ²	4.0%

1. In order to meet the quantitative requirements for being “well-capitalized” under the Federal Reserve Board’s regulations, the firm must meet a higher required minimum Total capital ratio of 10.0%.

2. Tier 1 leverage ratio is defined as Tier 1 capital divided by quarterly average adjusted total assets (which includes adjustments for goodwill and identifiable intangible assets, and certain investments in nonconsolidated financial institutions).

Certain aspects of the Revised Capital Framework's requirements phase in over time (transitional provisions). These include the introduction of capital buffers (including surcharges) and certain deductions from regulatory capital (such as investments in nonconsolidated financial institutions). These deductions from regulatory capital are required to be phased in ratably per year from 2014 to 2018, with residual amounts not deducted during the transitional period subject to risk weighting. In addition, junior subordinated debt issued to trusts is being phased out of regulatory capital. The minimum CET1, Tier 1 and Total capital ratios that apply to the firm will increase as the transitional provisions phase in and capital buffers (including surcharges) are introduced.

Definition of Risk-Weighted Assets. As of December 2015, RWAs were calculated in accordance with both the Standardized Capital Rules and the Basel III Advanced Rules. The following is a comparison of RWA calculations under these rules:

- RWAs for credit risk in accordance with the Standardized Capital Rules are calculated in a different manner than under the Basel III Advanced Rules. The primary difference is that the Standardized Capital Rules do not contemplate the use of internal models to compute exposure for credit risk on derivatives and securities financing transactions, whereas the Basel III Advanced Rules permit the use of such models, subject to supervisory approval. In addition, credit RWAs calculated in accordance with the Standardized Capital Rules utilize prescribed risk-weights which depend largely on the type of counterparty, rather than on internal assessments of the creditworthiness of such counterparties;
- RWAs for market risk in accordance with the Standardized Capital Rules and the Basel III Advanced Rules are generally consistent; and
- RWAs for operational risk are not required by the Standardized Capital Rules, whereas the Basel III Advanced Rules do include such a requirement.

As of December 2014, the firm calculated RWAs in accordance with both the Basel III Advanced Rules and the Hybrid Capital Rules described below.

Credit Risk

Credit RWAs are calculated based upon measures of exposure, which are then risk weighted. The following is a description of the calculation of credit RWAs in accordance with the Standardized Capital Rules, the Basel III Advanced Rules and the Hybrid Capital Rules:

- For credit RWAs calculated in accordance with the Standardized Capital Rules, the firm utilizes prescribed risk-weights which depend largely on the type of counterparty (e.g., whether the counterparty is a sovereign, bank, broker-dealer or other entity). The exposure measure for

securities financing transactions is calculated to reflect adjustments for potential price volatility, the size of which depends on factors such as the type and maturity of the security, and whether it is denominated in the same currency as the other side of the financing transaction. The firm utilizes specific required formulaic approaches to measure exposure for securitizations and equities;

- For credit RWAs calculated in accordance with the Basel III Advanced Rules, the firm has been given permission by its regulators to compute risk-weights for wholesale and retail credit exposures in accordance with the Advanced Internal Ratings-Based approach. This approach is based on internal assessments of the creditworthiness of counterparties, with key inputs being the probability of default, loss given default and the effective maturity. The firm utilizes internal models to measure exposure for derivatives, securities financing transactions and eligible margin loans. The Revised Capital Framework requires that a bank holding company obtain prior written agreement from its regulators before using internal models for such purposes. The firm utilizes specific required formulaic approaches to measure exposure for securitizations and equities; and
- For credit RWAs calculated in accordance with the Hybrid Capital Rules, the firm utilized prescribed risk-weights depending on, among other things, the type of counterparty. The exposure measure for derivatives was based on a combination of positive net current exposure and a percentage of the notional amount of each derivative. The exposure measure for securities financing transactions was based on the carrying value without the application of potential price volatility adjustments required under the Standardized Capital Rules.

Market Risk

Market RWAs are calculated based on measures of exposure which include Value-at-Risk (“VaR”), stressed VaR, incremental risk and comprehensive risk based on internal models, and a standardized measurement method for specific risk. The market risk regulatory capital rules require that a bank holding company obtain prior written agreement from its regulators before using any internal model to calculate its risk-based capital requirement.

The following is further information regarding the measures of exposure for market RWAs calculated in accordance with the Standardized Capital Rules, Basel III Advanced Rules and Hybrid Capital Rules:

- VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. For both risk management purposes and regulatory capital calculations the firm uses a single VaR model which captures risks including those related to interest rates, equity prices, currency rates and commodity prices. However, VaR used for

regulatory capital requirements (“regulatory VaR”) differs from risk management VaR due to different time horizons and confidence levels (10-day and 99% for regulatory VaR vs. one-day and 95% for risk management VaR), as well as differences in the scope of positions on which VaR is calculated. In addition, the daily trading net revenues used to determine risk management VaR exceptions (i.e., comparing the daily trading net revenues to the VaR measure calculated as of the end of the prior business day) include intraday activity, whereas the Federal Reserve Board’s regulatory capital rules require that intraday activity be excluded from daily trading net revenues when calculating regulatory VaR exceptions. Intraday activity includes bid/offer net revenues, which are more likely than not to be positive by their nature. As a result, there may be differences in the number of VaR exceptions and the amount of daily trading net revenues calculated regulatory VaR compared to the amounts calculated for risk management VaR. The firm’s positional losses observed on a single day did not exceed its 99% one-day regulatory VaR during 2015, but did exceed its 99% one-day regulatory VaR on three occasions during 2014. There was no change in the VaR multiplier used to calculate Market RWAs;

- Stressed VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, during a period of significant market stress;
- Incremental risk is the potential loss in value of non-securitized inventory positions due to the default or credit migration of issuers of financial instruments over a one-year time horizon;
- Comprehensive risk is the potential loss in value, due to price risk and defaults, within the firm’s credit correlation positions; and
- Specific risk is the risk of loss on a position that could result from factors other than broad market movements, including event risk, default risk and idiosyncratic risk. The standardized measurement method is used to determine specific risk RWAs, by applying supervisory defined risk-weighting factors after applicable netting is performed.

Operational Risk

Operational RWAs are only required to be included under the Basel III Advanced Rules. The firm has been given permission by its regulators to calculate operational RWAs in accordance with the “Advanced Measurement Approach,” and therefore utilizes an internal risk-based model to quantify operational RWAs.

Capital Ratios and RWAs. Each of the ratios calculated in accordance with the Basel III Advanced Rules was lower than that calculated in accordance with the Standardized Rules as of December 2015 and therefore such lower ratios applied to the firm as of that date. Each of the ratios calculated in accordance with the Basel III Advanced Rules was lower than that calculated in

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accordance with the Hybrid Capital Rules as of December 2014 and therefore such lower ratios applied to the firm as of that date.

The table below presents the ratios calculated in accordance with both the Standardized and Basel III Advanced rules as of both December 2015 and December 2014. While the ratios calculated in accordance with the Standardized Capital Rules were not applicable until January 2015, the December 2014 ratios are presented in the table below for comparative purposes.

