

GOLDMAN SACHS GROUP INC  
Form 10-K  
February 22, 2016  
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**Form 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015

Commission File Number: 001-14965

**The Goldman Sachs Group, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of

13-4019460  
(I.R.S. Employer

incorporation or organization)

Identification No.)

200 West Street  
New York, N.Y.

10282  
(Zip Code)

(Address of principal executive offices)

(212) 902-1000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

**Title of each class:**  
**Common stock, par value \$.01 per share**

**Name of each exchange on which registered:**  
**New York Stock Exchange**

**Depository Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate**

**Non-Cumulative Preferred Stock, Series A  
Depository Shares, Each Representing 1/1,000th Interest in a Share of 6.20%**

**New York Stock Exchange**

**Non-Cumulative Preferred Stock, Series B  
Depository Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate**

**New York Stock Exchange**

**Non-Cumulative Preferred Stock, Series C  
Depository Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate**

**New York Stock Exchange**

**Non-Cumulative Preferred Stock, Series D  
Depository Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate**

**New York Stock Exchange**

**Non-Cumulative Preferred Stock, Series I  
Depository Shares, Each Representing 1/1,000th Interest in a Share of 5.50%**

**New York Stock Exchange**

**Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J  
Depository Shares, Each Representing 1/1,000th Interest in a Share of 6.375%**

**New York Stock Exchange**

**Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K  
See Exhibit 99.2 for debt and trust securities registered under Section 12(b) of the Act**

**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act.

Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

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Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of the Annual Report on Form 10-K or any amendment to the Annual Report on Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  
 Yes  No

As of June 30, 2015, the aggregate market value of the common stock of the registrant held by non-affiliates of the registrant was approximately \$88.6 billion.

As of February 5, 2016, there were 422,349,543 shares of the registrant's common stock outstanding.

**Documents incorporated by reference:** Portions of The Goldman Sachs Group, Inc.'s Proxy Statement for its 2016 Annual Meeting of Shareholders are incorporated by reference in the Annual Report on Form 10-K in response to Part III, Items 10, 11, 12, 13 and 14.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**PART I**

**Item 1. Business**

**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.

When we use the terms Goldman Sachs, the firm, we, us and our, we mean The Goldman Sachs Group, Inc. (Inc. or parent company), a Delaware corporation, and its consolidated subsidiaries.

References to the 2015 Form 10-K are to our Annual Report on Form 10-K for the year ended December 31, 2015. 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 Board of Governors of the Federal Reserve System (Federal Reserve Board). Our U.S. depository institution subsidiary, Goldman Sachs Bank USA (GS Bank USA), is a New York State-chartered bank.

As of December 2015, we had offices in over 30 countries and 48% of our total staff was based outside the Americas. Our clients are located worldwide, and we are an active participant in financial markets around the world. In 2015, we generated 44% of our net revenues outside the Americas. For more information about our geographic results, see Note 25 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K.

**Our Business Segments and Segment Operating Results**

We report our activities in four business segments: Investment Banking, Institutional Client Services, Investing & Lending and Investment Management. The chart below presents our four business segments.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

The table below presents our segment operating results.

<i>\$ in millions</i>	Year Ended December <sup>1</sup>			<b>% of 2015</b>
	<b>2015</b>	2014	2013	<b>Net Revenues</b>
<b>Investment Banking</b>				
Net revenues	<b>\$ 7,027</b>	\$ 6,464	\$ 6,004	<b>21%</b>
Operating expenses	<b>3,713</b>	3,688	3,479	
<b>Pre-tax earnings</b>	<b>\$ 3,314</b>	\$ 2,776	\$ 2,525	
<b>Institutional Client Services</b>				
Net revenues	<b>\$15,151</b>	\$15,197	\$15,721	<b>45%</b>
Operating expenses <sup>2</sup>	<b>13,938</b>	10,880	11,792	
<b>Pre-tax earnings</b>	<b>\$ 1,213</b>	\$ 4,317	\$ 3,929	
<b>Investing &amp; Lending</b>				
Net revenues	<b>\$ 5,436</b>	\$ 6,825	\$ 7,018	<b>16%</b>
Operating expenses	<b>2,402</b>	2,819	2,686	
<b>Pre-tax earnings</b>	<b>\$ 3,034</b>	\$ 4,006	\$ 4,332	
<b>Investment Management</b>				
Net revenues	<b>\$ 6,206</b>	\$ 6,042	\$ 5,463	<b>18%</b>
Operating expenses	<b>4,841</b>	4,647	4,357	
<b>Pre-tax earnings</b>	<b>\$ 1,365</b>	\$ 1,395	\$ 1,106	
<b>Total net revenues</b>	<b>\$33,820</b>	\$34,528	\$34,206	
<b>Total operating expenses <sup>3</sup></b>	<b>25,042</b>	22,171	22,469	
<b>Total pre-tax earnings</b>	<b>\$ 8,778</b>	\$12,357	\$11,737	

1.

Financial information concerning our business segments for 2015, 2014 and 2013 is included in Management's Discussion and Analysis of Financial Condition and Results of Operations and the Financial Statements and Supplementary Data, which are in Part II, Items 7 and 8, respectively, of the 2015 Form 10-K. See Note 25 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for a summary of our total net revenues, pre-tax earnings and net earnings by geographic region.

2. Includes provisions of \$3.37 billion recorded during 2015 for the agreement in principle with the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force (RMBS Working Group). See Note 27 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for further information about this agreement in principle.

3. Includes charitable contributions that have not been allocated to our segments of \$148 million for 2015, \$137 million for 2014 and \$155 million for 2013.

### **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.



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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**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.

Our clients are primarily institutions that are professional market participants, including investment entities whose ultimate customers include individual investors investing for their retirement, buying insurance or putting aside surplus cash in a deposit account.

Through our global sales force, we maintain relationships with our clients, receiving orders and distributing investment research, trading ideas, market information and analysis. As a market maker, we provide prices to clients globally across thousands of products in all major asset classes and markets. At times we take the other side of transactions ourselves if a buyer or seller is not readily available and at other times we connect our clients to other parties who want to transact. Much of this connectivity between the firm and its clients is maintained on technology platforms and operates globally wherever and whenever markets are open for trading.

Institutional Client Services and our other businesses are supported by our Global Investment Research division, which, as of December 2015, provided fundamental research on more than 3,400 companies worldwide and more than 40 national economies, as well as on industries, currencies and commodities.

Institutional Client Services generates revenues in four ways:

In large, highly liquid markets (such as markets for U.S. Treasury bills, large capitalization S&P 500 stocks or certain mortgage pass-through securities), we execute a high volume of transactions for our clients;

In less liquid markets (such as mid-cap corporate bonds, growth market currencies or certain non-agency mortgage-backed securities), we execute transactions for our clients for spreads and fees that are generally somewhat larger than those charged in more liquid markets;

We also structure and execute transactions involving customized or tailor-made products that address our clients risk exposures, investment objectives or other complex needs (such as a jet fuel hedge for an airline); and

We provide financing to our clients for their securities trading activities, as well as securities lending and other prime brokerage services.

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).

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

**Interest Rate Products.** Government bonds, money market instruments, treasury bills, repurchase agreements and other highly liquid securities and instruments, as well as interest rate swaps, options and other derivatives.

**Credit Products.** Investment-grade corporate securities, high-yield securities, credit derivatives, 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, other prime, subprime and Alt-A securities and loans), and other asset-backed securities, loans and derivatives.

**Currencies.** Most currencies, including growth-market currencies.

**Commodities.** Crude oil and petroleum products, natural gas, base, precious and other metals, electricity, coal, agricultural and other commodity products.

**Equities.** Includes equities client execution, commissions and fees, and securities services.

**Equities Client Execution.** We make markets in equity securities and equity-related products, including convertible securities, options, futures and over-the-counter (OTC) derivative instruments, on a global basis. As a principal, we facilitate client transactions by providing liquidity to our clients with large blocks of stocks or derivatives, requiring the commitment of our capital.

We also structure and make markets in derivatives on indices, industry groups, financial measures and individual company stocks. We develop strategies and provide information about portfolio hedging and restructuring and asset allocation transactions for our clients. We also work with our clients to create specially tailored instruments to enable sophisticated investors to establish or liquidate investment positions or undertake hedging strategies. We are one of the leading participants in the trading and development of equity derivative instruments.

Our exchange-based market-making activities include making markets in stocks and exchange-traded funds, futures and options on major exchanges worldwide.

**Commissions and Fees.** We generate commissions and fees from executing and clearing institutional client transactions on major stock, options and futures exchanges worldwide, as well as OTC transactions. We provide our clients with access to a broad spectrum of equity execution services, including electronic low-touch access and more complex high-touch execution through both traditional and electronic platforms.

**Securities Services.** Includes financing, securities lending and other prime brokerage services.

**Financing Services.** We provide financing to our clients for their securities trading activities through margin loans that are collateralized by securities, cash or other acceptable collateral. We earn a spread equal to the difference between the amount we pay for funds and the amount we receive from our client.

**Securities Lending Services.** We provide services that principally involve borrowing and lending securities to cover institutional clients' short sales and borrowing securities to cover our short sales and otherwise to make deliveries into the market. In addition, we are an active participant in broker-to-broker securities lending and third-party agency lending activities.

**Other Prime Brokerage Services.** We earn fees by providing clearing, settlement and custody services globally. In addition, we provide our hedge fund and other clients with a technology platform and reporting which enables them to monitor their security portfolios and manage risk exposures.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Investing & Lending**

Our investing and lending activities, which are typically longer-term, include the firm's investing and relationship lending activities across various asset classes, primarily debt securities and loans, public and private equity securities, and real estate. These activities include investing directly in publicly and privately traded securities and in loans, and also through certain investment funds and separate accounts that we manage and through funds managed by external parties. We also provide financing to our clients.

**Equity Securities.** We make corporate, real estate and infrastructure equity-related investments.

**Debt Securities and Loans.** We make corporate, real estate, infrastructure and other debt investments. In addition, we provide credit to corporate clients through loan facilities and to individuals primarily through secured loans.

#### **Investment Management**

Investment Management provides investment and wealth advisory services to help clients preserve and grow their financial assets. Our clients include institutions and high-net-worth individuals, as well as retail investors who primarily access our products through a network of third-party distributors around the world.

We manage client assets across a broad range of asset classes and investment strategies, including equity, fixed income and alternative investments. Alternative investments primarily include hedge funds, credit funds, private equity, real estate, currencies, commodities, and asset allocation strategies. Our investment offerings include those managed on a fiduciary basis by our portfolio managers as well as strategies managed by third-party managers. We offer our investments in a variety of structures, including separately managed accounts, mutual funds, private partnerships, and other commingled vehicles.

We also provide customized investment advisory solutions designed to address our clients' investment needs. These solutions begin with identifying clients' objectives and continue through portfolio construction, ongoing asset allocation and risk management and investment realization. We draw from a variety of third-party managers as well as our proprietary offerings to implement solutions for clients.

We supplement our investment advisory solutions for high-net-worth clients with wealth advisory services that include income and liability management, trust and estate planning, philanthropic giving and tax planning. We also use the firm's global securities and derivatives market-making capabilities to address clients' specific investment needs.

**Management and Other Fees.** The majority of revenues in management and other fees is comprised of asset-based fees on client assets. The fees that we charge vary by asset class and are affected by investment performance as well as asset inflows and redemptions. Other fees we receive include financial counseling fees generated through our wealth advisory services and fees related to the administration of real estate assets.

Assets under supervision include assets under management and other client assets. Assets under management include client assets where we earn a fee for managing assets on a discretionary basis. This includes net assets in our mutual funds, hedge funds, credit funds and private equity funds (including real estate funds), and separately managed accounts for institutional and individual investors. Other client assets include client assets invested with third-party

managers, bank deposits and advisory relationships where we earn a fee for advisory and other services, but do not have investment discretion. Assets under supervision do not include the self-directed brokerage assets of our clients. Long-term assets under supervision represent assets under supervision excluding liquidity products. Liquidity products represent money market and bank deposit assets.

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**Incentive Fees.** In certain circumstances, we are also entitled to receive incentive fees based on a percentage of a fund's or a separately managed account's return, or when the return exceeds a specified benchmark or other performance targets. Such fees include overrides, which consist of the increased share of the income and gains derived primarily from our private equity funds when the return on a fund's investments over the life of the fund exceeds certain threshold returns. Incentive fees are recognized only when all material contingencies are resolved.

**Transaction Revenues.** We receive commissions and net spreads for facilitating transactional activity in high-net-worth client accounts. In addition, we earn net interest income primarily associated with client deposits and margin lending activity undertaken by such clients.

### **Business Continuity and Information Security**

Business continuity and information security, including cyber security, are high priorities for Goldman Sachs. Their importance has been highlighted by numerous highly publicized cyber attacks against financial institutions and large consumer-based companies in recent years that resulted in the unauthorized disclosure of personal information of clients and customers and the theft and destruction of corporate information, as well as extreme weather events, such as Hurricane Sandy.

Our Business Continuity Program has been developed to provide reasonable assurance of business continuity in the event of disruptions at the firm's critical facilities and to comply with regulatory requirements, including those of FINRA. Because we are a bank holding company, our Business Continuity Program is also subject to review by the Federal Reserve Board. The key elements of the program are crisis planning and management, people recovery, business recovery, systems and data recovery, and process improvement. In the area of information security, we have developed and implemented a framework of principles, policies and technology to protect the information provided to us by our clients and that of the firm from cyber attacks and other misappropriation, corruption or loss. Safeguards are applied to maintain the confidentiality, integrity and availability of information.

### **Employees**

Management believes that a major strength and principal reason for the success of Goldman Sachs is the quality and dedication of our people and the shared sense of being part of a team. We strive to maintain a work environment that fosters professionalism, excellence, diversity, cooperation among our employees worldwide and high standards of business ethics.

Instilling the Goldman Sachs culture in all employees is a continuous process, in which training plays an important part. All employees are offered the opportunity to participate in education and periodic seminars that we sponsor at various locations throughout the world. Another important part of instilling the Goldman Sachs culture is our employee review process. Employees are reviewed by supervisors, co-workers and employees they supervise in a 360-degree review process that is integral to our team approach, and includes an evaluation of an employee's performance with respect to risk management, compliance and diversity. As of December 2015, we had 36,800 total staff.

### **Competition**



The financial services industry and all of our businesses are intensely competitive, and we expect them to remain so. Our competitors are other entities that provide investment banking, securities and investment management services, as well as those entities that make investments in securities, commodities, derivatives, real estate, loans and other financial assets. These entities include brokers and dealers, investment banking firms, commercial banks, insurance companies, investment advisers, mutual funds, hedge funds, private equity funds and merchant banks. We compete with some entities globally and with others on a regional, product or niche basis. Our competition is based on a number of factors, including transaction execution, products and services, innovation, reputation and price.

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There has been substantial consolidation and convergence among companies in the financial services industry. Moreover, we have faced, and expect to continue to face, pressure to retain market share by committing capital to businesses or transactions on terms that offer returns that may not be commensurate with their risks. In particular, corporate clients seek such commitments (such as agreements to participate in their loan facilities) from financial services firms in connection with investment banking and other assignments.

Consolidation and convergence have significantly increased the capital base and geographic reach of some of our competitors, and have also hastened the globalization of the securities and other financial services markets. As a result, we have had to commit capital to support our international operations and to execute large global transactions. To take advantage of some of our most significant opportunities, we will have to compete successfully with financial institutions that are larger and have more capital and that may have a stronger local presence and longer operating history outside the United States. We also compete with smaller institutions that offer more targeted services, such as independent advisory firms. Some clients may perceive these firms to be less susceptible to potential conflicts of interest than we are, and, as described below, our ability to effectively compete with them could be affected by regulations and limitations on activities that apply to us but may not apply to them.

A number of our businesses are subject to intense price competition. Efforts by our competitors to gain market share have resulted in pricing pressure in our investment banking and client execution businesses and could result in pricing pressure in other of our businesses. For example, the increasing volume of trades executed electronically, through the internet and through alternative trading systems, has increased the pressure on trading commissions, in that commissions for electronic trading are generally lower than for non-electronic trading. It appears that this trend toward low-commission trading will continue. In addition, we believe that we will continue to experience competitive pressures in these and other areas in the future as some of our competitors seek to obtain market share by further reducing prices, and as we enter into or expand our presence in markets that may rely more heavily on electronic trading and execution, such as consumer-oriented deposit-taking activities.

The provisions of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the requirements promulgated by the Basel Committee on Banking Supervision (Basel Committee) and other financial regulation could affect our competitive position to the extent that limitations on activities, increased fees and compliance costs or other regulatory requirements do not apply, or do not apply equally, to all of our competitors or are not implemented uniformly across different jurisdictions. For example, the provisions of the Dodd-Frank Act that prohibit proprietary trading and restrict investments in certain hedge and private equity funds differentiate between U.S.-based and non-U.S.-based banking organizations and give non-U.S.-based banking organizations greater flexibility to trade outside of the United States and to form and invest in funds outside the United States. Likewise, the obligations with respect to derivative transactions under Title VII of the Dodd-Frank Act depend, in part, on the location of the counterparties to the transaction. The impact of the Dodd-Frank Act and other regulatory developments on our competitive position will depend to a large extent on the manner in which the required rulemaking and regulatory guidance evolve, the extent of international convergence, and the development of market practice and structures under the new regulatory regimes as described further under Regulation below.

We also face intense competition in attracting and retaining qualified employees. Our ability to continue to compete effectively will depend upon our ability to attract new employees, retain and motivate our existing employees and to continue to compensate employees competitively amid intense public and regulatory scrutiny on the compensation practices of large financial institutions. Our pay practices and those of certain of our competitors are subject to review

by, and the standards of, the Federal Reserve Board and other regulators inside and outside the United States, including the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) in the United Kingdom. We also compete for employees with institutions whose pay practices are not subject to regulatory oversight. See Regulation Compensation Practices below and Risk Factors Our businesses may be adversely affected if we are unable to hire and retain qualified employees in Part I, Item 1A of the 2015 Form 10-K for more information about the regulation of our compensation practices.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Regulation**

As a participant in the financial services industry, we are subject to extensive regulation worldwide. Our businesses have been subject to increasing regulation and supervision in the United States and other countries, and we expect this trend to continue in the future.

In particular, the Dodd-Frank Act, and the rules thereunder, significantly altered the financial regulatory regime within which we operate. The capital, liquidity and leverage ratios based on the Basel Committee's final capital framework for strengthening international capital standards (Basel III), as implemented by the Federal Reserve, the PRA and FCA and other national regulators have also had a significant impact on our businesses. The implications of such regulations for our businesses continue to depend to a large extent on their implementation by the relevant regulators globally, as well as the development of market practices and structures under the regime established by such regulations. Other reforms have been adopted or are being considered by regulators and policy makers worldwide, as described further throughout this section.

#### **Banking Supervision and Regulation**

Group Inc. is a bank holding company under the Bank Holding Company Act of 1956 (BHC Act), a financial holding company under amendments to the BHC Act effected by the U.S. Gramm-Leach-Bliley Act of 1999 (GLB Act) and 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 Board 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, Goldman, Sachs & Co. (GS&Co.), entities registered with or regulated by the U.S. Commodity Futures Trading Commission (CFTC) with respect to futures-related and swaps-related activities and investment advisers registered with the SEC with respect to their investment advisory activities.

Various of our subsidiaries are regulated by the banking and securities regulatory authorities of the countries in which they operate.

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

In addition, Group Inc. has two limited purpose trust company subsidiaries that are not permitted to accept deposits or make loans (other than as incidental to their trust activities) and are not insured by the FDIC. The Goldman Sachs Trust Company, N.A., a national banking association that is limited to fiduciary activities, is regulated by the Office of the Comptroller of the Currency and is a member bank of the Federal Reserve System. The Goldman Sachs Trust

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Company of Delaware, a Delaware limited purpose trust company, is regulated by the Office of the Delaware State Bank Commissioner.

Goldman Sachs International Bank (GSIB), our regulated U.K. bank and principal non-U.S. bank subsidiary, is regulated by the PRA and the FCA. GSIB acts as a primary dealer for European government bonds and is involved in market making in European government bonds, lending (including securities lending) and deposit-taking activities.

In November 2014, a new Single Supervisory Mechanism became effective, under which the European Central Bank and national supervisors both have certain regulatory responsibilities for banks in participating EU member states. While the U.K. does not participate in this new mechanism, it gives new powers to the European Central Bank to take regulatory action with regard to the firm's banks in Germany and France.

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**Capital, Leverage and Liquidity Requirements.** We are subject to consolidated regulatory capital and leverage requirements set forth by the Federal Reserve Board, and GS Bank USA is subject to capital and leverage requirements that are calculated in substantially the same manner as those applicable to Group Inc., also set forth by the Federal Reserve Board.

Under the Federal Reserve Board's capital adequacy requirements, Group Inc. must meet specific regulatory capital requirements that involve quantitative measures of assets, liabilities and certain off-balance-sheet items. The sufficiency of our capital levels is also subject to qualitative judgments by regulators. We are also subject to liquidity requirements established by the U.S. federal bank regulatory agencies.

**Capital Ratios.** We are subject to the Federal Reserve Board's revised risk-based capital and leverage ratio regulations, inclusive of certain transitional provisions (Revised Capital Framework). These regulations are largely based on Basel III, and also implement certain provisions of the Dodd-Frank Act. Under the Revised Capital Framework, we are an Advanced approach banking organization. The Revised Capital Framework provides for capital buffers (including surcharges) that phase in over time, including a capital conservation buffer, and a global systemically important bank (G-SIB) surcharge described below, as well as a counter-cyclical capital buffer.

In July 2015, the Federal Reserve Board approved final rules establishing a capital surcharge for U.S. G-SIBs. For these institutions, the final rules implement the framework developed by the Basel Committee for assessing the global systemic importance of banking institutions and determining the range of additional Common Equity Tier 1 (CET1) that should be maintained by those deemed to be G-SIBs.

The Federal Reserve Board's framework results in surcharges initially ranging from 1% to 4.5%. The final rules treat the Basel Committee's methodology as a floor (Method One) and introduce an alternative calculation to determine the applicable surcharge (Method Two), which includes a significantly higher surcharge for systemic risk and, as part of the calculation of the applicable surcharge, replaces the Basel Committee's indicator for substitutability with a new indicator based on a U.S. G-SIB's use of short-term wholesale funding. Under the Federal Reserve Board's final rules, G-SIBs are required to meet the capital surcharges on a phased-in basis beginning in 2016 through January 1, 2019.

The Revised Capital Framework also provides a counter-cyclical capital buffer of up to 2.5% (and also consisting entirely of CET1), to be imposed in the event that national supervisors deem it necessary in order to counteract excessive credit growth. The Federal Reserve Board has proposed, but not yet finalized, its policy for setting the counter-cyclical capital buffer, and several other national supervisors have started to implement this counter-cyclical buffer. The buffer applicable to us could change in the future and, as a result, the minimum ratios we are subject to could increase.

GS Bank USA computes its capital ratios in accordance with the Revised Capital Framework as an Advanced approach banking organization.

The Basel Committee has published final guidelines for calculating incremental capital requirements for domestic systemically important banking institutions (D-SIBs). These guidelines are complementary to the framework outlined above for G-SIBs, but are more principles-based in order to provide an appropriate degree of national discretion. The impact of these guidelines on the regulatory capital requirements of GS Bank USA and other subsidiaries will depend on how they are implemented by the banking and non-banking regulators in the United States and other jurisdictions.

In January 2016, the Basel Committee finalized a revised framework for calculating minimum capital requirements for market risk, which is expected to increase market risk capital requirements for most banking organizations. The revised framework, among other things: modifies the boundary between the trading book and banking book; replaces value at risk (VaR) and stressed VaR measurements in the internal models approach with an expected shortfall measure that is intended to reflect tail and liquidity risks not captured by VaR; revises the model review and approval process; limits the capital-reducing effects of hedging and portfolio diversification in the internal models approach; provides that securitization exposures will be measured using only the Standardized approach; and makes significant revisions to the methodology for capital requirements under the Standardized approach. The effective date for first reporting under the revised framework is December 31, 2019. The U.S. federal bank regulatory agencies have not yet proposed regulations implementing the revised requirements for U.S. banking organizations.

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The Basel Committee has issued a series of updates which propose other changes to capital regulations. In particular, it has finalized a revised standard approach for calculating RWAs for counterparty credit risk on derivatives exposures ( Standardized Approach for measuring Counterparty Credit Risk exposures, known as SA-CCR ). In addition, it has published guidelines for measuring and controlling large exposures ( Supervisory Framework for measuring and controlling Large Exposures ), and issued an updated framework for regulatory capital treatment of banking book securitizations.

The Basel Committee has also issued consultation papers on, among other matters, a Review of Interest Rate Risk in the Banking Book, a Review of the Credit Valuation Adjustment Risk Framework, revisions to the Basel Standardized approach for credit risk and operational risk capital, and the design of a capital floor framework based on the revised Standardized approach.

See Management's Discussion and Analysis of Financial Condition and Results of Operations Equity Capital Management and Regulatory Capital in Part II, Item 7 of the 2015 Form 10-K and Note 20 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for information about CET1, CET1 ratio, Tier 1 capital, Tier 1 capital ratio, Total capital, Total capital ratio, risk-weighted assets (RWAs), and for information about minimum required ratios, as well as applicable capital buffers and surcharges.

**Leverage Ratios.** Under the Revised Capital Framework, we and GS Bank USA are subject to Tier 1 leverage requirements established by the Federal Reserve Board. The Revised Capital Framework also introduced a supplementary leverage ratio for Advanced approach banking organizations effective January 1, 2018.

See Management's Discussion and Analysis of Financial Condition and Results of Operations Equity Capital Management and Regulatory Capital in Part II, Item 7 of the 2015 Form 10-K and Note 20 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for information about our Tier 1 leverage ratio and supplementary leverage ratio.

**Liquidity Ratios.** The Basel Committee's international framework for liquidity risk measurement, standards and monitoring requires banking organizations to measure their liquidity against two specific liquidity tests.

The liquidity coverage ratio (LCR) is designed to ensure that the entity maintains an adequate level of unencumbered high-quality liquid assets based on expected net cash outflows under an acute short-term liquidity stress scenario. The U.S. federal bank regulatory agencies' rules implementing the LCR for Advanced approach banking organizations are generally consistent with the Basel Committee's framework, but include accelerated transitional provisions and more stringent requirements related to both the range of assets that qualify as high-quality liquid assets and cash outflow assumptions for certain types of funding and other liquidity risks.

Under the accelerated transition timeline, the LCR became effective in the United States on January 1, 2015, with a phase-in period whereby firms, including Group Inc. and GS Bank USA, must have an 80% and 90% minimum ratio in 2015 and 2016, respectively, and a 100% minimum ratio commencing in 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. See Management's Discussion and Analysis of Financial Condition and Results of Operations Risk Management



Liquidity Risk Management in Part II, Item 7 of the 2015 Form 10-K for information about the LCR.

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 Goldman Sachs International (GSI), our regulated U.K. broker-dealer subsidiary, must have an 80% minimum ratio initially, increasing to 90% on January 1, 2017 and 100% on January 1, 2018.

The net stable funding ratio (NSFR) is 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. Under the Basel Committee framework, the NSFR will be effective on January 1, 2018. The U.S. federal bank regulatory agencies and the U.K. regulatory authorities have not yet proposed rules implementing the NSFR for U.S. banks and bank holding companies, and U.K. financial institutions, respectively.

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Since January 1, 2015, the enhanced prudential standards implemented by the Federal Reserve Board under the Dodd-Frank Act have required bank holding companies with \$50 billion or more in total consolidated assets to comply with enhanced liquidity and overall risk management standards, including a buffer of highly liquid assets based on projected funding needs for 30 days, and increased involvement by boards of directors in liquidity and overall risk management. Although the liquidity buffer under these rules has some similarities to the LCR (and is described by the agencies as complementary to the LCR), it is a separate requirement that is in addition to the LCR. See Management's Discussion and Analysis of Financial Condition and Results of Operations Risk Management Overview and Structure of Risk Management and Liquidity Risk Management in Part II, Item 7 of the 2015 Form 10-K for information about our risk management practices and liquidity.

**Stress Tests.** Bank holding companies with total consolidated assets of \$50 billion or more are subject to Dodd-Frank Act supervisory stress tests conducted by the Federal Reserve Board and semi-annual company-run stress tests. The stress test rules require increased involvement by boards of directors in stress testing and public disclosure of the results of both the Federal Reserve Board's annual stress tests and a bank holding company's annual supervisory stress tests, and semi-annual internal stress tests.

We publish summaries of our annual and mid-cycle stress tests results on our web site as described under Available Information below. Our annual Dodd-Frank Act stress test submission is incorporated into the annual capital plans that we are required to submit to the Federal Reserve Board as part of the Comprehensive Capital Analysis and Review (CCAR). The purpose of CCAR is to ensure that large bank holding companies have robust, forward-looking capital planning processes that account for each institution's unique risks and that permit continued operations during times of economic and financial stress. As part of CCAR, the Federal Reserve Board evaluates an institution's plan to make capital distributions, such as repurchasing or redeeming stock or increasing dividend payments, across a range of macroeconomic and firm-specific assumptions.

Similar to Group Inc., GS Bank USA is required to conduct stress tests on an annual basis, to submit the results to the Federal Reserve Board, and to make a summary of those results public. The rules require that the board of directors of GS Bank USA, among other things, consider the results of the stress tests in the normal course of the bank's business including, but not limited to, its capital planning, assessment of capital adequacy and risk management practices.

**Dividends and Stock Repurchases.** Federal and state laws impose limitations on the payment of dividends by our U.S. depository institution subsidiaries to Group Inc. In general, the amount of dividends that may be paid by GS Bank USA or our national bank trust company subsidiary is limited to the lesser of the amounts calculated under a recent earnings test and an undivided profits test. Under the recent earnings test, a dividend may not be paid if the total of all dividends declared by the entity in any calendar year is in excess of the current year's net income combined with the retained net income of the two preceding years, unless the entity obtains prior regulatory approval. Under the undivided profits test, a dividend may not be paid in excess of the entity's undivided profits (generally, accumulated net profits that have not been paid out as dividends or transferred to surplus).

The banking regulators have authority to prohibit or limit the payment of dividends if, in the banking regulator's opinion, payment of a dividend would constitute an unsafe or unsound practice in light of the financial condition of the banking organization. The BHC Act prohibits the Federal Reserve Board from requiring a payment by a holding company subsidiary to a depository institution if the functional regulator of that subsidiary objects to such payment. In such a case, the Federal Reserve Board could instead require the divestiture of the depository institution and impose

operating restrictions pending the divestiture.

Dividend payments by Group Inc. to its shareholders and stock repurchases by Group Inc. are subject to the oversight of the Federal Reserve Board. The dividend and share repurchase policies of large bank holding companies, such as Group Inc., are reviewed by the Federal Reserve Board through the CCAR process, based on capital plans and stress tests submitted by the bank holding company, and are assessed against, among other things, the bank holding company's ability to meet and exceed minimum regulatory capital ratios under stressed scenarios, its expected sources and uses of capital over the planning horizon under baseline and stressed scenarios, and any potential impact of changes to its business plan and activities on its capital adequacy and liquidity.