<i>\$ in millions</i>	As of December	
	2015	2014
Common shareholders' equity	\$ 75,528	\$ 73,597
Deductions for goodwill and identifiable intangible assets, net of deferred tax liabilities	(2,814)	(2,787)
Deductions for investments in nonconsolidated financial institutions	(864)	(953)
Other adjustments	(487)	(27)
Common Equity Tier 1	71,363	69,830
Perpetual non-cumulative preferred stock	11,200	9,200
Junior subordinated debt issued to trusts	330	660
Deduction for investments in covered funds	(413)	—
Other adjustments	(969)	(1,257)
Tier 1 capital	\$ 81,511	\$ 78,433
Standardized Tier 2 and total capital		
Tier 1 capital	\$ 81,511	\$ 78,433
Qualifying subordinated debt	15,132	11,894
Junior subordinated debt issued to trusts	990	660
Allowance for losses on loans and lending commitments	602	316
Other adjustments	(19)	(9)
Standardized Tier 2 capital	16,705	12,861
Standardized total capital	\$ 98,216	\$ 91,294
Basel III Advanced Tier 2 and total capital		
Tier 1 capital	\$ 81,511	\$ 78,433
Standardized Tier 2 capital	16,705	12,861
Allowance for losses on loans and lending commitments	(602)	(316)
Basel III Advanced Tier 2 capital	16,103	12,545
Basel III Advanced total capital	\$ 97,614	\$ 90,978
RWAs		
Standardized	\$ 524,107	\$ 619,216
Basel III Advanced	577,651	570,313
CET1 ratio		
Standardized	13.6%	11.3%
Basel III Advanced	12.4%	12.2%
Tier 1 capital ratio		
Standardized	15.6%	12.7%
Basel III Advanced	14.1%	13.8%
Total capital ratio		
Standardized	18.7%	14.7%
Basel III Advanced	16.9%	16.0%
Tier 1 leverage ratio	9.3%	9.0%

In the table above:

- The deductions for goodwill and identifiable intangible assets, net of deferred tax liabilities, include goodwill of \$3.66 billion and \$3.65 billion as of December 2015 and December 2014, respectively, and identifiable intangible assets of \$196 million (40% of \$491 million) and \$103 million (20% of \$515 million) as of December 2015 and December 2014, respectively, net of associated deferred tax liabilities of \$1.04 billion and \$961 million as of December 2015 and

December 2014, respectively. Goodwill is fully deducted from CET1, while the deduction for identifiable intangible assets is required to be phased into CET1 ratably over five years from 2014 to 2018. The balance that is not deducted during the transitional period is risk weighted.

- The deductions for investments in nonconsolidated financial institutions represent the amount by which the firm's investments in the capital of nonconsolidated financial institutions exceed certain prescribed thresholds. The deduction for such investments is required to be phased into CET1 ratably over five years from 2014 to 2018. As of December 2015 and December 2014, CET1 reflects 40% and 20% of the deduction, respectively. The balance that is not deducted during the transitional period is risk weighted.
- The deduction for investments in covered funds represents the firm's aggregate investments in applicable covered funds, as permitted by the Volcker Rule, that were purchased after December 2013. Substantially all of these investments in covered funds were purchased in connection with the firm's market-making activities. This deduction became effective in July 2015 and is not subject to a transition period.
- Other adjustments within CET1 and Tier 1 capital primarily include accumulated other comprehensive loss, credit valuation adjustments on derivative liabilities, debt valuation adjustments, the overfunded portion of the firm's defined benefit pension plan obligation net of associated deferred tax liabilities, disallowed deferred tax assets and other required credit risk-based deductions. The deductions for such items are generally required to be phased into CET1 ratably over five years from 2014 to 2018. As of December 2015 and December 2014, CET1 reflects 40% and 20% of such deductions, respectively. The balance that is not deducted from CET1 during the transitional period is generally deducted from Tier 1 capital within other adjustments.
- Junior subordinated debt issued to trusts is reflected in both Tier 1 capital (25%) and Tier 2 capital (75%) as of December 2015. Such percentages were 50% for both Tier 1 and Tier 2 capital as of December 2014. Junior subordinated debt issued to trusts is reduced by the amount of trust preferred securities purchased by the firm and will be fully phased out of Tier 1 capital into Tier 2 capital by 2016, and then out of Tier 2 capital by 2022.
- Qualifying subordinated debt represents subordinated debt issued by Group Inc. with an original term to maturity of five years or greater. The outstanding amount of subordinated debt qualifying for Tier 2 capital is reduced upon reaching a remaining maturity of five years.

Liquidity Risk Management and Funding Sources

Liquidity Risk Management

Liquidity risk is the risk that we will be unable to fund the firm or meet our liquidity needs in the event of firm-specific, broader industry, or market liquidity stress events. Liquidity is of critical importance to us, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. Accordingly, we have in place a comprehensive and conservative set of liquidity and funding policies. Our principal objective is to be able to fund the firm and to enable our core businesses to continue to serve clients and generate revenues, even under adverse circumstances.

Treasury has the primary responsibility for assessing, monitoring and managing our liquidity and funding strategy. Treasury is independent of the revenue-producing units and reports to our chief financial officer.

Liquidity Risk Management is an independent risk management function responsible for control and oversight of the firm's liquidity risk management framework, including stress testing and limit governance. Liquidity Risk Management is independent of the revenue-producing units and Treasury, and reports to our chief risk officer.

Liquidity Risk Management Principles

We manage liquidity risk according to three principles (i) hold sufficient excess liquidity in the form of GCLA to cover outflows during a stressed period, (ii) maintain appropriate Asset-Liability Management and (iii) maintain a viable Contingency Funding Plan.

Global Core Liquid Assets. GCLA is liquidity that we maintain to meet a broad range of potential cash outflows and collateral needs in a stressed environment. Our most important liquidity policy is to pre-fund our estimated potential cash and collateral needs during a liquidity crisis and hold this liquidity in the form of unencumbered, highly liquid securities and cash. We believe that the securities held in our GCLA would be readily convertible to cash in a matter of days, through liquidation, by entering into repurchase agreements or from maturities of resale agreements, and that this cash would allow us to meet immediate obligations without needing to sell other assets or depend on additional funding from credit-sensitive markets.

Our GCLA reflects the following principles:

- The first days or weeks of a liquidity crisis are the most critical to a company's survival;
- Focus must be maintained on all potential cash and collateral outflows, not just disruptions to financing flows. Our businesses are diverse, and our liquidity needs are determined by many factors, including market movements, collateral requirements and client commitments, all of which can change dramatically in a difficult funding environment;
- During a liquidity crisis, credit-sensitive funding, including unsecured debt and some types of secured financing agreements, may be unavailable, and the terms (e.g., interest rates, collateral provisions and tenor) or availability of other types of secured financing may change; and
- As a result of our policy to pre-fund liquidity that we estimate may be needed in a crisis, we hold more unencumbered securities and have larger debt balances than our businesses

would otherwise require. We believe that our liquidity is stronger with greater balances of highly liquid unencumbered securities, even though it increases our total assets and our funding costs.

We maintain our GCLA across major broker-dealer and bank subsidiaries, asset types, and clearing agents to provide us with sufficient operating liquidity to ensure timely settlement in all major markets, even in a difficult funding environment. In addition to the GCLA, we maintain cash balances in several of our other entities, primarily for use in specific currencies, entities, or jurisdictions where we do not have immediate access to parent company liquidity.

We believe that our GCLA provides us with a resilient source of funds that would be available in advance of potential cash and collateral outflows and gives us significant flexibility in managing through a difficult funding environment.

Asset-Liability Management. Our liquidity risk management policies are designed to ensure we have a sufficient amount of financing, even when funding markets experience persistent stress. We manage the maturities and diversity of our funding across markets, products and counterparties, and seek to maintain a long-dated and diversified funding profile, taking into consideration the characteristics and liquidity profile of our assets.