The Federal Reserve Board's capital planning rule includes a limitation on capital distributions to the extent that actual capital issuances are less than the amount indicated in the capital plan submission.

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**Source of Strength.** The Dodd-Frank Act requires bank holding companies to act as a source of strength to their bank subsidiaries and to commit capital and financial resources to support those subsidiaries. This support may be required by the Federal Reserve Board at times when we might otherwise determine not to provide it. Capital loans by a bank holding company to a subsidiary bank are subordinate in right of payment to deposits and to certain other indebtedness of the subsidiary bank. In addition, if a bank holding company commits to a federal bank regulator that it will maintain the capital of its bank subsidiary, whether in response to the Federal Reserve Board's invoking its source-of-strength authority or in response to other regulatory measures, that commitment will be assumed by the bankruptcy trustee for the holding company and the bank will be entitled to priority payment in respect of that commitment, ahead of other creditors of the bank holding company.

**Transactions between Affiliates.** Transactions between GS Bank USA or its subsidiaries, on the one hand, and Group Inc. or its other subsidiaries and affiliates, on the other hand, are regulated by the Federal Reserve Board. These regulations generally limit the types and amounts of transactions (including credit extensions from GS Bank USA or its subsidiaries to Group Inc. or its other subsidiaries and affiliates) that may take place and generally require those transactions to be on market terms or better to GS Bank USA or its subsidiaries. These regulations generally do not apply to transactions between GS Bank USA and its subsidiaries. The Dodd-Frank Act expanded the coverage and scope of these regulations, including by applying them to the credit exposure arising under derivative transactions, repurchase and reverse repurchase agreements, and securities borrowing and lending transactions.

**Total Loss-Absorbing Capacity.** In October 2015, the Federal Reserve Board issued a proposed rule that would establish loss-absorbency and related requirements for U.S. G-SIBs. The proposed rule would address U.S. implementation of the Financial Stability Board's total loss-absorbing capacity (TLAC) principles and term sheet described below. The proposed rule would require U.S. G-SIBs, such as Group Inc., to maintain minimum external TLAC, consisting of Tier 1 capital and eligible senior and subordinated long-term debt (i.e., debt that is unsecured, has a maturity greater than one year from issuance and satisfies certain additional criteria), equal to the greater of (i) 16% of risk-weighted assets (RWAs) and (ii) 9.5% of total leverage exposure (the denominator of the supplementary leverage ratio) commencing January 1, 2019. The RWA component would increase to 18% of RWAs on January 1, 2022. The proposed rule would also require a buffer of CET1 in an amount equal to the sum of (i) the capital conservation buffer (2.5% of RWAs), (ii) the G-SIB surcharge calculated in accordance with the Method One calculation and (iii) any applicable counter-cyclical capital buffer.

In addition, beginning in 2019, U.S. G-SIBs would also be required to maintain minimum eligible long-term debt equal to the greater of (i) 6% plus the G-SIB surcharge of RWAs and (ii) 4.5% of total leverage exposure. The proposed rule would disqualify from eligible long-term debt, among other instruments, debt securities that permit acceleration for reasons other than insolvency or payment default, as well as structured notes and debt securities not governed by U.S. law. The senior long-term debt of U.S. G-SIBs, including Group Inc., typically permits acceleration for reasons other than insolvency or payment default, and therefore would not qualify as eligible long-term debt under the proposed rule.

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The proposed rule would also prohibit Group Inc., as a U.S. G-SIB, from (i) guaranteeing liabilities of subsidiaries that are subject to early termination provisions if the parent company of a U.S. G-SIB enters into an insolvency or receivership proceeding, (ii) incurring liabilities guaranteed by subsidiaries, (iii) issuing short-term debt, or (iv) entering into derivatives and certain other financial contracts with external counterparties. Additionally, the proposed rule would cap, at 5% of the value of the U.S. G-SIB's eligible TLAC, the amount of a U.S. G-SIB's unsecured non-contingent third-party liabilities that are not eligible long-term debt that could rank equally with or junior to eligible long-term debt. Finally, the proposed rule would require U.S. G-SIBs and other large banking entities to deduct from their own Tier 2 capital certain holdings in unsecured debt of other U.S. G-SIBs, as well as holdings of their own unsecured debt securities. The Federal Reserve Board has also indicated that it is considering imposing subsidiary TLAC requirements on material operating subsidiaries of U.S. G-SIBs.

In November 2015, the Financial Stability Board issued a set of final principles and a final term sheet on a new minimum standard for TLAC of G-SIBs. The Financial Stability Board's final standard also requires certain material subsidiaries of a G-SIB organized outside of the G-SIB's home country, such as GSI, to maintain amounts of TLAC to facilitate the transfer of losses from operating subsidiaries to the parent company.

Also, in November 2015, the Basel Committee issued a proposal to implement internationally the capital deductions for G-SIBs' holdings of the TLAC of other G-SIBs and their own, which will inform how the deductions are implemented by other national regulators.

In December 2015, the Bank of England published a consultation paper on its approach for setting a minimum requirement for own funds and eligible liabilities (MREL) under which certain U.K. financial institutions, including GSI, would need to maintain equity and liabilities sufficient to credibly bear losses in resolution. MREL is generally consistent with the Financial Stability Board's TLAC standard.

The proposed MREL is the sum of a loss absorption amount and a recapitalization amount. The loss absorption amount is based on a firm's minimum going-concern capital requirement, which currently consists of Pillar 1 (the minimum capital requirement under the fourth EU Capital Requirements Directive and EU Capital Requirements Regulation, collectively known as CRD IV), plus Pillar 2A (an additional amount to cover risks not adequately captured in Pillar 1). The recapitalization amount is based on a firm's recapitalization needs post-resolution and any additional requirements to be determined by the Bank of England as necessary to maintain market confidence.

**Resolution and Recovery.** Each bank holding company with over \$50 billion in assets and each designated systemically important financial institution is required by the Federal Reserve Board and the FDIC to provide an annual plan for its rapid and orderly resolution in the event of material financial distress or failure (resolution plan). Our resolution plan must, among other things, demonstrate that GS Bank USA is adequately protected from risks arising from our other entities. The regulators' joint rule sets specific standards for the resolution plans, including requiring a detailed resolution strategy and analyses of the company's material entities, organizational structure, interconnections and interdependencies, and management information systems, among other elements. If the regulators jointly determine that an institution has failed to cure identified shortcomings in its resolution plan and that its resolution plan, after any permitted resubmission, is not credible, the regulators may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on growth, activities or operations or may jointly order the institutions to divest assets or operations in order to facilitate orderly resolution in the event of failure.

We are also required by the Federal Reserve Board to submit, on an annual basis, a global recovery plan that outlines the steps that management could take to reduce risk, maintain sufficient liquidity, and conserve capital in times of prolonged stress.

The FDIC has issued a rule requiring each insured depository institution with \$50 billion or more in assets, such as GS Bank USA, to provide a resolution plan. Similar to our resolution plan for Group Inc., our resolution plan for GS Bank USA must, among other things, demonstrate that it is adequately protected from risks arising from our other entities.

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The EU Bank Recovery and Resolution Directive (the BRRD) required EU member states to grant, by January 1, 2016, bail-in powers to EU resolution authorities to recapitalize a failing entity by writing down its unsecured debt or converting its unsecured debt into equity. Financial institutions in the EU (including GSI) must provide that new contracts entered into after January 1, 2016 enable such actions and also amend pre-existing contracts governed by non-EU law to enable such actions, when the financial institutions could incur liabilities under such pre-existing contracts after January 1, 2016.

Separately, under the BRRD, financial contracts not governed by EU law are required to be amended so that the resolution authorities can impose a temporary stay of termination in resolution. These requirements must be implemented over 2016 and 2017, with the timing depending on the category of the counterparty of the financial institution. The BRRD also subjects investment firms to MREL so that they can be resolved without causing financial instability and without recourse to public funds in the event of a failure. In July 2015, the European Banking Authority published final draft Regulatory Technical Standards on MREL, which specify the common criteria under the BRRD. The Bank of England's proposal on MREL is described above under Total Loss-Absorbing Capacity.

**Insolvency of an Insured Depository Institution or a Bank Holding Company.** Under the Federal Deposit Insurance Act of 1950, if the FDIC is appointed as conservator or receiver for an insured depository institution such as GS Bank USA, upon its insolvency or in certain other events, the FDIC has broad powers, including the power:

To transfer any of the depository institution's assets and liabilities to a new obligor, including a newly formed bridge bank, without the approval of the depository institution's creditors;

To enforce the depository institution's contracts pursuant to their terms without regard to any provisions triggered by the appointment of the FDIC in that capacity; or

To repudiate or disaffirm any contract or lease to which the depository institution is a party, the performance of which is determined by the FDIC to be burdensome and the disaffirmance or repudiation of which is determined by the FDIC to promote the orderly administration of the depository institution.

In addition, under federal law, the claims of holders of domestic deposit liabilities and certain claims for administrative expenses against an insured depository institution would be afforded a priority over other general unsecured claims, including deposits at non-U.S. branches and claims of debt holders of the institution, in the liquidation or other resolution of such an institution by any receiver. As a result, whether or not the FDIC ever sought to repudiate any debt obligations of GS Bank USA, the debt holders (other than depositors) would be treated differently from, and could receive, if anything, substantially less than, the depositors of GS Bank USA.

The Dodd-Frank Act created a new resolution regime (known as orderly liquidation authority) for bank holding companies and their affiliates that are systemically important and certain non-bank financial companies. Under the orderly liquidation authority, the FDIC may be appointed as receiver for the systemically important institution and its failed non-bank subsidiaries if, upon the recommendation of applicable regulators, the Secretary of the Treasury determines, among other things, that the institution is in default or in danger of default, that the institution's failure

would have serious adverse effects on the U.S. financial system and that resolution under the orderly liquidation authority would avoid or mitigate those effects.

If the FDIC is appointed as receiver under the orderly liquidation authority, then the powers of the receiver, and the rights and obligations of creditors and other parties who have dealt with the institution, would be determined under the orderly liquidation authority, and not under the bankruptcy or insolvency law that would otherwise apply. The powers of the receiver under the orderly liquidation authority were generally based on the powers of the FDIC as receiver for depository institutions under the Federal Deposit Insurance Act. Substantial differences in the rights of creditors exist between the orderly liquidation authority and the U.S. Bankruptcy Code, including the right of the FDIC under the orderly liquidation authority to disregard the strict priority of creditor claims in some circumstances, the use of an administrative claims procedure to determine creditors' claims (as opposed to the judicial procedure utilized in bankruptcy proceedings), and the right of the FDIC to transfer claims to a bridge entity. In addition, the orderly liquidation authority limits the ability of creditors to enforce certain contractual cross-defaults against affiliates of the institution in receivership.



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The orderly liquidation authority provisions of the Dodd-Frank Act became effective upon enactment. The FDIC has completed several rulemakings and taken other actions under the orderly liquidation authority, including the issuance of a notice describing some elements of its single point of entry or SPOE strategy pursuant to the orderly liquidation authority provisions of the Dodd-Frank Act. Under this strategy, the FDIC would, among other things, resolve a failed financial holding company by transferring its assets to a bridge holding company.

In November 2015, we, along with a number of other major global banking organizations, adhered to an updated version of the International Swaps and Derivatives Association Resolution Stay Protocol (the ISDA Protocol) that was developed in coordination with the Financial Stability Board. The ISDA Protocol imposes a stay on certain cross-default and early termination rights within standard ISDA derivatives contracts and securities financing transactions between adhering parties in the event that one of them is subject to resolution in its home jurisdiction, including a resolution under the orderly liquidation authority in the United States. The initial version, which addressed ISDA derivatives contracts, took effect in January 2015, and the updated version, which was revised to also cover securities financing transactions, took effect in January 2016. The ISDA Protocol is expected to be adopted more broadly in the future, following the adoption of regulations by banking regulators, and expanded to include instances where a U.S. financial holding company becomes subject to proceedings under the U.S. bankruptcy code.

**FDIC Insurance.** GS Bank USA accepts deposits, and those deposits have the benefit of FDIC insurance up to the applicable limits. The FDIC's Deposit Insurance Fund is funded by assessments on insured depository institutions, such as GS Bank USA. The amounts of these assessments for larger depository institutions (generally those that have \$10 billion in assets or more), such as GS Bank USA, are currently based on the average total consolidated assets less the average tangible equity of the insured depository institution during the assessment period, the supervisory ratings of the insured depository institution and specified forward-looking financial measures used to calculate the assessment rate. The assessment rate is subject to adjustment by the FDIC.

In October 2015, the FDIC issued a proposed rule that would increase the reserve ratio for the Deposit Insurance Fund to 1.35% of total insured deposits. The proposed rule would impose a surcharge on the assessments of larger depository institutions, beginning the quarter after the reserve ratio first reaches or exceeds 1.15% and continuing through the earlier of the quarter that the reserve ratio first reaches or exceeds 1.35% and December 31, 2018. Under the proposed rule, if the reserve ratio does not reach 1.35% by December 31, 2018, the FDIC would impose a shortfall assessment on larger depository institutions, including GS Bank USA.

**Prompt Corrective Action.** The U.S. Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), among other things, requires the federal bank regulatory agencies to take prompt corrective action in respect of depository institutions that do not meet specified capital requirements. FDICIA establishes five capital categories for FDIC-insured banks: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized.

An institution may be downgraded to, or deemed to be in, a capital category that is lower than is indicated by its capital ratios if it is determined to be in an unsafe or unsound condition or if it receives an unsatisfactory examination rating with respect to certain matters. FDICIA imposes progressively more restrictive constraints on operations, management and capital distributions, as the capital category of an institution declines. Failure to meet the capital requirements could also require a depository institution to raise capital. Ultimately, critically undercapitalized institutions are subject to the appointment of a receiver or conservator, as described under Resolution and Recovery,

and Insolvency   Insolvency of an Insured Depository Institution or a Bank Holding Company   above.

The prompt corrective action regulations apply only to depository institutions and not to bank holding companies such as Group Inc. However, the Federal Reserve Board is authorized to take appropriate action at the holding company level, based upon the undercapitalized status of the holding company's depository institution subsidiaries. In certain instances relating to an undercapitalized depository institution subsidiary, the bank holding company would be required to guarantee the performance of the undercapitalized subsidiary's capital restoration plan and might be liable for civil money damages for failure to fulfill its commitments on that guarantee. Furthermore, in the event of the bankruptcy of the holding company, the guarantee would take priority over the holding company's general unsecured creditors, as described under   Source of Strength   above.

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**Activities.** The Dodd-Frank Act and the BHC Act generally restrict bank holding companies from engaging in business activities other than the business of banking and certain closely related activities.

**Volcker Rule.** The provisions of the Dodd-Frank Act referred to as the Volcker Rule became effective in July 2015. The Volcker Rule prohibits proprietary trading, but permits activities such as underwriting, market making and risk-mitigation hedging, requires an extensive compliance program and includes additional reporting and record keeping requirements. The reporting requirements include calculating daily quantitative metrics on covered trading activities (as defined in the rule) and providing these metrics to regulators on a monthly basis.

In addition, the Volcker Rule limits the sponsorship of, and investment in, covered funds (as defined in the rule) by banking entities, including Group Inc. and its subsidiaries. It also limits certain types of transactions between us and our sponsored funds, similar to the limitations on transactions between depository institutions and their affiliates. Covered funds include our private equity funds, certain of our credit and real estate funds, our hedge funds and certain other investment structures. The limitation on investments in covered funds requires us to reduce our investment in each such fund to 3% or less of the fund's net asset value, and to reduce our aggregate investment in all such funds to 3% or less of our Tier 1 capital.