Our approach to asset-liability management includes:

- Conservatively managing the overall characteristics of our funding book, with a focus on maintaining long-term, diversified sources of funding in excess of our current requirements;
- Actively managing and monitoring our asset base, with particular focus on the liquidity, holding period and our ability to fund assets on a secured basis. We assess our funding requirements and our ability to liquidate assets in a stressed environment while appropriately managing risk. This enables us to determine the most appropriate funding products and tenors; and
- Raising secured and unsecured financing that has a long tenor relative to the liquidity profile of our assets. This reduces the risk that our liabilities will come due in advance of our ability to generate liquidity from the sale of our assets. Because we maintain a highly liquid balance sheet, the holding period of certain of our assets may be materially shorter than their contractual maturity dates.

Our goal is to ensure that we maintain sufficient liquidity to fund our assets and meet our contractual and contingent obligations in normal times as well as during periods of market stress. Through our dynamic balance sheet management process, we use actual and projected asset balances to determine secured and unsecured funding requirements. Funding plans are reviewed and approved by the firmwide Finance Committee on a quarterly basis. In addition, senior managers in our independent control and support functions regularly analyze, and the firmwide Finance Committee reviews, our consolidated total capital position (unsecured long-term borrowings plus total shareholders' equity) so that we maintain a level of long-term funding that is sufficient to meet our long-term financing requirements. In a liquidity crisis, we would first use our GCLA in order to avoid reliance on asset sales (other than our GCLA). However, we recognize that orderly asset sales may be prudent or necessary in a severe or persistent liquidity crisis.

Contingency Funding Plan. We maintain a contingency funding plan to provide a framework for analyzing and responding to a liquidity crisis situation or periods of market stress. This framework sets forth the plan of action to fund normal business activity in emergency and stress situations. Our contingency funding plan outlines a list of potential risk factors, key reports and metrics that are reviewed on an ongoing basis to assist in assessing the severity of, and managing through, a liquidity crisis and/or market dislocation. The contingency funding plan also describes in detail our potential responses if our assessments indicate that we have entered a liquidity crisis, which include pre-funding for what we estimate will be our potential cash and collateral needs as well as utilizing secondary sources of liquidity. Mitigants and action items to address specific risks which may arise are also described and assigned to individuals responsible for execution.

The contingency funding plan identifies key groups of individuals to foster effective coordination, control and distribution of information, all of which are critical in the management of a crisis or period of market stress. The contingency funding plan also details the responsibilities of these groups and individuals, which include making and disseminating key decisions, coordinating all contingency activities throughout the duration of the crisis or period of market stress, implementing liquidity maintenance activities and managing internal and external communication.

Liquidity Stress Tests

In order to determine the appropriate size of our GCLA, we use an internal liquidity model, referred to as the Modeled Liquidity Outflow, which captures and quantifies our liquidity risks. We also consider other factors including, but not limited to, an assessment of our potential intraday liquidity needs through an additional internal liquidity model, referred to as the Intraday Liquidity Model, the

results of our long-term stress testing models, applicable regulatory requirements and a qualitative assessment of the condition of the financial markets and the firm. The results of the Modeled Liquidity Outflow, the Intraday Liquidity Model and the long-term stress testing models are reported to senior management on a regular basis.

Modeled Liquidity Outflow. Our Modeled Liquidity Outflow is based on conducting multiple scenarios that include combinations of market-wide and firm-specific stress. These scenarios are characterized by the following qualitative elements:

- Severely challenged market environments, including low consumer and corporate confidence, financial and political instability, adverse changes in market values, including potential declines in equity markets and widening of credit spreads; and
- A firm-specific crisis potentially triggered by material losses, reputational damage, litigation, executive departure, and/or a ratings downgrade.

The following are the critical modeling parameters of the Modeled Liquidity Outflow:

- Liquidity needs over a 30-day scenario;
- A two-notch downgrade of our long-term senior unsecured credit ratings;
- A combination of contractual outflows, such as upcoming maturities of unsecured debt, and contingent outflows (e.g., actions though not contractually required, we may deem necessary in a crisis). We assume that most contingent outflows will occur within the initial days and weeks of a crisis;
- No issuance of equity or unsecured debt;
- No support from additional government funding facilities. Although we have access to various central bank funding programs, we do not assume reliance on additional sources of funding in a liquidity crisis; and
- No asset liquidation, other than the GCLA.

The potential contractual and contingent cash and collateral outflows covered in our Modeled Liquidity Outflow include:

Unsecured Funding

- Contractual: All upcoming maturities of unsecured long-term debt, commercial paper, promissory notes and other unsecured funding products. We assume that we will be unable to issue new unsecured debt or rollover any maturing debt.
- Contingent: Repurchases of our outstanding long-term debt, commercial paper and hybrid financial instruments in the ordinary course of business as a market maker.

Deposits

- Contractual: All upcoming maturities of term deposits. We assume that we will be unable to raise new term deposits or rollover any maturing term deposits.
- Contingent: Withdrawals of bank deposits that have no contractual maturity. The withdrawal assumptions reflect, among other factors, the type of deposit, whether the deposit is insured or uninsured, and our relationship with the depositor.

Secured Funding

- Contractual: A portion of upcoming contractual maturities of secured funding due to either the inability to refinance or the ability to refinance only at wider haircuts (i.e., on terms which require us to post additional collateral). Our assumptions reflect, among other factors, the quality of the underlying collateral, counterparty roll probabilities (our assessment of the counterparty's likelihood of continuing to provide funding on a secured basis at the maturity of the trade) and counterparty concentration.
- Contingent: Adverse changes in value of financial assets pledged as collateral for financing transactions, which would necessitate additional collateral postings under those transactions.

OTC Derivatives

- Contingent: Collateral postings to counterparties due to adverse changes in the value of our OTC derivatives, excluding those that are cleared and settled through central counterparties (OTC-cleared).
- Contingent: Other outflows of cash or collateral related to OTC derivatives, excluding OTC-cleared, including the impact of trade terminations, collateral substitutions, collateral disputes, loss of rehypothecation rights, collateral calls or termination payments required by a two-notch downgrade in our credit ratings, and collateral that has not been called by counterparties, but is available to them.

Exchange-Traded and OTC-cleared Derivatives

- Contingent: Variation margin postings required due to adverse changes in the value of our outstanding exchange-traded and OTC-cleared derivatives.
- Contingent: An increase in initial margin and guaranty fund requirements by derivative clearing houses.

Customer Cash and Securities

- Contingent: Liquidity outflows associated with our prime brokerage business, including withdrawals of customer credit balances, and a reduction in customer short positions, which may serve as a funding source for long positions.

Firm Securities

- Contingent: Liquidity outflows associated with a reduction or composition change in firm short positions, which may serve as a funding source for long positions.

Unfunded Commitments

- Contingent: Draws on our unfunded commitments. Draw assumptions reflect, among other things, the type of commitment and counterparty.

Other

- Other upcoming large cash outflows, such as tax payments.

Intraday Liquidity Model. Our Intraday Liquidity Model measures our intraday liquidity needs using a scenario analysis characterized by the same qualitative elements as our Modeled Liquidity Outflow. The model assesses the risk of increased intraday liquidity requirements during a scenario where access to sources of intraday liquidity may become constrained.

The following are key modeling elements of the Intraday Liquidity Model:

- Liquidity needs over a one-day settlement period;
- Delays in receipt of counterparty cash payments;
- A reduction in the availability of intraday credit lines at our third-party clearing agents; and
- Higher settlement volumes due to an increase in activity.