In December 2014, the Federal Reserve Board extended the conformance period through July 2016 for investments in, and relationships with, covered funds that were in place prior to December 31, 2013, and indicated that it intends to further extend the conformance period through July 2017.

See Management's Discussion and Analysis of Financial Condition and Results of Operations Regulatory Developments Volcker Rule in Part II, Item 7 of the 2015 Form 10-K for information about our investments in covered funds.

**Other Restrictions.** Financial holding companies generally can engage in a broader range of financial and related activities than are otherwise permissible for bank holding companies as long as they continue to meet the eligibility requirements for financial holding companies. The broader range of permissible activities for financial holding companies includes underwriting, dealing and making markets in securities and making investments in non-financial companies. In addition, financial holding companies are permitted under the GLB Act to engage in certain commodities activities in the United States that may otherwise be impermissible for bank holding companies, so long as the assets held pursuant to these activities do not equal 5% or more of their consolidated assets.

The Federal Reserve Board, however, has the authority to limit a financial holding company's ability to conduct activities that would otherwise be permissible, and will likely do so if the financial holding company does not satisfactorily meet certain requirements of the Federal Reserve Board. For example, if a financial holding company or any of its U.S. depository institution subsidiaries ceases to maintain its status as well-capitalized or well-managed, the Federal Reserve Board may impose corrective capital and/or managerial requirements, as well as additional limitations or conditions. If the deficiencies persist, the financial holding company may be required to divest its U.S. depository institution subsidiaries or to cease engaging in activities other than the business of banking and certain closely related activities.

In addition, we are required to obtain prior Federal Reserve Board approval before engaging in certain banking and other financial activities both within and outside the United States.

Single-counterparty credit limits and early remediation requirements have been proposed but are still under consideration by the Federal Reserve Board. The proposed single-counterparty credit limits impose more stringent requirements for credit exposure among major financial institutions, which (together with other provisions incorporated into the Basel III capital rules) may affect our ability to transact or hedge with other financial institutions. The proposed early remediation rules are modeled on the prompt corrective action regime, described under U.S. Deposit Insurance and Prompt Corrective Action , but are designed to require action to begin in earlier stages of a company's financial distress, based on a range of triggers, including capital and leverage, stress test results, liquidity and risk management.

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If any insured depository institution subsidiary of a financial holding company fails to maintain at least a satisfactory rating under the Community Reinvestment Act, the financial holding company would be subject to similar restrictions on activities.

In addition, New York State banking law imposes lending limits (which take into account credit exposure from derivative transactions) and other requirements that could impact the manner and scope of GS Bank USA's activities.

During the past several years, the U.S. federal bank regulatory agencies have raised concerns over origination and other practices in leveraged lending markets. The agencies have issued guidance that focuses on transaction structures and risk management frameworks and outlines high-level principles for safe-and-sound leveraged lending, including underwriting standards, valuation and stress testing.

### **Broker-Dealer and Securities Regulation**

Our 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 FINRA and 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, as described further below, as well as under Other Regulation. GSEC is a registered U.S. broker-dealer and is regulated by the SEC, the NYSE and FINRA. For a description of net capital requirements applicable to GS&Co. and GSEC, see Note 20 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K.

In Europe, we provide broker-dealer services that are subject to oversight by national regulators as well as EU regulators. These 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. GSI, our regulated U.K. broker-dealer subsidiary, is subject to capital requirements imposed by the PRA. GSI also has its own capital planning and stress testing process, which incorporates internally designed stress tests and those required under the PRA's Internal Capital Adequacy Assessment Process. See Management's Discussion and Analysis of Financial Condition and Results of Operations—Equity Capital Management and Regulatory Capital—Subsidiary Capital Requirements in Part II, Item 7 of the 2015 Form 10-K for information about GSI's capital ratios.

Goldman Sachs Japan Co., Ltd. (GSJCL), our regulated Japanese broker-dealer, is subject to capital requirements imposed by Japan's Financial Services Agency. GSJCL is also regulated by the Tokyo Stock Exchange, the Osaka

Exchange, the Tokyo Financial Exchange, the Japan Securities Dealers Association, the Tokyo Commodity Exchange, Securities and Exchange Surveillance Commission, Bank of Japan, the Ministry of Finance and the Ministry of Economy, Trade and Industry, among others.

Also, the Securities and Futures Commission in Hong Kong, the Monetary Authority of Singapore, the China Securities Regulatory Commission, the Korean Financial Supervisory Service, the Reserve Bank of India, the Securities and Exchange Board of India, the Australian Securities and Investments Commission and the Australian Securities Exchange, among others, regulate various of our subsidiaries and also have capital standards and other requirements comparable to the rules of the SEC. Various of our other subsidiaries are regulated by the banking and regulatory authorities in jurisdictions in which we operate, including, among others, Brazil and Dubai.

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.

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The Dodd-Frank Act will result in additional regulation by the SEC, the CFTC and other regulators of our broker-dealer and regulated subsidiaries in a number of respects. The legislation calls for the imposition of expanded standards of care by market participants in dealing with clients and customers, including by providing the SEC with authority to adopt rules establishing fiduciary duties for broker-dealers and directing the SEC to examine and improve sales practices and disclosure by broker-dealers and investment advisers. In addition, the U.S. Department of Labor has issued proposed rules defining the circumstances in which a person would be treated as a fiduciary under the Employee Retirement Income Security Act of 1974 by reason of providing investment advice to retirement plans and individual retirement accounts, as well as proposed exemptions.

Our broker-dealer and other subsidiaries are also subject to rules adopted by federal agencies pursuant to the Dodd-Frank Act that require any person who organizes or initiates an asset-backed security transaction to retain a portion (generally, at least five percent) of any credit risk that the person conveys to a third party. Securitizations would also be affected by rules proposed by the SEC to implement the Dodd-Frank Act's prohibition against securitization participants engaging in any transaction that would involve or result in any material conflict of interest with an investor in a securitization transaction. The proposed rules would exempt bona fide market-making activities and risk-mitigating hedging activities in connection with securitization activities from the general prohibition.

The SEC, FINRA and regulators in various non-U.S. jurisdictions have imposed both conduct-based and disclosure-based requirements with respect to research reports and research analysts and may impose additional regulations.

**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. 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 our subsidiaries, including GS&Co. and GSEC, are registered with the CFTC and act as futures commission merchants, commodity pool operators, commodity trading advisors or (as described 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.

The Dodd-Frank Act provides for significantly increased regulation of, and restrictions on, derivative markets and transactions. In particular, the Dodd-Frank Act imposes the following requirements relating to swaps and security-based swaps:

Real-time public and regulatory reporting of trade information for swaps and security-based swaps and large trader reporting for swaps;

Registration of swap dealers and major swap participants with the CFTC and of security-based swap dealers and major security-based swap participants with the SEC;

Position limits, aggregated generally across commonly controlled accounts and commonly controlled affiliates, that cap exposure to derivatives on certain physical commodities;

Mandated clearing through central counterparties and execution through regulated exchanges or electronic facilities for certain swaps and security-based swaps;

New business conduct standards and other requirements for swap dealers, major swap participants, security-based swap dealers and major security-based swap participants, covering their relationships with counterparties, internal oversight and compliance structures, conflict of interest rules, internal information barriers, general and trade-specific record-keeping and risk management;



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Margin requirements for trades that are not cleared through a central counterparty; and

Entity-level capital requirements for swap dealers, major swap participants, security-based swap dealers, and major security-based swap participants.

The terms swaps and security-based swaps are generally defined broadly for purposes of these requirements, and can include a wide variety of derivative instruments in addition to those conventionally called swaps. The definition includes certain forward contracts, options, certain loan participations and guarantees of swaps, subject to certain exceptions, and relates to a wide variety of underlying assets or obligations, including currencies, commodities, interest or other monetary rates, yields, indices, securities, credit events, loans and other financial obligations.

The CFTC is responsible for issuing rules relating to swaps, swap dealers and major swap participants, and the SEC is responsible for issuing rules relating to security-based swaps, security-based swap dealers and major security-based swap participants. The U.S. federal bank regulatory agencies (acting jointly) adopted final rules in October 2015 and the CFTC adopted final margin rules for uncleared swaps in December 2015 that will phase in variation margin requirements from September 1, 2016 through March 1, 2017 and initial margin requirements from September 1, 2016 through September 1, 2020, depending on the level of swaps and foreign exchange forward transaction activity of the swap dealer and the relevant counterparty. The final rules of the U.S. federal bank regulatory agencies would generally apply to inter-affiliate transactions, with limited relief available from the initial margin requirements for affiliates that have registered with the CFTC as swap dealers. Under the CFTC final rules, inter-affiliate transactions would be exempt from initial margin requirements with certain exceptions, but variation margin requirements would still apply. We expect the SEC to adopt margin regulations as well in 2016.

The CFTC has not yet finalized its capital regulations for swap dealers. However, many of the requirements, including registration of swap dealers, mandatory clearing and execution of certain swaps, business conduct standards and real-time public trade reporting, have taken effect already under CFTC rules, and the SEC and the CFTC have finalized the definitions of a number of key terms. Finally, the CFTC has begun to decide which swaps must be cleared through central counterparties and executed on swap execution facilities or exchanges. In particular, certain interest rate swaps and credit default swaps are now subject to these clearing and trade-execution requirements. The CFTC is expected to continue to make such determinations during 2016.

The SEC has adopted rules relating to trade reporting and real-time reporting requirements for security-based swap dealers and major security-based swap participants. The SEC has also adopted final rules relating to the registration of security-based swap dealers, but such registration is not currently required. The SEC has proposed, but not yet finalized, rules to impose margin, capital, segregation and business conduct requirements for security-based swap dealers and major security-based swap participants. The SEC has also proposed rules that would govern the design of new trading venues for security-based swaps and establish the process for determining which products must be traded on these venues.

We have registered certain subsidiaries as swap dealers under the CFTC rules, including GS&Co., GS Bank USA, GSI and J. Aron & Company. We also expect to register certain subsidiaries as security-based swap dealers. We expect that these subsidiaries, and our businesses more broadly, will continue to 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. For instance, the EU has established regulatory requirements for OTC derivatives activities under the European Market Infrastructure Regulation, including requirements relating to portfolio reconciliation and reporting, which have already taken effect, as well as requirements relating to clearing and margining for uncleared derivatives, which are currently expected to be finalized during 2016.

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The CFTC and SEC have issued guidance and rules relating to swap activities. The CFTC has provided guidance and timing on the cross-border regulation of swaps and announced that it had reached an understanding with the European Commission regarding the cross-border regulation of derivatives and the common goals underlying their respective regulations. The CFTC also approved certain comparability determinations that would permit substituted compliance with non-U.S. regulatory regimes for certain swap regulations related to certain business conduct requirements, including chief compliance officer duties, conflict of interest rules, monitoring of position limits, record-keeping and risk management. The SEC issued rules and guidance on cross-border security-based swap activities and the CFTC issued proposed rules that would determine the circumstances under which registered swap dealers would be subject to the CFTC's rules regarding margin in connection with uncleared swaps in cross-border transactions. In particular, under the proposal, certain non-U.S. swap dealers would generally be required to comply with the CFTC's rules but, with respect to the requirement to post margin, these non-U.S. swap dealers would be permitted to comply with comparable margin requirements in a foreign jurisdiction, subject to the CFTC's approval of the particular jurisdiction. Substituted compliance would also be available with respect to the collection of margin in certain circumstances. The CFTC's rules will only be applicable to those swap dealers that are not subject to the margin requirements of a prudential regulator.

The application of new derivatives rules across different national and regulatory jurisdictions has not yet been fully established and specific determinations of the extent to which regulators in each of the relevant jurisdictions will defer to regulations in other jurisdictions have not yet been completed. 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.

J. Aron & Company is authorized by the U.S. Federal Energy Regulatory Commission (FERC) to sell wholesale physical power at market-based rates. As a FERC-authorized power marketer, J. Aron & Company 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, as described under Risk Factors. Our commodities activities, particularly our physical commodities activities, subject us to extensive regulation and involve certain potential risks, including environmental, reputational and other risks that may expose us to significant liabilities and costs in Part I, Item 1A of the 2015 Form 10-K.

**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. The SEC recently adopted amendments to the rules that govern SEC-registered money market mutual funds. The new rules require institutional prime money market funds to value their portfolio securities using market-based factors and to sell and redeem their shares based on a floating net asset value. In addition, the rules allow, in certain circumstances,

for the board of directors of money market mutual funds to impose liquidity fees and redemption gates and also require additional disclosure, reporting and stress testing. Certain reporting requirements became effective during 2015, and the firm's money market mutual funds will be required to comply with the amendments relating to floating net asset value, fees and redemption gates and stress testing in 2016.

In September 2015, the SEC also proposed rules that would require registered funds to adopt and implement liquidity risk management programs, including establishing a minimum percentage of net assets that could be invested only in assets offering three-day liquidity and classifying and reviewing the liquidity of fund portfolio assets; permit funds to employ swing pricing, under which the net asset value of a fund's shares may be adjusted in order to pass the cost of trading in such shares to purchasing or redeeming shareholders; and require related disclosures.

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In December 2015, the SEC also proposed a new rule regulating the use of derivatives by registered funds. Under the proposed rule, a registered fund would be required to, among other things, comply with one of two alternative portfolio limitations designed to impose a limit on the total amount of leverage the fund can obtain through derivatives transactions; maintain a minimum amount of qualifying coverage assets (generally limited to cash and cash equivalents) to support payment obligations for each derivative transaction; establish a derivatives risk management program if derivative use meets specified thresholds; and comply with new recordkeeping, disclosure and reporting requirements related to its use of derivatives.

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.

The European Commission has published a proposal relating to money market funds, including provisions prescribing minimum levels of daily and weekly liquidity, clear labeling of money market funds, a 3% capital buffer for constant net asset value funds and internal credit risk assessments.

### **Compensation Practices**

Our compensation practices are subject to oversight by the Federal Reserve Board and, with respect to some of our subsidiaries and employees, by other financial regulatory bodies worldwide. The scope and content of compensation regulation in the financial industry are continuing to develop, and we expect that these regulations and resulting market practices will evolve over a number of years.

The U.S. federal bank regulatory agencies have provided guidance designed to ensure that incentive compensation arrangements at banking organizations take into account risk and are consistent with safe and sound practices. The guidance sets forth the following three key principles with respect to incentive compensation arrangements: (i) the arrangements should provide employees with incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose their organizations to imprudent risk; (ii) the arrangements should be compatible with effective controls and risk management; and (iii) the arrangements should be supported by strong corporate governance. The guidance provides that supervisory findings with respect to incentive compensation will be incorporated, as appropriate, into the organization's supervisory ratings, which can affect its ability to make acquisitions or perform other actions. The guidance also provides that enforcement actions may be taken against a banking organization if its incentive compensation arrangements or related risk management, control or governance processes pose a risk to the organization's safety and soundness.

The Financial Stability Board has released standards for implementing certain compensation principles for banks and other financial companies designed to encourage sound compensation practices. These standards are to be implemented by local regulators. In the EU, CRD IV includes compensation provisions designed to implement the Financial Stability Board's compensation standards. These rules have been implemented by EU member states and, among other things, limit the ratio of variable to fixed compensation of certain employees, including those identified as having a material impact on the risk profile of EU-regulated entities, including GSI.

The EU has also introduced rules regulating compensation for certain persons providing services to certain investment funds. These requirements are in addition to the guidance issued by U.S. financial regulators described above and the Dodd-Frank Act provision described below.