As noted above, we have estimated the stand-alone liquidity position of each material entity over a stressed period of 30 days in accordance with the RLAP guidance, which includes taking into account the daily contractual mismatches between inflows and outflows, the effect of inter-affiliate frictions, and the daily stressed liquidity flows and trapped liquidity as a result of potential actions taken by clients, counterparties, key FMUs and regulatory authorities. We will demonstrate that we hold sufficient liquidity at the parent company to cover the sum of all stand-alone material entity net liquidity deficits, if any. The stand-alone net liquidity position of each material entity is measured using our internal liquidity stress test assumptions, and treats inter-affiliate exposures in the same manner as third-party exposures. It does not assume that a net liquidity surplus at one material entity could be moved to meet net liquidity deficits at other material entities or to augment our parent company's resources.

During the period remaining until we submit our 2017 Resolution Plan, we will continue to refine our enhanced model and the platform to calculate our liquidity forecasts, which will then become part of our business-as-usual processes.

GCLA and Unencumbered Metrics

GCLA. Based on the results of our internal liquidity risk models, described above, as well as our consideration of other factors including, but not limited to, an assessment of our potential intraday liquidity needs and a qualitative assessment of the condition of the financial markets and the firm, we believe our liquidity position as of December 2015 was appropriate. As of December 2015, the fair value of the securities and certain overnight cash deposits included in our GCLA totaled \$199.12 billion, and the fair value of these assets averaged \$187.75 billion.

We maintain our GCLA to enable us to meet current and potential liquidity requirements of our parent company, Group Inc., and its subsidiaries. Our Modeled Liquidity Outflow and Intraday Liquidity Model incorporate a consolidated requirement for Group Inc. as well as a standalone requirement for each of our major broker-dealer and bank subsidiaries. Liquidity held directly in each of these major subsidiaries is intended for use only by that subsidiary to meet its liquidity requirements and is assumed not to be available to Group Inc. unless (i) legally provided for and (ii) there are no additional regulatory, tax or other restrictions. In addition, the Modeled Liquidity Outflow and Intraday Liquidity Model also incorporate a broader assessment of standalone liquidity requirements for other subsidiaries and we hold a portion of our GCLA directly at Group Inc. to support such requirements.

The table below presents the GCLA of Group Inc. and our major broker-dealer and bank subsidiaries.

<i>\$ in millions</i>	Average for the Year Ended December	
	2015	2014
Group Inc.	\$ 41,284	\$ 37,699
Major broker-dealer subsidiaries	89,510	89,549
Major bank subsidiaries	56,954	52,385
Total	\$ 187,748	\$ 179,633

Other Unencumbered Assets. In addition to our GCLA, we have a significant amount of other unencumbered cash and “Financial instruments owned, at fair value,” including other government obligations, high-grade money market securities, corporate obligations, marginable equities, loans and cash deposits not included in our GCLA. The fair value of these assets averaged \$90.36 billion for 2015. We do not consider these assets liquid enough to be eligible for our GCLA.

Liquidity Regulatory Framework

The Basel Committee’s international framework for liquidity risk measurement, standards and monitoring calls for a liquidity coverage ratio (“LCR”) designed to ensure that banking organizations maintain an adequate level of unencumbered HQLA based on expected net cash outflows under an acute short-term liquidity stress scenario.

The final rules on minimum liquidity standards approved by the U.S. federal bank regulatory agencies are generally consistent with the Basel Committee's framework as described above, but include accelerated transition provisions and more stringent requirements related to both the range of assets that qualify as HQLA and cash outflow assumptions for certain types of funding and other liquidity risks. Our GCLA is substantially the same in composition as the assets that qualify as HQLA under these rules. Under the accelerated transition timeline, the LCR became effective in the United States on January 1, 2015, with a phase-in period whereby firms have an 80% minimum in 2015, which will increase by 10% per year until 2017. In November 2015, the Federal Reserve Board proposed a rule that would require bank holding companies to disclose their LCR on a quarterly basis beginning in the quarter ended September 2016. These requirements include LCR averages over the prior quarter, detailed information on certain components of the LCR calculation and projected net cash outflows. For the three months ended December 2015, our average LCR exceeded the fully phased-in minimum requirement, based on our interpretation and understanding of the finalized framework, which may evolve as we review our interpretation and application with the Agencies.

The Basel Committee's international framework for liquidity risk measurement, standards and monitoring also calls for a net stable funding ratio (NSFR) designed to promote more medium- and long-term stable funding of the assets and off-balance-sheet activities of banking organizations over a one-year time horizon. The Basel Committee's NSFR framework requires banking organizations to maintain a minimum NSFR of 100%, and will be effective on January 1, 2018. In addition, in the second quarter of 2016, the U.S. federal bank regulatory agencies issued a proposed rule that would implement an NSFR for large U.S. banking organizations. The proposal would require banking organizations to ensure they have access to stable funding over a one-year time horizon. The proposed NSFR requirement has an effective date of January 1, 2018, including quarterly disclosure of the ratio, as well as a description of the banking organization's stable funding sources. Based on our current interpretation and understanding of the proposal, we estimate that we are approximately at the NSFR requirement.

The following is information on our subsidiary liquidity regulatory requirements:

- **GS Bank USA.** GS Bank USA is subject to minimum liquidity standards under the LCR rule approved by the U.S. federal bank regulatory agencies that became effective on January 1, 2015, with the same phase-in through 2017 described above.
- **GSI.** The LCR rule issued by the U.K. regulatory authorities became effective in the United Kingdom on October 1, 2015, with a phase-in period whereby certain financial institutions,

including GSI, must have an 80% minimum ratio initially, increasing to 90% on January 1, 2017 and 100% on January 1, 2018.

- **Other Subsidiaries.** We monitor the local regulatory liquidity requirements of our subsidiaries to ensure compliance. For many of our subsidiaries, these requirements either have changed or are likely to change in the future due to the implementation of the Basel Committee's framework for liquidity risk measurement, standards and monitoring, as well as other regulatory developments.

The implementation of these rules, and any amendments adopted by the applicable regulatory authorities, could impact our liquidity and funding requirements and practices in the future.

Funding Sources

Our primary sources of funding are secured financings, unsecured long-term and short-term borrowings, and deposits. We seek to maintain broad and diversified funding sources globally across products, programs, markets, currencies and creditors to avoid funding concentrations.

We raise funding through a number of different products, including:

- Collateralized financings, such as repurchase agreements, securities loaned and other secured financings;
- Long-term unsecured debt (including structured notes) through syndicated U.S. registered offerings, U.S. registered and Rule 144A medium-term note programs, offshore medium-term note offerings and other debt offerings;
- Savings and demand deposits through deposit sweep programs and time deposits through internal and third-party broker-dealers; and
- Short-term unsecured debt at the subsidiary level through U.S. and non-U.S. hybrid financial instruments, commercial paper and promissory note issuances and other methods.

Our funding is primarily raised in U.S. dollar, Euro, British pound and Japanese yen. We generally distribute our funding products through our own sales force and third-party distributors to a large, diverse creditor base in a variety of markets in the Americas, Europe and Asia. We believe that our relationships with our creditors are critical to our liquidity. Our creditors include banks, governments, securities lenders, pension funds, insurance companies, mutual funds and individuals. We have imposed various internal guidelines to monitor creditor concentration across our funding programs.

Secured Funding. We fund a significant amount of inventory on a secured basis. Secured funding is less sensitive to changes in our credit quality than unsecured funding, due to our posting of collateral to our lenders. Nonetheless, we continually analyze the refinancing risk of our secured funding activities, taking into account trade tenors, maturity profiles, counterparty concentrations, collateral eligibility and counterparty rollover probabilities. We seek to mitigate our refinancing risk by executing term trades with staggered maturities, diversifying counterparties, raising excess secured funding, and pre-funding residual risk through our GCLA.

We seek to raise secured funding with a term appropriate for the liquidity of the assets that are being financed, and we seek longer maturities for secured funding collateralized by asset classes that may be harder to fund on a secured basis especially during times of market stress. Substantially all of our secured funding, excluding funding collateralized by liquid government obligations, is executed for tenors of one month or greater. Assets that may be harder to fund on a secured basis during times of market stress include certain financial instruments in the following categories: mortgage and other asset-backed loans and securities, non-investment-grade corporate debt securities, equities and convertible debentures and emerging market securities. Assets that are classified as level 3 in the fair value hierarchy are generally funded on an unsecured basis.

The weighted average maturity of our secured funding, excluding funding collateralized by highly liquid securities eligible for inclusion in our GCLA, exceeded 120 days as of December 2015.

A majority of our secured funding for securities not eligible for inclusion in the GCLA is executed through term repurchase agreements and securities loaned contracts. We also raise financing through other types of collateralized financings, such as secured loans and notes. GS Bank USA has access to funding from the Federal Home Loan Bank (FHLB). As of December 2015, our outstanding borrowings against the FHLB were \$2.92 billion. GS Bank USA also has access to funding through the Federal Reserve Bank discount window. While we do not rely on this funding in our liquidity planning and stress testing, we maintain policies and procedures necessary to access this funding and test discount window borrowing procedures.

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Unsecured Long-Term Borrowings. We issue unsecured long-term borrowings as a source of funding for inventory and other assets and to finance a portion of our GCLA. We issue in different tenors, currencies and products to maximize the diversification of our investor base. The table below presents our quarterly unsecured long-term borrowings maturity profile as of December 2015:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
<i>\$ in millions</i>					
2017	\$ 12,618	\$ 3,403	\$ 7,305	\$ 2,036	\$ 25,362
2018	8,114	8,258	5,243	3,516	25,131
2019	6,318	663	2,243	6,811	16,035
2020	4,290	7,368	5,455	842	17,955
2021 - thereafter					90,939
Total					\$ 175,422

The weighted average maturity of our unsecured long-term borrowings as of December 2015 was approximately nine years. To mitigate refinancing risk, we seek to limit the principal amount of debt maturing on any one day or during any week or year. We enter into interest rate swaps to convert a majority of the amount of our unsecured long-term borrowings into floating-rate obligations in order to manage our exposure to interest rates.

Deposits. We raise deposits mainly through GS Bank USA and GSIB. The tables below present the types and sources of our deposits.

	Savings and Demand ¹	Time ²	Total
<i>\$ in millions</i>			
Private bank deposits ³	\$ 38,715	\$ 2,354	\$ 41,069
Certificates of deposit	–	34,375	34,375
Deposit sweep programs ⁴	15,791	–	15,791
Institutional	1	6,283	6,284
Total ⁵	\$ 54,507	\$ 43,012	\$ 97,519

	Savings and Demand ¹	Time ²	Total
<i>\$ in millions</i>			
Private bank deposits ³	\$ 33,590	\$ 1,609	\$ 35,199
Certificates of deposit	–	25,780	25,780
Deposit sweep programs ⁴	15,691	–	15,691
Institutional	12	6,198	6,210
Total ⁵	\$ 49,293	\$ 33,587	\$ 82,880

1. Represents deposits with no stated maturity.
2. Weighted average maturity of approximately three years as of both December 2015 and December 2014.
3. Substantially all were from overnight deposit sweep programs related to private wealth management clients.
4. Represents long-term contractual agreements with several U.S. broker-dealers who sweep client cash to FDIC-insured deposits.
5. Deposits insured by the FDIC as of December 2015 and December 2014 were approximately \$55.48 billion and \$45.72 billion, respectively.

In April 2016, following regulatory approvals, GS Bank USA acquired GE Capital Bank's online deposit platform and assumed \$16.52 billion of deposits, consisting of \$8.76 billion in online deposit accounts and certificates of deposit, and \$7.76 billion in brokered certificates of deposit.

Unsecured Short-Term Borrowings. A significant portion of our unsecured short-term borrowings was originally long-term debt that is scheduled to mature within one year of the reporting date. We use unsecured short-term borrowings to finance liquid assets and for other cash management purposes. We issue hybrid financial instruments, commercial paper and promissory notes. In light of regulatory developments, since the third quarter of 2015, Group Inc. has not issued debt with an original maturity of less than one year and currently does not expect to issue short-term debt in the future.

As of December 2015 and December 2014, our unsecured short-term borrowings, including the current portion of unsecured long-term borrowings, were \$42.79 billion and \$44.54 billion, respectively.

SI 3. Description of Derivatives and Hedging Activities

Derivatives are instruments that derive their value from underlying asset prices, indices, reference rates and other inputs, or a combination of these factors. Derivatives may be traded on an exchange or they may be privately negotiated contracts, which are usually referred to as OTC derivatives. Certain of the firm's OTC derivatives are cleared and settled through central clearing counterparties, while others are bilateral contracts between two counterparties.

Market-Making. As a market maker, the firm enters into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. In this capacity, the firm typically acts as principal and is consequently required to commit capital to provide execution. As a market maker, it is essential to maintain an inventory of financial instruments sufficient to meet expected client and market demands.

Risk Management. The firm also enters into derivatives to actively manage risk exposures that arise from its market-making and investing and lending activities in derivative and cash instruments. The firm's holdings and exposures are hedged, in many cases, on either a portfolio or risk-specific basis, as opposed to an instrument-by-instrument basis. The offsetting impact of this economic hedging is reflected in the same business segment as the related revenues. In addition, the firm may enter into derivatives designated as hedges under U.S. GAAP. These derivatives are used to manage interest rate exposure in certain fixed-rate unsecured long-term and short-term borrowings, and deposits, and to manage foreign currency exposure on the net investment in certain non-U.S. operations.

The firm enters into various types of derivatives, including:

- **Futures and Forwards.** Contracts that commit counterparties to purchase or sell financial instruments, commodities or currencies in the future.
- **Swaps.** Contracts that require counterparties to exchange cash flows such as currency or interest payment streams. The amounts exchanged are based on the specific terms of the contract with reference to specified rates, financial instruments, commodities, currencies or indices.
- **Options.** Contracts in which the option purchaser has the right, but not the obligation, to purchase from or sell to the option writer financial instruments, commodities or currencies within a defined time period for a specified price.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement (counterparty netting). Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements (cash collateral netting).