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The Dodd-Frank Act requires the U.S. financial regulators, including the Federal Reserve Board, to establish joint regulations or guidelines prohibiting incentive-based payment arrangements at specified regulated entities having at least \$1 billion in total assets (which would include Group Inc. and some of its depository institution, broker-dealer and investment adviser subsidiaries) that encourage inappropriate risks by providing an executive officer, employee, director or principal shareholder with excessive compensation, fees, or benefits or that could lead to material financial loss to the entity. In addition, these regulators must establish regulations or guidelines requiring enhanced disclosure to regulators of incentive-based compensation arrangements. The initial version of these regulations was proposed by the U.S. financial regulators in early 2011 but the regulations have not yet been finalized. The proposed regulations incorporate the three key principles from the regulatory guidance described above. If the regulations are adopted in the form proposed, they may restrict our flexibility with respect to the manner in which we structure compensation.

### **Anti-Money Laundering and Anti-Bribery Rules and Regulations**

The U.S. Bank Secrecy Act (BSA), as amended by the USA PATRIOT Act of 2001 (PATRIOT Act), contains anti-money laundering and financial transparency laws and mandated the implementation of various regulations applicable to all financial institutions, including standards for verifying client identification at account opening, and obligations to monitor client transactions and report suspicious activities. Through these and other provisions, the BSA and the PATRIOT Act seek to promote the identification of parties that may be involved in terrorism, money laundering or other suspicious activities. Anti-money laundering laws outside the United States contain some similar provisions.

In addition, we are subject to laws and regulations worldwide, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, relating to corrupt and illegal payments to, and hiring practices with regard to, government officials and others. The obligation of financial institutions, including Goldman Sachs, to identify their clients, to monitor for and report suspicious transactions, to monitor direct and indirect payments to government officials, to respond to requests for information by regulatory authorities and law enforcement agencies, and to share information with other financial institutions, has required the implementation and maintenance of internal practices, procedures and controls.

### **Other Regulation**

The U.S. and non-U.S. government agencies, regulatory bodies and self-regulatory organizations, as well as state securities commissions and other state regulators in the United States, are empowered to conduct administrative proceedings that can result in censure, fine, the issuance of cease-and-desist orders, or the suspension or expulsion of a regulated entity or its directors, officers or employees. In addition, a number of our other activities require us to obtain licenses, adhere to applicable regulations and be subject to the oversight of various regulators in the jurisdictions in which we conduct these activities.

The EU finalized the Markets in Financial Instruments Regulation and a revision of the Markets in Financial Instruments Directive (collectively, MiFID II). These include new extensive market structure reforms, such as the establishment of new trading venue categories for the purposes of discharging the obligation to trade OTC derivatives on a trading platform, enhanced pre- and post-trade transparency covering a wider range of financial instruments and a reform of the equities markets. Commodities trading firms will be required to calculate their positions and adhere to specific limits. Other reforms introduce enhanced transaction reporting, the publication of best execution data by

investment firms and trading venues, investor protection-related and organizational requirements. Other requirements may affect the way investment managers can pay for the receipt of investment research. On February 10, 2016, the European Commission proposed delaying the effectiveness of MiFID II until January 2018.

The EU and national financial legislators and regulators have proposed or adopted numerous further market reforms that may impact our businesses, including heightened corporate governance standards for financial institutions and rules on indices that are used as benchmarks for financial instruments or funds. In addition, the European Commission, the European Securities Market Authority and the European Banking Authority have announced or are formulating regulatory standards and other measures which will impact our European operations. Certain of our subsidiaries are also regulated by the European securities, derivatives and commodities exchanges of which they are members.

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The European Commission has published a proposal for a common system of financial transactions tax which would be implemented in certain EU member states willing to engage in enhanced cooperation in this area. The proposed financial transactions tax is broad in scope and would apply to transactions in a wide variety of financial instruments and derivatives. The European Commission has also published a draft proposal for structural reform of EU banks, which would prohibit certain banks from proprietary trading and would require separating certain trading activities from deposit-taking entities.

As described above, many of our subsidiaries are subject to regulatory capital requirements in jurisdictions throughout the world. Subsidiaries not subject to separate regulation may hold capital to satisfy local tax guidelines, rating agency requirements or internal policies, including policies concerning the minimum amount of capital a subsidiary should hold based upon its underlying risk.

Certain of our businesses are subject to laws and regulations enacted by U.S. federal and state governments, the EU or other jurisdictions and/or enacted by various regulatory organizations or exchanges relating to the privacy of the information of clients, employees or others, including the GLB Act, the EU Data Protection Directive, the Japanese Personal Information Protection Act, the Hong Kong Personal Data (Privacy) Ordinance, the Australian Privacy Act and the Brazilian Bank Secrecy Law.

### **Available Information**

Our internet address is [www.gs.com](http://www.gs.com) and the investor relations section of our web site is located at [www.gs.com/shareholders](http://www.gs.com/shareholders). We make available free of charge through the investor relations section of our web site, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934 (Exchange Act), as well as proxy statements, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Also posted on our web site, and available in print upon request of any shareholder to our Investor Relations Department, are our certificate of incorporation and by-laws, charters for our Audit Committee, Risk Committee, Compensation Committee, Corporate Governance and Nominating Committee, and Public Responsibilities Committee, our Policy Regarding Director Independence Determinations, our Policy on Reporting of Concerns Regarding Accounting and Other Matters, our Corporate Governance Guidelines and our Code of Business Conduct and Ethics governing our directors, officers and employees. Within the time period required by the SEC, we will post on our web site any amendment to the Code of Business Conduct and Ethics and any waiver applicable to any executive officer, director or senior financial officer.

In addition, our web site includes information concerning:

Purchases and sales of our equity securities by our executive officers and directors;

Disclosure relating to certain non-GAAP financial measures (as defined in the SEC's Regulation G) that we may make public orally, telephonically, by webcast, by broadcast or by similar means from time to time;

Dodd-Frank Act stress test results; and

The firm's risk management practices and regulatory capital ratios, as required under the disclosure-related provisions of the Revised Capital Framework, which are based on the third pillar of Basel III.

Our Investor Relations Department can be contacted at The Goldman Sachs Group, Inc., 200 West Street, 29th Floor, New York, New York 10282, Attn: Investor Relations, telephone: 212-902-0300, e-mail: [gs-investor-relations@gs.com](mailto:gs-investor-relations@gs.com).

From time to time, we use our website, our Twitter account ([twitter.com/GoldmanSachs](https://twitter.com/GoldmanSachs)) and other social media channels as additional means of disclosing public information to investors, the media and others interested in Goldman Sachs. It is possible that certain information we post on our website and on social media could be deemed to be material information, and we encourage investors, the media and others interested in Goldman Sachs to review the business and financial information we post on our website and on the social media channels identified above. The information on our website and the firm's social media channels is not incorporated by reference into the 2015 Form 10-K.

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**Cautionary Statement Pursuant to the U.S. Private Securities Litigation Reform Act of 1995**

We have included or incorporated by reference in the 2015 Form 10-K, and from time to time our management may make, statements that may constitute forward-looking statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. These statements include statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, among other things, and may also include statements about the effect of changes to the capital, leverage, liquidity, long-term debt and total loss-absorbing capacity rules applicable to banks and bank holding companies, the impact of the Dodd-Frank Act on our businesses and operations, and various legal proceedings or mortgage-related contingencies as set forth in Notes 27 and 18, respectively, to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K, as well as statements about the results of our Dodd-Frank Act and firm stress tests, statements about the objectives and effectiveness of our business continuity plan, information security program, risk management and liquidity policies, statements about trends in or growth opportunities for our businesses, statements about our future status, activities or reporting under U.S. or non-U.S. banking and financial regulation, and statements about our investment banking transaction backlog. By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in the forward-looking statements include, among others, those described below and under Risk Factors in Part I, Item 1A of the 2015 Form 10-K.

Statements about the agreement in principle to resolve the RMBS Working Group investigation and its impact on the firm's results of operations, financial condition and cash flows are based on the firm's current expectations regarding the ultimate terms of the definitive settlement documentation. The agreement in principle is subject to the negotiation of definitive documentation, and there can be no assurance that the firm, the U.S. Department of Justice and the other applicable governmental authorities will agree on the definitive documentation. Accordingly, the effects of the definitive settlement, as well as the firm's ability to negotiate definitive documentation for the settlement, may change materially from what is currently expected.

Statements about our investment banking transaction backlog are subject to the risk that the terms of these transactions may be modified or that they may not be completed at all; therefore, the net revenues, if any, that we actually earn from these transactions may differ, possibly materially, from those currently expected. Important factors that could result in a modification of the terms of a transaction or a transaction not being completed include, in the case of underwriting transactions, a decline or continued weakness in general economic conditions, outbreak of hostilities, volatility in the securities markets generally or an adverse development with respect to the issuer of the securities and, in the case of financial advisory transactions, a decline in the securities markets, an inability to obtain adequate financing, an adverse development with respect to a party to the transaction or a failure to obtain a required regulatory approval. For information about other important factors that could adversely affect our investment banking transactions, see Risk Factors in Part I, Item 1A of the 2015 Form 10-K.

We have provided in this filing information regarding the firm's capital ratios, including the CET1 ratios under the Advanced and Standardized approaches on a fully phased-in basis, as well as the LCR and the supplementary leverage ratios for the firm and GS Bank USA. The statements with respect to these ratios are forward-looking statements, based on our current interpretation, expectations and understandings of the relevant regulatory rules and guidance, and reflect significant assumptions concerning the treatment of various assets and liabilities and the manner in which the ratios are calculated. As a result, the methods used to calculate these ratios may differ, possibly materially, from those used in calculating the firm's capital, liquidity and leverage ratios for any future disclosures. The ultimate methods of calculating the ratios will depend on, among other things, implementation guidance or further rulemaking from the U.S. federal bank regulatory agencies and the development of market practices and standards.

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**Item 1A. Risk Factors**

We face a variety of risks that are substantial and inherent in our businesses, including market, liquidity, credit, operational, legal, regulatory and reputational risks. The following are some of the more important factors that could affect our businesses.

*Our businesses have been and may continue to be adversely affected by conditions in the global financial markets and economic conditions generally.*

Our businesses, by their nature, do not produce predictable earnings, and all of our businesses are materially affected by conditions in the global financial markets and economic conditions generally, both directly and through their impact on client activity levels. These conditions can change suddenly and negatively.

Our financial performance is highly dependent on the environment in which our businesses operate. A favorable business environment is generally characterized by, among other factors, high global gross domestic product growth, regulatory and market conditions which result in transparent, liquid and efficient capital markets, low inflation, high business and investor confidence, stable geopolitical conditions, clear regulations and strong business earnings. Unfavorable or uncertain economic and market conditions can be caused by: concerns about sovereign defaults; uncertainty in U.S. federal fiscal or monetary policy, the U.S. federal debt ceiling and the continued funding of the U.S. government; the extent of and uncertainty about the timing and nature of regulatory reforms; declines in economic growth, business activity or investor or business confidence; limitations on the availability or increases in the cost of credit and capital; illiquid markets; increases in inflation, interest rates, exchange rate or basic commodity price volatility or default rates; outbreaks of hostilities or other geopolitical instability; corporate, political or other scandals that reduce investor confidence in capital markets; extreme weather events or other natural disasters or pandemics; or a combination of these or other factors.

In 2008 and through early 2009, the financial services industry and the securities markets generally were materially and adversely affected by significant declines in the values of nearly all asset classes and by a serious lack of liquidity. Since 2011, concerns about European sovereign debt risk and its impact on the European banking system, and about changes in interest rates and other market conditions or actual changes in interest rates and other market conditions, including market conditions in China, have resulted, at times, in significant volatility while negatively impacting the levels of client activity.

General uncertainty about economic, political and market activities, and the scope, timing and final implementation of regulatory reform, as well as weak consumer, investor and CEO confidence resulting in large part from such uncertainty, continues to negatively impact client activity, which adversely affects many of our businesses. Periods of low volatility and periods of high volatility combined with a lack of liquidity, have at times had an unfavorable impact on our market-making businesses.

Our revenues and profitability and those of our competitors have been and will continue to be impacted by requirements relating to capital, additional loss-absorbing capacity, leverage, minimum liquidity and long-term funding levels, requirements related to resolution and recovery planning, derivatives clearing and margin rules and

levels of regulatory oversight, as well as limitations on whether and how certain business activities may be carried out by financial institutions. Although interest rates are at or near historically low levels, financial institution returns have also been negatively impacted by increased funding costs due in part to the withdrawal of perceived government support of such institutions in the event of future financial crises. In addition, liquidity in the financial markets has also been negatively impacted as market participants and market practices and structures adjust to new regulations.

The degree to which these and other changes resulting from the financial crisis will have a long-term impact on the profitability of financial institutions will depend on the final interpretation and implementation of new regulations, the manner in which markets, market participants and financial institutions adapt to the new landscape, and the prevailing economic and financial market conditions. However, there is a significant risk that such changes will, at least in the near term, continue to negatively impact the absolute level of revenues, profitability and return on equity at our firm and at other financial institutions.

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***Our businesses and those of our clients are subject to extensive and pervasive regulation around the world.***

As a participant in the financial services industry and a systemically important financial institution, we are subject to extensive regulation in jurisdictions around the world. We face the risk of significant intervention by regulatory and taxing authorities in all jurisdictions in which we conduct our businesses. In many cases, our activities may be subject to overlapping and divergent regulation in different jurisdictions. Among other things, as a result of regulators or private parties challenging our compliance with existing laws and regulations, we could be fined, prohibited from engaging in some of our business activities, subject to limitations or conditions on our business activities or subjected to new or substantially higher taxes or other governmental charges in connection with the conduct of our businesses or with respect to our employees. Such limitations or conditions may negatively impact our profitability.

Separate and apart from the impact on the scope and profitability of our business activities, day-to-day compliance with existing laws and regulations, in particular those laws and regulations adopted since 2008, has involved and will continue to involve significant amounts of time, including that of our senior leaders and that of an increasing number of dedicated compliance and other reporting and operational personnel, all of which may negatively impact our profitability.

If there are new laws or regulations or changes in the enforcement of existing laws or regulations applicable to our businesses or those of our clients, including capital, liquidity, leverage, long-term debt, total loss-absorbing capacity and margin requirements, restrictions on leveraged lending or other business practices, reporting requirements, requirements relating to recovery and resolution planning, tax burdens and compensation restrictions, that are imposed on a limited subset of financial institutions (either based on size, activities, geography or other criteria), compliance with these new laws or regulations, or changes in the enforcement of existing laws or regulations, could adversely affect our ability to compete effectively with other institutions that are not affected in the same way. In addition, regulation imposed on financial institutions or market participants generally, such as taxes on financial transactions, could adversely impact levels of market activity more broadly, and thus impact our businesses.

These developments could impact our profitability in the affected jurisdictions, or even make it uneconomic for us to continue to conduct all or certain of our businesses in such jurisdictions, or could cause us to incur significant costs associated with changing our business practices, restructuring our businesses, moving all or certain of our businesses and our employees to other locations or complying with applicable capital requirements, including liquidating assets or raising capital in a manner that adversely increases our funding costs or otherwise adversely affects our shareholders and creditors.

U.S. and non-U.S. regulatory developments, in particular the Dodd-Frank Act and Basel III, have significantly altered the regulatory framework within which we operate and may adversely affect our competitive position and profitability.

Among the aspects of the Dodd-Frank Act that have affected or may in the future affect our businesses are: increased capital, liquidity and reporting requirements; limitations on activities in which we may engage; increased regulation of and restrictions on OTC derivatives markets and transactions; limitations on incentive compensation; limitations on affiliate transactions; requirements to reorganize or limit activities in connection with recovery and resolution planning; increased deposit insurance assessments; and increased standards of care for broker-dealers and investment advisers in dealing with clients. The implementation of higher capital requirements, the liquidity coverage ratio, the

net stable funding ratio, requirements relating to long-term debt and total loss-absorbing capacity and the prohibition on proprietary trading and the sponsorship of, or investment in, covered funds by the Volcker Rule may adversely affect our profitability and competitive position, particularly if these requirements do not apply, or do not apply equally, to our competitors or are not implemented uniformly across jurisdictions.

As described under **Business Regulation Capital and Liquidity Requirements Payment of Dividends and Stock Repurchases** in Part I, Item 1 of the 2015 Form 10-K, Group Inc.'s proposed capital actions and capital plan are reviewed by the Federal Reserve Board as part of the CCAR process. If the Federal Reserve Board objects to our proposed capital actions in our capital plan, Group Inc. could be prohibited from taking some or all of the proposed capital actions, including increasing or paying dividends on common or preferred stock or repurchasing common stock or other capital securities. Our inability to carry out our proposed capital actions could, among other things, prevent us from returning capital to our shareholders and impact our return on equity.



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We are also subject to laws and regulations relating to the privacy of the information of clients, employees or others, and any failure to comply with these regulations could expose us to liability and/or reputational damage. In addition, our businesses are increasingly subject to laws and regulations relating to surveillance, encryption and data on-shoring in the jurisdictions in which we operate. Compliance with these laws and regulations may require us to change our policies, procedures and technology for information security, which could, among other things, make us more vulnerable to cyber attacks and misappropriation, corruption or loss of information or technology.

Increasingly, regulators and courts have sought to hold financial institutions liable for the misconduct of their clients where such regulators and courts have determined that the financial institution should have detected that the client was engaged in wrongdoing, even though the financial institution had no direct knowledge of the activities engaged in by its client. Regulators and courts have also increasingly found liability as a control person for activities of entities in which financial institutions or funds controlled by financial institutions have an investment, but which they do not actively manage. In addition, regulators and courts continue to seek to establish fiduciary obligations to counterparties to which no such duty had been assumed to exist. To the extent that such efforts are successful, the cost of, and liabilities associated with, engaging in brokerage, clearing, market-making, prime brokerage, investing and other similar activities could increase significantly. To the extent that we have fiduciary obligations in connection with acting as a financial adviser, investment adviser or in other roles for individual, institutional, sovereign or investment fund clients, any breach, or even an alleged breach, of such obligations could have materially negative legal, regulatory and reputational consequences.

For information about the extensive regulation to which our businesses are subject, see **Business Regulation** in Part I, Item 1 of the 2015 Form 10-K.

***Our businesses have been and may be adversely affected by declining asset values. This is particularly true for those businesses in which we have net long positions, receive fees based on the value of assets managed, or receive or post collateral.***

Many of our businesses have net long positions in debt securities, loans, derivatives, mortgages, equities (including private equity and real estate) and most other asset classes. These include positions we take when we act as a principal to facilitate our clients' activities, including our exchange-based market-making activities, or commit large amounts of capital to maintain positions in interest rate and credit products, as well as through our currencies, commodities, equities and mortgage-related activities. Because substantially all of these investing, lending and market-making positions are marked-to-market on a daily basis, declines in asset values directly and immediately impact our earnings, unless we have effectively hedged our exposures to such declines.

In certain circumstances (particularly in the case of credit products, including leveraged loans, and private equities or other securities that are not freely tradable or lack established and liquid trading markets), it may not be possible or economic to hedge such exposures and to the extent that we do so the hedge may be ineffective or may greatly reduce our ability to profit from increases in the values of the assets. Sudden declines and significant volatility in the prices of assets may substantially curtail or eliminate the trading markets for certain assets, which may make it difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces our ability to limit losses in such positions and the difficulty in valuing assets may negatively affect our capital, liquidity or leverage ratios, increase our funding costs and generally require us to maintain additional capital.

In our exchange-based market-making activities, we are obligated by stock exchange rules to maintain an orderly market, including by purchasing securities in a declining market. In markets where asset values are declining and in volatile markets, this results in losses and an increased need for liquidity.

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We receive asset-based management fees based on the value of our clients' portfolios or investment in funds managed by us and, in some cases, we also receive incentive fees based on increases in the value of such investments. Declines in asset values reduce the value of our clients' portfolios or fund assets, which in turn reduce the fees we earn for managing such assets.

We post collateral to support our obligations and receive collateral to support the obligations of our clients and counterparties in connection with our client execution businesses. When the value of the assets posted as collateral or the credit ratings of the party posting collateral decline, the party posting the collateral may need to provide additional collateral or, if possible, reduce its trading position. A classic example of such a situation is a margin call in connection with a brokerage account. Therefore, declines in the value of asset classes used as collateral mean that either the cost of funding positions is increased or the size of positions is decreased. If we are the party providing collateral, this can increase our costs and reduce our profitability and if we are the party receiving collateral, this can also reduce our profitability by reducing the level of business done with our clients and counterparties. In addition, volatile or less liquid markets increase the difficulty of valuing assets which can lead to costly and time-consuming disputes over asset values and the level of required collateral, as well as increased credit risk to the recipient of the collateral due to delays in receiving adequate collateral.

***Our businesses have been and may be adversely affected by disruptions in the credit markets, including reduced access to credit and higher costs of obtaining credit.***

Widening credit spreads, as well as significant declines in the availability of credit, have in the past adversely affected our ability to borrow on a secured and unsecured basis and may do so in the future. We fund ourselves on an unsecured basis by issuing long-term debt, by accepting deposits at our bank subsidiaries, by issuing hybrid financial instruments, or by obtaining bank loans or lines of credit. We seek to finance many of our assets on a secured basis. Any disruptions in the credit markets may make it harder and more expensive to obtain funding for our businesses. If our available funding is limited or we are forced to fund our operations at a higher cost, these conditions may require us to curtail our business activities and increase our cost of funding, both of which could reduce our profitability, particularly in our businesses that involve investing, lending and market making.

Our clients engaging in mergers and acquisitions often rely on access to the secured and unsecured credit markets to finance their transactions. A lack of available credit or an increased cost of credit can adversely affect the size, volume and timing of our clients' merger and acquisition transactions, particularly large transactions, and adversely affect our financial advisory and underwriting businesses.

Our credit businesses have been and may in the future be negatively affected by a lack of liquidity in credit markets. A lack of liquidity reduces price transparency, increases price volatility and decreases transaction volumes and size, all of which can increase transaction risk or decrease the profitability of such businesses.

To the extent that the final rules related to TLAC require us to issue material amounts of additional qualified loss-absorbing debt or to refinance material amounts of our existing debt, such requirements, at least in the near term, could increase our borrowing costs, perhaps materially, and negatively impact the debt capital markets. See Business Regulation Banking Supervision and Regulation Total Loss-Absorbing Capacity in Part I, Item 1 of the 2015 Form 10-K for more information about the Federal Reserve Board's proposed rules on loss-absorbency requirements.

***Our market-making activities have been and may be affected by changes in the levels of market volatility.***

Certain of our market-making activities depend on market volatility to provide trading and arbitrage opportunities to our clients, and decreases in volatility may reduce these opportunities and adversely affect the results of these activities. On the other hand, increased volatility, while it can increase trading volumes and spreads, also increases risk as measured by Value-at-Risk (VaR) and may expose us to increased risks in connection with our market-making activities or cause us to reduce our market-making positions in order to avoid increasing our VaR. Limiting the size of our market-making positions can adversely affect our profitability. In periods when volatility is increasing, but asset values are declining significantly, it may not be possible to sell assets at all or it may only be possible to do so at steep discounts. In such circumstances we may be forced to either take on additional risk or to realize losses in order to decrease our VaR. In addition, increases in volatility increase the level of our RWAs, which increases our capital requirements.

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***Our investment banking, client execution and investment management businesses have been adversely affected and may in the future be adversely affected by market uncertainty or lack of confidence among investors and CEOs due to general declines in economic activity and other unfavorable economic, geopolitical or market conditions.***

Our investment banking business has been and may continue to be adversely affected by market conditions. Poor economic conditions and other adverse geopolitical conditions can adversely affect and have in the past adversely affected investor and CEO confidence, resulting in significant industry-wide declines in the size and number of underwritings and of financial advisory transactions, which could have an adverse effect on our revenues and our profit margins. In particular, because a significant portion of our investment banking revenues is derived from our participation in large transactions, a decline in the number of large transactions would adversely affect our investment banking business.

In certain circumstances, market uncertainty or general declines in market or economic activity may affect our client execution businesses by decreasing levels of overall activity or by decreasing volatility, but at other times market uncertainty and even declining economic activity may result in higher trading volumes or higher spreads or both.

Market uncertainty, volatility and adverse economic conditions, as well as declines in asset values, may cause our clients to transfer their assets out of our funds or other products or their brokerage accounts and result in reduced net revenues, principally in our investment management business. To the extent that clients do not withdraw their funds, they may invest them in products that generate less fee income.

***Our investment management business may be affected by the poor investment performance of our investment products.***

Poor investment returns in our investment management business, due to either general market conditions or underperformance (relative to our competitors or to benchmarks) by funds or accounts that we manage or investment products that we design or sell, affects our ability to retain existing assets and to attract new clients or additional assets from existing clients. This could affect the management and incentive fees that we earn on assets under supervision or the commissions and net spreads that we earn for selling other investment products, such as structured notes or derivatives.

***We may incur losses as a result of ineffective risk management processes and strategies.***

We seek to monitor and control our risk exposure through a risk and control framework encompassing a variety of separate but complementary financial, credit, operational, compliance and legal reporting systems, internal controls, management review processes and other mechanisms. Our risk management process seeks to balance our ability to profit from market-making, investing or lending positions with our exposure to potential losses. While we employ a broad and diversified set of risk monitoring and risk mitigation techniques, those techniques and the judgments that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. Thus, we may, in the course of our activities, incur losses. Market conditions in recent years have involved unprecedented dislocations and highlight the limitations inherent in using historical data to manage risk.

The models that we use to assess and control our risk exposures reflect assumptions about the degrees of correlation or lack thereof among prices of various asset classes or other market indicators. In times of market stress or other

unforeseen circumstances, such as occurred during 2008 and early 2009, and to some extent since 2011, previously uncorrelated indicators may become correlated, or conversely previously correlated indicators may move in different directions. These types of market movements have at times limited the effectiveness of our hedging strategies and have caused us to incur significant losses, and they may do so in the future. These changes in correlation can be exacerbated where other market participants are using risk or trading models with assumptions or algorithms that are similar to ours. In these and other cases, it may be difficult to reduce our risk positions due to the activity of other market participants or widespread market dislocations, including circumstances where asset values are declining significantly or no market exists for certain assets.

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To the extent that we have positions through our market-making or origination activities or we make investments directly through our investing activities, including private equity, that do not have an established liquid trading market or are otherwise subject to restrictions on sale or hedging, we may not be able to reduce our positions and therefore reduce our risk associated with such positions. In addition, to the extent permitted by applicable law and regulation, we invest our own capital in private equity, credit, real estate and hedge funds that we manage and limitations on our ability to withdraw some or all of our investments in these funds, whether for legal, reputational or other reasons, may make it more difficult for us to control the risk exposures relating to these investments. See Management's Discussion and Analysis of Financial Condition and Results of Operations Regulatory Developments Volcker Rule in Part II, Item 7 of the 2015 Form 10-K for information about our plans to reduce our interests in covered funds in order to comply with the Volcker Rule.

Prudent risk management, as well as regulatory restrictions, may cause us to limit our exposure to counterparties, geographic areas or markets, which may limit our business opportunities and increase the cost of our funding or hedging activities.

For further information about our risk management policies and procedures, see Management's Discussion and Analysis of Financial Condition and Results of Operations Risk Management in Part II, Item 7 of the 2015 Form 10-K.

***Our liquidity, profitability and businesses may be adversely affected by an inability to access the debt capital markets or to sell assets or by a reduction in our credit ratings or by an increase in our credit spreads.***

Liquidity is essential to our businesses. Our liquidity may be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from our subsidiaries or otherwise allocate liquidity optimally across our firm, an inability to sell assets or redeem our investments, or unforeseen outflows of cash or collateral. This situation may arise due to circumstances that we may be unable to control, such as a general market disruption or an operational problem that affects third parties or us, or even by the perception among market participants that we, or other market participants, are experiencing greater liquidity risk.

We employ structured products to benefit our clients and hedge our own risks. The financial instruments that we hold and the contracts to which we are a party are often complex, and these complex structured products often do not have readily available markets to access in times of liquidity stress. Our investing and lending activities may lead to situations where the holdings from these activities represent a significant portion of specific markets, which could restrict liquidity for our positions.

Further, our ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time, as is likely to occur in a liquidity or other market crisis or in response to changes to rules or regulations. In addition, financial institutions with which we interact may exercise set-off rights or the right to require additional collateral, including in difficult market conditions, which could further impair our access to liquidity.

Our credit ratings are important to our liquidity. A reduction in our credit ratings could adversely affect our liquidity and competitive position, increase our borrowing costs, limit our access to the capital markets or trigger our obligations under certain provisions in some of our trading and collateralized financing contracts. Under these provisions, counterparties could be permitted to terminate contracts with us or require us to post additional collateral.

Termination of our trading and collateralized financing contracts could cause us to sustain losses and impair our liquidity by requiring us to find other sources of financing or to make significant cash payments or securities movements. As of December 2015, in the event of a one-notch and two-notch downgrade of our credit ratings our counterparties could have called for additional collateral or termination payments related to our net derivative liabilities under bilateral agreements in an aggregate amount of \$1.06 billion and \$2.69 billion, respectively. A downgrade by any one rating agency, depending on the agency's relative ratings of the firm at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies. For further information about our credit ratings, see Management's Discussion and Analysis of Financial Condition and Results of Operations Risk Management Liquidity Risk Management Credit Ratings in Part II, Item 7 of the 2015 Form 10-K.

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Our cost of obtaining long-term unsecured funding is directly related to our credit spreads (the amount in excess of the interest rate of U.S. Treasury securities (or other benchmark securities) of the same maturity that we need to pay to our debt investors). Increases in our credit spreads can significantly increase our cost of this funding. Changes in credit spreads are continuous, market-driven, and subject at times to unpredictable and highly volatile movements. Our credit spreads are also influenced by market perceptions of our creditworthiness. In addition, our credit spreads may be influenced by movements in the costs to purchasers of credit default swaps referenced to our long-term debt. The market for credit default swaps has proven to be extremely volatile and at times has lacked a high degree of transparency or liquidity.

Regulatory changes relating to liquidity may also negatively impact our results of operations and competitive position. Recently, numerous regulations have been adopted or proposed, and additional regulations are under consideration, to introduce more stringent liquidity requirements for large financial institutions. These regulations and others being considered address, among other matters, liquidity stress testing, minimum liquidity requirements, wholesale funding, limitations on the issuance of short-term debt and structured notes and prohibitions on parent guarantees that are subject to cross-defaults. These may overlap with, and be impacted by, other regulatory changes, including new guidance on the treatment of brokered deposits and the capital, leverage and resolution and recovery frameworks applicable to large financial institutions, as well as proposals relating to minimum long-term debt requirements and TLAC, including limitations on the terms of eligible debt securities qualifying as TLAC or as eligible long-term debt limiting events of default, excluding structured notes and restrictions on non-U.S. governing law. Given the overlap and complex interactions among these new and prospective regulations, they may have unintended cumulative effects, and their full impact will remain uncertain until implementation of post-financial crisis regulatory reform is complete.