SI 4. Memberships in Material Payment, Clearing and Settlement Systems

Set forth below is a list of our memberships and contractual relationships with the most material payment, clearing and settlement systems:

Market	Payment, Clearing and Settlement Systems	Description of Services
Global	<ul style="list-style-type: none"> The Bank of New York Mellon 	Agent bank providing tri-party services, corporate trust services, direct credit support, US government security clearing, custody services, and USD clearing to multiple GS entities globally
	<ul style="list-style-type: none"> Citibank 	Agent bank providing settlement and custody services across multiple global markets
	<ul style="list-style-type: none"> CLS Bank Limited 	Multi-currency cash settlement system that settles payment instructions related to trades in FX spot contracts, FX forwards, FX options, FX swaps, non-deliverable forwards, credit derivatives and 17 major currencies
	<ul style="list-style-type: none"> HSBC 	Agent bank providing settlement and custody services across multiple global markets
	<ul style="list-style-type: none"> Standard Chartered Bank 	Agent bank providing settlement and custody services across multiple global markets
	<ul style="list-style-type: none"> SWIFT 	Telecommunication platform for the exchange of standardized financial messages between financial institutions and corporations
Japan	<ul style="list-style-type: none"> Japan Securities Clearing Corporation 	Clearing service provider for Japanese equities, bonds and derivatives
	<ul style="list-style-type: none"> Japan Securities Depository 	Japan's central securities depository
Europe	<ul style="list-style-type: none"> Eurex Clearing AG 	Central counterparty for derivatives, equities, repo, energy and fixed income transactions
	<ul style="list-style-type: none"> Euroclear 	International central securities depository and provider of settlement services for cross-border transactions involving bonds, equities, derivatives and investment funds
	<ul style="list-style-type: none"> European Central Counterparty N.V. 	Central counterparty clearing equities from various European markets and from the US, as well as ETFs, currency ETCs and depository receipts
	<ul style="list-style-type: none"> ICE Clear Europe 	Clearing house for OTC energy and emissions markets and European credit default swaps
	<ul style="list-style-type: none"> LCH.Clearnet Group 	Central counterparty providing clearing for commodities (exchange traded and OTC), equities, fixed income, energy and freight, and interest rate and credit default swaps
United States	<ul style="list-style-type: none"> Chicago Mercantile Exchange, Inc. 	Clearing and settlement services provider for futures, options, and OTC derivatives products
	<ul style="list-style-type: none"> The Depository Trust Company 	Central depository providing depository and book-entry services for eligible securities and other financial assets
	<ul style="list-style-type: none"> Fixed Income Clearing Corporation 	Clearing, settlement, risk management, central counterparty services provider for U.S. Government securities and mortgage-backed securities
	<ul style="list-style-type: none"> ICE Clear Credit LLC 	Clearing house for North American credit default swaps
	<ul style="list-style-type: none"> ICE Clear U.S. 	Clearing house for agriculture, foreign exchange and equity index futures markets
	<ul style="list-style-type: none"> National Securities Clearing Corporation Ltd. 	Clearing, settlement, risk management, central counterparty services provider for equities, corporate and municipal debt, American depository receipts, ETFs, and unit investment trusts
<ul style="list-style-type: none"> Options Clearing Corporation 	Central clearing and settlement services provider for options on common stocks and other equity issues, stock indices, foreign currencies, interest rate composites, single-stock futures, futures, options on futures, and securities lending transactions	

SI 5. Description of Foreign Operations

Our most significant overseas material operating entities for the purposes of resolution planning are:

- Goldman Sachs International (U.K. Broker-Dealer)
- Goldman Sachs International Bank (U.K. Bank)
- Goldman Sachs Japan Co., Ltd (Japan Broker-Dealer)

In total, we have a physical presence in over 30 countries, but we are highly concentrated in just three: the United States, the United Kingdom and Japan.

Due to the highly integrated nature of international financial markets, the firm manages its businesses based on the profitability of the enterprise as a whole. The methodology for allocating profitability to geographic regions is dependent on estimates and management judgment because a significant portion of the firm's activities require cross-border coordination in order to facilitate the needs of the firm's clients.

Geographic results for the firm (not just the Resolution Core Business Lines identified in Supporting Information Section SI 1 above) are generally allocated as follows:

- Investment Banking: location of the client and investment banking team.
- Institutional Client Services: Fixed Income, Currency and Commodities Client Execution, and Equities (excluding Securities Services): location of the market-making desk; Securities Services: location of the primary market for the underlying security.
- Investing & Lending: Investing: location of the investment; Lending: location of the client.
- Investment Management: location of the sales team.

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The table below presents the total net revenues, pre-tax earnings and net earnings of the firm by geographic region allocated based on the methodology referred to above, as well as the percentage of total net revenues, pre-tax earnings and net earnings (excluding Corporate) for each geographic region. In the table below, Asia includes Australia and New Zealand.

\$ in millions	Year Ended December					
	2015		2014		2013	
Net revenues						
Americas	\$ 19,202	56%	\$ 20,062	58%	\$ 19,858	58%
Europe, Middle East and Africa	8,981	27%	9,057	26%	8,828	26%
Asia	5,637	17%	5,409	16%	5,520	16%
Total net revenues	\$ 33,820	100%	\$ 34,528	100%	\$ 34,206	100%
Pre-tax earnings						
Americas	\$ 3,359 ²	37%	\$ 7,144	57%	\$ 6,794	57%
Europe, Middle East and Africa	3,364	38%	3,338	27%	3,230	27%
Asia	2,203	25%	2,012	16%	1,868	16%
Subtotal	8,926	100%	12,494	100%	11,892	100%
Corporate ¹	(148)		(137)		(155)	
Total pre-tax earnings	\$ 8,778		\$ 12,357		\$ 11,737	
Net earnings						
Americas	\$ 1,587	26%	\$ 4,558	53%	\$ 4,425	54%
Europe, Middle East and Africa	2,914	47%	2,576	30%	2,377	29%
Asia	1,686	27%	1,434	17%	1,345	17%
Subtotal	6,187	100%	8,568	100%	8,147	100%
Corporate ¹	(104)		(91)		(107)	
Total net earnings	\$ 6,083		\$ 8,477		\$ 8,040	

1. Includes charitable contributions that have not been allocated to the firm's geographic regions.

2. Includes provisions of \$3.37 billion recorded during 2015 for the agreement in principle with the RMBS Working Group. See Note 27 for further information about this agreement in principle.

SI 6. Material Supervisory Authorities

Regulation

As a participant in the banking, securities, investment management, and derivatives industries, we are subject to extensive regulation worldwide. Regulatory bodies around the world are generally charged with safeguarding the integrity of the securities and other financial markets and with protecting the interests of the customers of market participants, including depositors in banking entities and the customers of banks, broker-dealers, investment advisers, swap dealers and security-based swap dealers. The following section refers to the firm (i.e., not only the Material Entities or the Resolution Core Business Lines referred to in Sections 6 and Supporting Information Section SI 1, respectively).

Bank Holding Company Regulation

Group Inc. is a bank holding company under the Bank Holding Company Act of 1956 (“BHC Act”) and a financial holding company under amendments to the BHC Act effected by the U.S. Gramm-Leach-Bliley Act of 1999.

As a bank holding company and a financial holding company under the BHC Act, Group Inc. is subject to supervision and examination by the Federal Reserve Board. Under the system of “functional regulation” established under the BHC Act, the Federal Reserve Board serves as the primary regulator of our consolidated organization. The primary regulators of our U.S. non-bank subsidiaries directly regulate the activities of those subsidiaries, with the Federal Reserve exercising a supervisory role. Such “functionally regulated” U.S. non-bank subsidiaries include broker-dealers registered with the SEC, such as our principal U.S. broker-dealer, GS&Co., entities registered with or regulated by the CFTC with respect to futures-related and swaps-related activities and investment advisers registered with the SEC with respect to their investment advisory activities.

Bank Subsidiaries

Our principal U.S. bank subsidiary, GS Bank USA, is supervised and regulated by the Federal Reserve Board, the FDIC, the New York State Department of Financial Services and the Consumer Financial Protection Bureau.

A number of our activities are conducted partially or entirely through GS Bank USA and our subsidiaries, including: origination of bank loans; interest rate, credit, currency and other derivatives; leveraged finance; mortgage origination; structured finance; and agency lending.

The firm's principal non-U.S. bank subsidiary, GSIB, is a wholly-owned credit institution, regulated by the PRA and the FCA in the United Kingdom.

Broker-Dealer and Securities Regulation

Goldman Sachs' broker-dealer subsidiaries are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices, use and safekeeping of clients' funds and securities, capital structure, recordkeeping, the financing of clients' purchases, and the conduct of directors, officers and employees. In the United States, the SEC is the federal agency responsible for the administration of the federal securities laws. GS&Co. is registered as a broker-dealer, a municipal advisor and an investment adviser with the SEC and as a broker-dealer in all 50 states and the District of Columbia. Self-regulatory organizations, such as the FINRA and the New York Stock Exchange (the "NYSE"), adopt rules that apply to, and examine, broker-dealers such as GS&Co.

In addition, state securities and other regulators also have regulatory or oversight authority over GS&Co. Similarly, our businesses are also subject to regulation by various non-U.S. governmental and regulatory bodies and self-regulatory authorities in virtually all countries where we have offices. GSEC is a registered U.S. broker-dealer and is regulated by the SEC, the NYSE and FINRA.

Our exchange-based market-making activities are subject to extensive regulation by a number of securities exchanges. As a market maker on exchanges, we are required to maintain orderly markets in the securities to which we are assigned.

Swaps, Derivatives and Commodities Regulation

The commodity futures, commodity options and swaps industry in the United States is subject to regulation under the U.S. Commodity Exchange Act ("CEA"). The CFTC is the federal agency charged with the administration of the CEA. In addition, the SEC is the federal agency charged with the regulation of security-based swaps. Several of Goldman Sachs' subsidiaries are registered with the CFTC and act as futures commission merchants, commodity pool operators, commodity trading advisors or (as discussed below) swap dealers, and are subject to CFTC regulations. The rules and regulations of various self-regulatory organizations, such as the Chicago Board of Trade and the Chicago Mercantile Exchange, other futures exchanges and the

National Futures Association, also govern the commodity futures, commodity options and swaps activities of these entities. In addition, Goldman Sachs Financial Markets, L.P. is registered with the SEC as an OTC derivatives dealer and conducts certain OTC derivatives activities.

We have registered certain subsidiaries as “swap dealers” under the CFTC rules, including GS&Co., GS Bank USA, GSI and JANY. We expect that these entities, and our businesses more broadly, will be subject to significant and developing regulation and regulatory oversight in connection with swap-related activities. Similar regulations have been proposed or adopted in jurisdictions outside the United States, including the adoption of standardized execution and clearing, margining and reporting requirements for OTC derivatives.

The full impact of the various U.S. and non-U.S. regulatory developments in this area will not be known with certainty until all the rules are finalized and implemented and market practices and structures develop under the final rules.

JANY is authorized by the FERC to sell wholesale physical power at market-based rates. As a FERC-authorized power marketer, JANY is subject to regulation under the U.S. Federal Power Act and FERC regulations and to the oversight of FERC. As a result of our investing activities, Group Inc. is also an “exempt holding company” under the U.S. Public Utility Holding Company Act of 2005 and applicable FERC rules.

In addition, as a result of our power-related and commodities activities, we are subject to energy, environmental and other governmental laws and regulations.

Investment Management Regulation

Our investment management business is subject to significant regulation in numerous jurisdictions around the world relating to, among other things, the safeguarding of client assets, offerings of funds, marketing activities, transactions among affiliates and our management of client funds. Certain of our subsidiaries are registered with, and subject to oversight by, the SEC as investment advisers.

Certain of our European subsidiaries are subject to the Alternative Investment Fund Managers Directive and related regulations, which govern the approval, organizational, marketing and reporting requirements of EU-based alternative investment managers and the ability of alternative investment fund managers located outside the EU to access the EU market.

Non-U.S. Regulated Broker-Dealer Subsidiaries

In Europe, we provide broker-dealer services that are subject to oversight by national regulators as well as EU regulators. These investment services are regulated in accordance with national laws, many of which implement EU directives, and increasingly by directly applicable EU regulations. These national and EU laws require, among other things, compliance with certain capital adequacy standards, customer protection requirements and market conduct and trade reporting rules.

We provide broker-dealer services in and from the United Kingdom under the regulation of the PRA and the FCA. The firm's principal non-U.S. regulated broker-dealer subsidiaries include GSI and GSJCL. GSI, the firm's regulated U.K. broker-dealer, is regulated by the PRA and the FCA. GSJCL, the firm's Japanese broker-dealer, is regulated by Japan's Financial Services Agency. These and certain other non-U.S. subsidiaries of the firm are also subject to capital adequacy requirements promulgated by authorities of the countries in which they operate.

SI 7. Principal Officers

Set forth below are the name, present title, principal occupation and certain biographical information for our executive officers as included in our 2015 Form 10-K, and our Chief Risk Officer. All of our executive officers have been appointed by and serve at the pleasure of our Board.

- **Lloyd C. Blankfein.** Mr. Blankfein has been our Chairman and Chief Executive Officer since June 2006, and a director since April 2003.
- **Alan M. Cohen.** Mr. Cohen has been an Executive Vice President of Goldman Sachs and our Global Head of Compliance since February 2004.
- **Gary D. Cohn.** Mr. Cohn has been our President and Chief Operating Officer (or Co-Chief Operating Officer) and a director since June 2006.
- **Edith W. Cooper.** Ms. Cooper has been an Executive Vice President of Goldman Sachs since April 2011 and our Global Head of Human Capital Management since March 2008. From 2002 to 2008, she served in various positions at the firm, including sales management within the Securities Division.
- **Gregory K. Palm.** Mr. Palm has been an Executive Vice President of Goldman Sachs since May 1999, and our General Counsel and head or co-head of the Legal Department since May 1992.
- **John F.W. Rogers.** Mr. Rogers has been an Executive Vice President of Goldman Sachs since April 2011 and Chief of Staff and Secretary to the Board of Directors of Goldman Sachs since December 2001.
- **Harvey M. Schwartz.** Mr. Schwartz has been an Executive Vice President of Goldman Sachs and our Chief Financial Officer since January 2013. From February 2008 to January 2013, Mr. Schwartz was global co-head of the Securities Division.
- **Mark Schwartz.** Mr. Schwartz has been a Vice Chairman of Goldman Sachs and Chairman of Goldman Sachs Asia Pacific since rejoining the firm in June 2012. From 2006 to June 2012, he was Chairman of MissionPoint Capital Partners, an investment firm he co-founded.

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- **Michael S. Sherwood.** Mr. Sherwood has been a Vice Chairman of Goldman Sachs since February 2008 and co-chief executive officer of Goldman Sachs International since 2005. He assumed responsibility for coordinating the firm's business and activities around Growth Markets in November 2013.
- **Craig W. Broderick.** Mr. Broderick has been Chief Risk Officer of Goldman Sachs since 2008. From 1999 to 2008, Mr. Broderick was Chief Credit Officer.