*A failure to appropriately identify and address potential conflicts of interest could adversely affect our businesses.*

Due to the broad scope of our businesses and our client base, we regularly address potential conflicts of interest, including situations where our services to a particular client or our own investments or other interests conflict, or are perceived to conflict, with the interests of another client, as well as situations where one or more of our businesses have access to material non-public information that may not be shared with other businesses within the firm and situations where we may be a creditor of an entity with which we also have an advisory or other relationship.

In addition, our status as a bank holding company subjects us to heightened regulation and increased regulatory scrutiny by the Federal Reserve Board with respect to transactions between GS Bank USA and entities that are or could be viewed as affiliates of ours and, under the Volcker Rule, transactions between Goldman Sachs and certain covered funds.

We have extensive procedures and controls that are designed to identify and address conflicts of interest, including those designed to prevent the improper sharing of information among our businesses. However, appropriately identifying and dealing with conflicts of interest is complex and difficult, and our reputation, which is one of our most important assets, could be damaged and the willingness of clients to enter into transactions with us may be affected if we fail, or appear to fail, to identify, disclose and deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to litigation or regulatory enforcement actions.

*A failure in our operational systems or infrastructure, or those of third parties, as well as human error, could impair our liquidity, disrupt our businesses, result in the disclosure of confidential information, damage our*

*reputation and cause losses.*

Our businesses are highly dependent on our ability to process and monitor, on a daily basis, a large number of transactions, many of which are highly complex and occur at high volumes and frequencies, across numerous and diverse markets in many currencies. These transactions, as well as the information technology services we provide to clients, often must adhere to client-specific guidelines, as well as legal and regulatory standards.

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Many rules and regulations worldwide govern our obligations to report transactions to regulators, exchanges and investors. Compliance with these legal and reporting requirements can be challenging, and the firm and other financial institutions have been subject to regulatory fines and penalties for failing to report timely, accurate and complete information. As reporting requirements expand, compliance with these rules and regulations has become more challenging.

As our client base, and our geographical reach expands, and the volume, speed, frequency and complexity of transactions, especially electronic transactions (as well as the requirements to report such transactions on a real-time basis to clients, regulators and exchanges) increases, developing and maintaining our operational systems and infrastructure becomes more challenging, and the risk of systems or human error in connection with such transactions increases, as well as the potential consequences of such errors due to the speed and volume of transactions involved and the potential difficulty associated with discovering such errors quickly enough to limit the resulting consequences.

Our financial, accounting, data processing or other operational systems and facilities may fail to operate properly or become disabled as a result of events that are wholly or partially beyond our control, such as a spike in transaction volume, adversely affecting our ability to process these transactions or provide these services. We must continuously update these systems to support our operations and growth and to respond to changes in regulations and markets, and invest heavily in systemic controls and training to ensure that such transactions do not violate applicable rules and regulations or, due to errors in processing such transactions, adversely affect markets, our clients and counterparties or the firm.

Systems enhancements and updates, as well as the requisite training, including in connection with the integration of new businesses, entail significant costs and create risks associated with implementing new systems and integrating them with existing ones.

Notwithstanding the proliferation of technology and technology-based risk and control systems, our businesses ultimately rely on human beings as our greatest resource, and, from time-to-time, they make mistakes that are not always caught immediately by our technological processes or by our other procedures which are intended to prevent and detect such errors. These can include calculation errors, mistakes in addressing emails, errors in software development or implementation, or simple errors in judgment. We strive to eliminate such human errors through training, supervision, technology and by redundant processes and controls. Human errors, even if promptly discovered and remediated, can result in material losses and liabilities for the firm.

In addition, we face the risk of operational failure, termination or capacity constraints of any of the clearing agents, exchanges, clearing houses or other financial intermediaries we use to facilitate our securities and derivatives transactions, and as our interconnectivity with our clients grows, we increasingly face the risk of operational failure with respect to our clients' systems.

In recent years, there has been significant consolidation among clearing agents, exchanges and clearing houses and an increasing number of derivative transactions are now or in the near future will be cleared on exchanges, which has increased our exposure to operational failure, termination or capacity constraints of the particular financial intermediaries that we use and could affect our ability to find adequate and cost-effective alternatives in the event of any such failure, termination or constraint. Industry consolidation, whether among market participants or financial intermediaries, increases the risk of operational failure as disparate complex systems need to be integrated, often on an

accelerated basis.

Furthermore, the interconnectivity of multiple financial institutions with central agents, exchanges and clearing houses, and the increased centrality of these entities, increases the risk that an operational failure at one institution or entity may cause an industry-wide operational failure that could materially impact our ability to conduct business. Any such failure, termination or constraint could adversely affect our ability to effect transactions, service our clients, manage our exposure to risk or expand our businesses or result in financial loss or liability to our clients, impairment of our liquidity, disruption of our businesses, regulatory intervention or reputational damage.

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Despite the resiliency plans and facilities we have in place, our ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports our businesses and the communities in which we are located. This may include a disruption involving electrical, satellite, undersea cable or other communications, internet, transportation or other services facilities used by us or third parties with which we conduct business, including cloud service providers. These disruptions may occur as a result of events that affect only our buildings or systems or those of such third parties, or as a result of events with a broader impact globally, regionally or in the cities where those buildings or systems are located, including, but not limited to, natural disasters, war, civil unrest, terrorism, economic or political developments, pandemics and weather events.

Nearly all of our employees in our primary locations, including the New York metropolitan area, London, Bengaluru, Hong Kong, Tokyo and Salt Lake City, work in close proximity to one another, in one or more buildings. Notwithstanding our efforts to maintain business continuity, given that our headquarters and the largest concentration of our employees are in the New York metropolitan area, and our two principal office buildings in the New York area both are located on the waterfront of the Hudson River, depending on the intensity and longevity of the event, a catastrophic event impacting our New York metropolitan area offices, including a terrorist attack, extreme weather event or other hostile or catastrophic event, could negatively affect our business. If a disruption occurs in one location and our employees in that location are unable to occupy our offices or communicate with or travel to other locations, our ability to service and interact with our clients may suffer, and we may not be able to successfully implement contingency plans that depend on communication or travel.

***A failure to protect our computer systems, networks and information, and our clients' information, against cyber attacks and similar threats could impair our ability to conduct our businesses, result in the disclosure, theft or destruction of confidential information, damage our reputation and cause losses.***

Our operations rely on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. There have been several highly publicized cases involving financial services and consumer-based companies reporting the unauthorized disclosure of client or customer information in recent years, as well as cyber attacks involving the dissemination, theft and destruction of corporate information or other assets, as a result of failure to follow procedures by employees or contractors or as a result of actions by third parties, including actions by foreign governments.

We are regularly the target of attempted cyber attacks, including denial-of-service attacks, and must continuously monitor and develop our systems to protect our technology infrastructure and data from misappropriation or corruption. In addition, due to our interconnectivity with third-party vendors, central agents, exchanges, clearing houses and other financial institutions, we could be adversely impacted if any of them is subject to a successful cyber attack or other information security event.

Despite our efforts to ensure the integrity of our systems and information, we may not be able to anticipate, detect or implement effective preventive measures against all cyber threats, especially because the techniques used are increasingly sophisticated, change frequently and are often not recognized until launched. Cyber attacks can originate from a variety of sources, including third parties who are affiliated with foreign governments or are involved with organized crime or terrorist organizations. Third parties may also attempt to place individuals within the firm or induce employees, clients or other users of our systems to disclose sensitive information or provide access to our data or that of our clients, and these types of risks may be difficult to detect or prevent.



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Although we take protective measures and endeavor to modify them as circumstances warrant, our computer systems, software and networks may be vulnerable to unauthorized access, misuse, computer viruses or other malicious code and other events that could have a security impact. If one or more of such events occur, this potentially could jeopardize our or our clients' or counterparties' confidential and other information processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our, our clients', our counterparties' or third parties' operations, which could impact their ability to transact with us or otherwise result in significant losses or reputational damage.

The increased use of mobile and cloud technologies can heighten these and other operational risks. We expect to expend significant additional resources on an ongoing basis to modify our protective measures and to investigate and remediate vulnerabilities or other exposures, but these measures may be ineffective and we may be subject to litigation and financial losses that are either not insured against or not fully covered through any insurance maintained by us. Certain aspects of the security of such technologies are unpredictable or beyond our control, and the failure by mobile technology and cloud service providers to adequately safeguard their systems and prevent cyber attacks could disrupt our operations and result in misappropriation, corruption or loss of confidential and other information. In addition, there is a risk that encryption and other protective measures, despite their sophistication, may be defeated, particularly to the extent that new computing technologies vastly increase the speed and computing power available.

We routinely transmit and receive personal, confidential and proprietary information by email and other electronic means. We have discussed and worked with clients, vendors, service providers, counterparties and other third parties to develop secure transmission capabilities and protect against cyber attacks, but we do not have, and may be unable to put in place, secure capabilities with all of our clients, vendors, service providers, counterparties and other third parties and we may not be able to ensure that these third parties have appropriate controls in place to protect the confidentiality of the information. An interception, misuse or mishandling of personal, confidential or proprietary information being sent to or received from a client, vendor, service provider, counterparty or other third party could result in legal liability, regulatory action and reputational harm.

***Group Inc. is a holding company and is dependent for liquidity on payments from its subsidiaries, many of which are subject to restrictions.***

Group Inc. is a holding company and, therefore, 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. Many of our subsidiaries, including our broker-dealer and bank subsidiaries, are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Group Inc.

In addition, our broker-dealer and bank subsidiaries are subject to restrictions on their ability to lend or transact with affiliates and to minimum regulatory capital and other requirements, as well as restrictions on their ability to use funds deposited with them in brokerage or bank accounts to fund their businesses. Additional restrictions on related-party transactions, increased capital and liquidity requirements and additional limitations on the use of funds on deposit in bank or brokerage accounts, as well as lower earnings, can reduce the amount of funds available to meet the obligations of Group Inc., including under the Federal Reserve Board's source of strength policy, and even require Group Inc. to provide additional funding to such subsidiaries. Restrictions or regulatory action of that kind could impede access to funds that Group Inc. needs to make payments on its obligations, including debt obligations, or dividend payments. In addition, Group Inc.'s right to participate in a distribution of assets upon a subsidiary's

liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

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There has been a trend towards increased regulation and supervision of our subsidiaries by the governments and regulators in the countries in which those subsidiaries are located or do business. Concerns about protecting clients and creditors of financial institutions that are controlled by persons or entities located outside of the country in which such entities are located or do business have caused or may cause a number of governments and regulators to take additional steps to ring fence or maintain internal total loss-absorbing capacity at such entities in order to protect clients and creditors of such entities in the event of financial difficulties involving such entities. The result has been and may continue to be additional limitations on our ability to efficiently move capital and liquidity among our affiliated entities, thereby increasing the overall level of capital and liquidity required by the firm on a consolidated basis.

Furthermore, Group Inc. has guaranteed the payment obligations of certain of its subsidiaries, including GS&Co., GS Bank USA and GSEC subject to certain exceptions. In addition, Group Inc. guarantees many of the obligations of its other consolidated subsidiaries on a transaction-by-transaction basis, as negotiated with counterparties. These guarantees may require Group Inc. to provide substantial funds or assets to its subsidiaries or their creditors or counterparties at a time when Group Inc. is in need of liquidity to fund its own obligations.

The requirements for Group Inc. and GS Bank USA to develop and submit recovery and resolution plans to regulators, and the incorporation of feedback received from regulators, may require us to increase capital or liquidity levels or issue additional long-term debt at Group Inc. or particular subsidiaries or otherwise incur additional or duplicative operational or other costs at multiple entities, and may reduce our ability to provide Group Inc. guarantees of the obligations of our subsidiaries or raise debt at Group Inc. Resolution planning may also impair our ability to structure our intercompany and external activities in a manner that we may otherwise deem most operationally efficient. Furthermore, we may incur additional taxes. Any such limitations or requirements would be in addition to the legal and regulatory restrictions described above on our ability to engage in capital actions or make intercompany dividends or payments.

See Business Regulation in Part I, Item 1 of the 2015 Form 10-K for further information about regulatory restrictions.

***The application of regulatory strategies and requirements in the United States and non-U.S. jurisdictions to facilitate the orderly resolution of large financial institutions could create greater risk of loss for Group Inc. s security holders.***

As described under Business Regulation Insolvency of an Insured Depository Institution or a Bank Holding Company, if the FDIC is appointed as receiver under the orderly liquidation authority, the rights of Group Inc. s creditors would be determined under the orderly liquidation authority, and substantial differences exist in the rights of creditors between the orderly liquidation authority and the U.S. Bankruptcy Code, including the right of the FDIC under the orderly liquidation authority to disregard the strict priority of creditor claims in some circumstances, which could have a material adverse effect on debt holders.

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The FDIC has announced that a single point of entry strategy may be a desirable strategy under the orderly liquidation authority to resolve a large financial institution such as Group Inc. in a manner that would, among other things, impose losses on shareholders, debt holders (including, in our case, holders of our debt securities) and other creditors of the top-tier holding company (in our case, Group Inc.), while the holding company's subsidiaries may continue to operate. It is possible that the application of the single point of entry strategy, in which Group Inc. would be the only legal entity to enter resolution proceedings, could result in greater losses to Group Inc.'s security holders (including holders of our fixed rate, floating rate and indexed debt securities), than the losses that could result from the application of a bankruptcy proceeding or a different resolution strategy for Group Inc. Assuming Group Inc. entered resolution proceedings and that support from Group Inc. to its subsidiaries was sufficient to enable the subsidiaries to remain solvent, losses at the subsidiary level would be transferred to Group Inc. and ultimately borne by Group Inc.'s security holders, third-party creditors of Group Inc.'s subsidiaries would receive full recoveries on their claims, and Group Inc.'s security holders (including our shareholders, holders of our debt securities and other unsecured creditors) could face significant losses.

The orderly liquidation authority also provides the FDIC with authority to cause creditors and shareholders of the financial company such as Group Inc. in receivership to bear losses before taxpayers are exposed to such losses, and amounts owed to the U.S. government would generally receive a statutory payment priority over the claims of private creditors, including senior creditors. In addition, under the orderly liquidation authority, claims of creditors (including holders of our debt securities) could be satisfied through the issuance of equity or other securities in a bridge entity to which Group Inc.'s assets are transferred. If such a securities-for-claims exchange were implemented, there can be no assurance that the value of the securities of the bridge entity would be sufficient to repay or satisfy all or any part of the creditor claims for which the securities were exchanged. While the FDIC has issued regulations to implement the orderly liquidation authority, not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is likely.

***The ultimate impact of the recently proposed rules requiring U.S. G-SIBs to maintain minimum amounts of long-term debt meeting specified eligibility requirements is uncertain.***

On October 30, 2015, the Federal Reserve Board released for comment proposed rules (the TLAC Rules) that would require the eight U.S. G-SIBs, including Group Inc., among other things, to maintain minimum amounts of long-term debt (i.e., debt having a maturity greater than one year from issuance (LTD)) satisfying certain eligibility criteria commencing January 1, 2019. As proposed, the TLAC Rules would disqualify from eligible LTD, among other instruments, senior debt securities that permit acceleration for reasons other than insolvency or payment default, as well as debt securities defined as structured notes in the TLAC Rules (e.g., many of our indexed debt securities) and debt securities not governed by U.S. law. The currently outstanding senior LTD of U.S. G-SIBs, including Group Inc., typically permits acceleration for reasons other than insolvency or payment default and, as a result, neither such outstanding senior LTD nor any subsequently issued senior LTD with similar terms, would qualify as eligible LTD under the proposed rules. The Federal Reserve Board has requested comment on whether currently outstanding instruments should be allowed to count as eligible LTD despite containing features that would be prohibited under the proposal. The U.S. G-SIBs, including Group Inc., may need to take steps to come into compliance with the final TLAC Rules depending in substantial part on the ultimate eligibility requirements for senior LTD and any grandfathering provisions. Non-U.S. regulators are considering similar requirements. See Business Regulation Banking Supervision and Regulation Total Loss-Absorbing Capacity in Part I, Item 1 of the 2015 Form 10-K for more information about the Federal Reserve Board's proposed rules on loss-absorbency requirements.