SI 8. Governance Structure and Processes Related to Resolution Planning

Our Resolution Plan's governing and oversight bodies consist of the following groups and individuals:

- The Board of Directors of Group Inc. (our "Board") is the body responsible for establishing the strategic direction of GS Group and overseeing the performance of GS Group's business and management. The Board is responsible for providing general oversight of the process for developing the Resolution Plan. The Board reviews and approves the Resolution Plan on an annual basis. In addition, at its regularly held or special meetings, the Board reviews and approves any significant changes to the Resolution Plan that may occur during the year before submission to the Agencies.
- Senior executives of GS Group, including the Chief Financial Officer, Principal Accounting Officer, Treasurer and other key members of the Executive Office and the Firmwide Finance Committee, are responsible for oversight of the Resolution Plan's development, maintenance, implementation, filing and compliance. Annually, and at other Board meetings as needed, these senior executives are also responsible for presenting the Resolution Plan to the Board for its review and approval.
- The Firmwide Regulatory Findings Remediation Governance Committee, which is co-chaired by the firm's Chief Financial Officer and its President and Chief Operating Officer, is charged with ensuring that all regulatory findings are resolved to the satisfaction of senior management, Internal Audit, our Board and, ultimately, the Agencies. This Committee oversees the remediation of the shortcomings in our 2015 Resolution Plan that were identified by the Agencies.
- The Resolution Plan's Steering Group (the "Steering Group") is co-chaired by the firm's Principal Accounting Officer and Treasurer. Members of the Steering Group include the Steering Group Operating Officer (described below) and representatives of a wide range of departments, including our Legal, Controllers, Operations, Corporate Treasury and Technology departments. The Steering Group actively works to develop and maintain the Resolution Plan and to ensure that it contains information required by the relevant rules. The Steering Group, through the Steering Group Operating Officer, coordinates the

activities of various workstreams and leads in the development and maintenance of specific parts of the Resolution Plan. In addition, the Steering Group provides direction and strategy for the Resolution Plan, helps to resolve issues and policy decisions, and approves scope changes and Resolution Plan deliverables. The Steering Group also acts as a liaison with senior executives (including the Executive Office and the Firmwide Finance Committee) and with the Agencies. The Steering Group meets frequently (usually weekly).

- The Steering Group Operating Officer is the senior management official primarily responsible for overseeing the development, maintenance, implementation and filing of the Resolution Plan and for GS Group's compliance with the Final Rule and the 2017 Guidance. The Steering Group Operating Officer is responsible for the day-to-day maintenance of the workstream activities that develop specific components of the Resolution Plan. The Steering Group Operating Officer and the supporting team are the content experts who manage the overall Resolution Plan activities, meet with the various global regulatory bodies, respond to requested comments on various regulatory proposals, and engage directly with the Steering Group and the Firmwide Finance Committee, as necessary. In addition, the Steering Group Operating Officer will meet and engage with outside legal counsel and consultants as necessary.
- Internal Audit provides independent assurance over the relevant procedures and controls with respect to the Resolution Plan.

Process Steps

The various components of the Resolution Plan were developed by the Steering Group Operating Officer and members of the Steering Group based on the underlying regulations, communications with the Agencies, and information from, and communications with, various divisions of GS Group.

The Steering Group operates by receiving presentations on various topics, both from internal teams and from external advisors (legal and financial consultants), meeting with regulators and discussing the issues raised in order to formulate a direction for the Resolution Plan. They will challenge views and approaches to ensure the best solution is achieved.

The Steering Group, which usually meets weekly:

- Works to ensure that the shortcomings in our 2015 Resolution Plan that were identified by the Agencies and the 2017 Guidance are adequately addressed

- Analyzes any other guidance provided by the Agencies and determines how to incorporate it into our Resolution Plan
- Determines the preferred strategy under the various applicable economic scenarios
- Reviews the modeled financial projections for each economic scenario
- Analyzes counterparties' contractual rights, based on advice from internal and external counsel
- Analyzes jurisdiction-by-jurisdiction assumptions as to actions that individual authorities would take in consultation with external legal advisors
- Leverages a broad range of financial and other relevant information from our MIS
- Revisits our determinations with respect to RCBLs and Material Entities based on the information from our MIS
- Reviews our critical operations, as agreed with the Agencies, and considers how they could be maintained, sold or wound down in an orderly manner
- Analyzes the obstacles to resolution and their mitigants, and the progress in overcoming impediments identified in prior resolution plans
- Analyzes the feasibility of the Resolution Plan
- Determines whether there have been changes in the firm that require changes to the Resolution Plan

The Resolution Plan was updated and presented broadly across the firm. This included discussions with subject matter experts, senior management and various internal governance committees in a number of jurisdictions globally. Outside legal counsel and other consultants were engaged to provide advice on various matters in our Resolution Plan. Once vetted, the Resolution Plan was presented to the firm's Firmwide Finance Committee, the Executive Office and the Board for review and approval.

The Resolution Plan was submitted to the Agencies on September 30, 2016. The firm will submit its next Resolution Plan to the Agencies by July 1, 2017.

SI 9. Description of Material Management Information Systems

Goldman Sachs has a long-standing history of investing in technology. Our management information systems are designed to support and enable the firm's core functions across all service and business units. As an integral component of our Resolution Plan, our systems serve to manage risk and provide complete, timely and accurate information.

Over recent years, we have invested in the broad adoption of platform strategies to support the firm's enterprise architecture. In most cases, a single technology platform supports a given function across all geographies and entities. For example, our broker-dealer subsidiary in Tokyo books its secured funding transactions (such as a repos) into the same technology platform as our broker-dealer subsidiaries in London, New York or elsewhere. This results in a high degree of consistency in both functionality and reporting to enable key decision making at all levels.

As a firm, we place a strong focus on developing software applications internally, although we also make use of third-party vendor software. Our system architecture supports data, modeling, user interface and workflow capabilities, which our MIS systems leverage to provide a rich feature set for our businesses. To ensure the rigor and effectiveness of our systems, we have focused on promoting standardization and reusability.

Our data aggregation capabilities and risk reporting practices are overseen by a governance framework which is supported by documented policies, standards and procedures. We recognize that, in a resolution scenario, the effectiveness of our systems is driven by adhering to an appropriate governance framework which is supported by the relevant controls. For example, our business resiliency program is intended to ensure that all critical applications, including our data aggregation capabilities and risk reports, are available not only in normal times, but also during times of stress or crisis scenarios.

The Firmwide Technology Risk Committee reviews matters related to the design, development, deployment and use of technology: it oversees and monitors the effectiveness of cyber security matters, as well as technology risk management frameworks and methodologies. Our governance framework is supported by documented policies, standards and procedures. We have developed and implemented a framework of principles, policies and technology to protect client and firm

assets from cyber-attacks and other misappropriation, corruption or loss; safeguards are applied to maintain the confidentiality and availability of information resources.

Our MIS have extensive ad hoc reporting capabilities, and have been used extensively to prepare financial and other information used in the preparation of our Resolution Plan. We have performed a detailed assessment of our ability to satisfy MIS reporting requirements in resolution, and we have determined that there are no material gaps or weaknesses in our ability to provide relevant data in a crisis scenario.

Recovery and Resolution Systems

As our resolution planning process progressed, we came to recognize the benefits of being able to identify, aggregate, visualize and easily navigate key interdependencies and relationships across the firm's legal entities and critical services. We therefore developed a new platform that leverages existing, authoritative sources of data, and links them in a flexible and adaptable way to provide a holistic understanding and visualization of the firm's legal entities, services, functions, systems, people, vendors and facilities. The tool is integrated with several of the firm's other platforms, including the global framework for the documentation and management of the inter-affiliate service level agreements, the firm's "document lake" which stores resolution-critical legal agreements and associated metadata, and the firm's "data lake" which is a central data warehousing solution.