In addition, certain jurisdictions, including the United Kingdom and the EU, have implemented, or are considering, changes to resolution regimes to provide resolution authorities with the ability to recapitalize a failing entity by writing down its unsecured debt or converting its unsecured debt into equity. Such bail-in powers are intended to enable the recapitalization of a failing institution by allocating losses to its shareholders and unsecured debt holders. U.S. and non-U.S. regulators are also considering requirements that certain subsidiaries of large financial institutions maintain minimum amounts of total loss-absorbing capacity that would pass losses up from the subsidiaries to the top-tier holding company and, ultimately, to security holders of the top-tier holding company in the event of failure.

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***The application of Group Inc.'s proposed resolution strategy could result in greater losses for Group Inc.'s security holders, and failure to address shortcomings in our resolution plan could subject us to increased regulatory requirements.***

In our resolution plan, Group Inc. would be resolved under the U.S. Bankruptcy Code. The strategy described in our resolution plan is a variant of the single point of entry strategy: Group Inc. would recapitalize and provide liquidity to certain major subsidiaries, including through the forgiveness of intercompany indebtedness, the extension of the maturities of intercompany indebtedness and the extension of additional intercompany loans. If this strategy were successful, creditors of some or all of Group Inc.'s major subsidiaries would receive full recoveries on their claims, while Group Inc.'s security holders could face significant losses. If this strategy were not successful, Group Inc.'s financial condition would be adversely impacted and Group Inc.'s security holders, including debt holders, may as a consequence be in a worse position than if the strategy had not been implemented. In all cases, any payments to debt holders are dependent on our ability to make such payments and are therefore subject to our credit risk.

In August 2014, the Federal Reserve Board and the FDIC indicated that Group Inc., along with other large industry participants, had certain shortcomings in the 2013 resolution plans that were required to have been addressed in the 2015 resolution plans. If it is determined that Group Inc. did not effectively address these shortcomings, the Federal Reserve Board and the FDIC could, after any permitted resubmission, find our resolution plan not credible and require us to hold more capital, change our business structure or dispose of businesses, which could have a negative impact on our ability to return capital to shareholders, financial condition, results of operations or competitive position.

***Our businesses, profitability and liquidity may be adversely affected by deterioration in the credit quality of, or defaults by, third parties who owe us money, securities or other assets or whose securities or obligations we hold.***

We are exposed to the risk that third parties that owe us money, securities or other assets will not perform their obligations. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. A failure of a significant market participant, or even concerns about a default by such an institution, could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect us.

We are also subject to the risk that our rights against third parties may not be enforceable in all circumstances. In addition, deterioration in the credit quality of third parties whose securities or obligations we hold, including a deterioration in the value of collateral posted by third parties to secure their obligations to us under derivatives contracts and loan agreements, could result in losses and/or adversely affect our ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes.

A significant downgrade in the credit ratings of our counterparties could also have a negative impact on our results. While in many cases we are permitted to require additional collateral from counterparties that experience financial difficulty, disputes may arise as to the amount of collateral we are entitled to receive and the value of pledged assets. The termination of contracts and the foreclosure on collateral may subject us to claims for the improper exercise of our rights. Default rates, downgrades and disputes with counterparties as to the valuation of collateral increase significantly in times of market stress and illiquidity.

As part of our clearing and prime brokerage activities, we finance our clients' positions, and we could be held responsible for the defaults or misconduct of our clients. Although we regularly review credit exposures to specific clients and counterparties and to specific industries, countries and regions that we believe may present credit concerns, default risk may arise from events or circumstances that are difficult to detect or foresee.

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***Concentration of risk increases the potential for significant losses in our market-making, underwriting, investing and lending activities.***

Concentration of risk increases the potential for significant losses in our market-making, underwriting, investing and lending activities. The number and size of such transactions may affect our results of operations in a given period. Moreover, because of concentration of risk, we may suffer losses even when economic and market conditions are generally favorable for our competitors. Disruptions in the credit markets can make it difficult to hedge these credit exposures effectively or economically. In addition, we extend large commitments as part of our credit origination activities.

Rules adopted under the Dodd-Frank Act require issuers of asset-backed securities and any person who organizes and initiates an asset-backed securities transaction to retain economic exposure to the asset, which is likely to significantly increase the cost to us of engaging in securitization activities. Our inability to reduce our credit risk by selling, syndicating or securitizing these positions, including during periods of market stress, could negatively affect our results of operations due to a decrease in the fair value of the positions, including due to the insolvency or bankruptcy of the borrower, as well as the loss of revenues associated with selling such securities or loans.

In the ordinary course of business, we may be subject to a concentration of credit risk to a particular counterparty, borrower, issuer, including sovereign issuers, or geographic area or group of related countries, such as the EU, and a failure or downgrade of, or default by, such entity could negatively impact our businesses, perhaps materially, and the systems by which we set limits and monitor the level of our credit exposure to individual entities, industries and countries may not function as we have anticipated. While our activities expose us to many different industries, counterparties and countries, we routinely execute a high volume of transactions with counterparties engaged in financial services activities, including brokers and dealers, commercial banks, clearing houses, exchanges and investment funds. This has resulted in significant credit concentration with respect to these counterparties. Provisions of the Dodd-Frank Act have led to increased centralization of trading activity through particular clearing houses, central agents or exchanges, which has significantly increased our concentration of risk with respect to these entities.

***The financial services industry is both highly competitive and interrelated.***

The financial services industry and all of our businesses are intensely competitive, and we expect them to remain so. We compete on the basis of a number of factors, including transaction execution, our products and services, innovation, reputation, creditworthiness and price. There has been substantial consolidation and convergence among companies in the financial services industry. This consolidation and convergence has hastened the globalization of the securities and other financial services markets.

As a result, we have had to commit capital to support our international operations and to execute large global transactions. To the extent we expand into new business areas and new geographic regions, we will face competitors with more experience and more established relationships with clients, regulators and industry participants in the relevant market, which could adversely affect our ability to expand. Governments and regulators have recently adopted regulations, imposed taxes, adopted compensation restrictions or otherwise put forward various proposals that have or may impact our ability to conduct certain of our businesses in a cost-effective manner or at all in certain or all jurisdictions, including proposals relating to restrictions on the type of activities in which financial institutions are permitted to engage. These or other similar rules, many of which do not apply to all our U.S. or non-U.S. competitors,

could impact our ability to compete effectively.

Pricing and other competitive pressures in our businesses have continued to increase, particularly in situations where some of our competitors may seek to increase market share by reducing prices. For example, in connection with investment banking and other assignments, we have experienced pressure to extend and price credit at levels that may not always fully compensate us for the risks we take.

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The financial services industry is highly interrelated in that a significant volume of transactions occur among a limited number of members of that industry. Many transactions are syndicated to other financial institutions and financial institutions are often counterparties in transactions. This has led to claims by other market participants and regulators that such institutions have colluded in order to manipulate markets or market prices, including allegations that antitrust laws have been violated. While we have extensive procedures and controls that are designed to identify and prevent such activities, allegations of such activities, particularly by regulators, can have a negative reputational impact and can subject us to large fines and settlements, and potentially significant penalties, including treble damages.

***We face enhanced risks as new business initiatives lead us to transact with a broader array of clients and counterparties and expose us to new asset classes and new markets.***

A number of our recent and planned business initiatives and expansions of existing businesses may bring us into contact, directly or indirectly, with individuals and entities that are not within our traditional client and counterparty base and expose us to new asset classes and new markets. For example, we continue to transact business and invest in new regions, including a wide range of emerging and growth markets. Furthermore, in a number of our businesses, including where we make markets, invest and lend, we directly or indirectly own interests in, or otherwise become affiliated with the ownership and operation of public services, such as airports, toll roads and shipping ports, as well as physical commodities and commodities infrastructure components, both within and outside the United States.

We have announced our intention to increase our consumer-oriented deposit-taking activities. To the extent we engage in such activities or similar consumer-oriented activities, we could face additional compliance, legal and regulatory risk, increased reputational risk and increased operational risk due to, among other things, higher transaction volumes and significantly increased retention and transmission of customer and client information.

New business initiatives expose us to new and enhanced risks, including risks associated with dealing with governmental entities, reputational concerns arising from dealing with less sophisticated counterparties and investors, greater regulatory scrutiny of these activities, increased credit-related, market, sovereign and operational risks, risks arising from accidents or acts of terrorism, and reputational concerns with the manner in which these assets are being operated or held or in which we interact with these counterparties.

***Derivative transactions and delayed settlements may expose us to unexpected risk and potential losses.***

We are party to a large number of derivative transactions, including credit derivatives. Many of these derivative instruments are individually negotiated and non-standardized, which can make exiting, transferring or settling positions difficult. Many credit derivatives require that we deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, we do not hold the underlying security, loan or other obligation and may not be able to obtain the underlying security, loan or other obligation. This could cause us to forfeit the payments due to us under these contracts or result in settlement delays with the attendant credit and operational risk as well as increased costs to the firm.

Derivative transactions may also involve the risk that documentation has not been properly executed, that executed agreements may not be enforceable against the counterparty, or that obligations under such agreements may not be able to be netted against other obligations with such counterparty. In addition, counterparties may claim that such transactions were not appropriate or authorized.



As a signatory to the ISDA Protocol, we may not be able to exercise remedies against counterparties and, as this new regime has not yet been tested, we may suffer risks or losses that we would not have expected to suffer if we could immediately close out transactions upon a termination event. The ISDA Protocol contemplates adoption of implementing regulations by various U.S. and non-U.S. regulators, and the ISDA Protocol's impact will depend on, among other things, how it is implemented.

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Derivative contracts and other transactions, including secondary bank loan purchases and sales, entered into with third parties are not always confirmed by the counterparties or settled on a timely basis. While the transaction remains unconfirmed or during any delay in settlement, we are subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce our rights. In addition, as new complex derivative products are created, covering a wider array of underlying credit and other instruments, disputes about the terms of the underlying contracts could arise, which could impair our ability to effectively manage our risk exposures from these products and subject us to increased costs. The provisions of the Dodd-Frank Act requiring central clearing of credit derivatives and other OTC derivatives, or a market shift toward standardized derivatives, could reduce the risk associated with such transactions, but under certain circumstances could also limit our ability to develop derivatives that best suit the needs of our clients and to hedge our own risks, and could adversely affect our profitability and increase our credit exposure to such platform.

*Our businesses may be adversely affected if we are unable to hire and retain qualified employees.*

Our performance is largely dependent on the talents and efforts of highly skilled individuals; therefore, our continued ability to compete effectively in our businesses, to manage our businesses effectively and to expand into new businesses and geographic areas depends on our ability to attract new talented and diverse employees and to retain and motivate our existing employees. Factors that affect our ability to attract and retain such employees include our compensation and benefits, and our reputation as a successful business with a culture of fairly hiring, training and promoting qualified employees. As a significant portion of the compensation that we pay to our employees is paid in the form of year-end discretionary compensation, a significant portion of which is in the form of deferred equity-related awards, declines in our profitability, or in the outlook for our future profitability, as well as regulatory limitations on compensation levels and terms, can negatively impact our ability to hire and retain highly qualified employees.

Competition from within the financial services industry and from businesses outside the financial services industry for qualified employees has often been intense. Recently, we have experienced increased competition in hiring and retaining employees to address the demands of new regulatory requirements. This is also the case in emerging and growth markets, where we are often competing for qualified employees with entities that have a significantly greater presence or more extensive experience in the region.

Changes in law or regulation in jurisdictions in which our operations are located that affect taxes on our employees income, or the amount or composition of compensation, may also adversely affect our ability to hire and retain qualified employees in those jurisdictions.

As described further in Business Regulation Compensation Practices in Part I, Item 1 of the 2015 Form 10-K, our compensation practices are subject to review by, and the standards of, the Federal Reserve Board. As a large global financial and banking institution, we are subject to limitations on compensation practices (which may or may not affect our competitors) by the Federal Reserve Board, the PRA, the FCA, the FDIC and other regulators worldwide. These limitations, including any imposed by or as a result of future legislation or regulation, may require us to alter our compensation practices in ways that could adversely affect our ability to attract and retain talented employees.

*We may be adversely affected by increased governmental and regulatory scrutiny or negative publicity.*

Governmental scrutiny from regulators, legislative bodies and law enforcement agencies with respect to matters relating to compensation, our business practices, our past actions and other matters has increased dramatically in the past several years. The financial crisis and the current political and public sentiment regarding financial institutions has resulted in a significant amount of adverse press coverage, as well as adverse statements or charges by regulators or other government officials. Press coverage and other public statements that assert some form of wrongdoing often result in some type of investigation by regulators, legislators and law enforcement officials or in lawsuits.

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Responding to these investigations and lawsuits, regardless of the ultimate outcome of the proceeding, is time-consuming and expensive and can divert the time and effort of our senior management from our business. Penalties and fines sought by regulatory authorities have increased substantially over the last several years, and certain regulators have been more likely in recent years to commence enforcement actions or to advance or support legislation targeted at the financial services industry. Adverse publicity, governmental scrutiny and legal and enforcement proceedings can also have a negative impact on our reputation and on the morale and performance of our employees, which could adversely affect our businesses and results of operations.

***Substantial legal liability or significant regulatory action against us could have material adverse financial effects or cause us significant reputational harm, which in turn could seriously harm our business prospects.***

We face significant legal risks in our businesses, and the volume of claims and amount of damages and penalties claimed in litigation and regulatory proceedings against financial institutions remain high. See Note 27 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for information about certain legal proceedings in which we are involved and Note 18 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for information regarding certain mortgage-related contingencies. Our experience has been that legal claims by customers and clients increase in a market downturn and that employment-related claims increase following periods in which we have reduced our staff. Additionally, governmental entities are plaintiffs in certain of the legal proceedings in which we are involved, and we may face future actions or claims by the same or other governmental entities, as well as follow-on civil litigation that is often commenced after regulatory settlements.

Recently, significant settlements by several large financial institutions with governmental entities have been publicly announced. The trend of large settlements with governmental entities may adversely affect the outcomes for other financial institutions in similar actions, especially where governmental officials have announced that the large settlements will be used as the basis or a template for other settlements. The uncertain regulatory enforcement environment makes it difficult to estimate probable losses, which can lead to substantial disparities between legal reserves and subsequent actual settlements or penalties.

Certain regulators, including the SEC, have announced policies that make it more likely that they will seek an admission of wrongdoing as part of any settlement of a matter brought by them against a regulated entity or individual, which could lead to increased exposure to civil litigation, could adversely affect our reputation, could result in penalties or limitations on our ability to do business in certain jurisdictions with so-called "bad actor" laws and could have other negative effects.

In addition, the U.S. Department of Justice has announced a policy of requiring companies to provide investigators with all relevant facts relating to the individuals responsible for the alleged misconduct in order to qualify for any cooperation credit in civil and criminal investigations of corporate wrongdoing, which may result in our incurring increased fines and penalties if the Department of Justice determines that we have not provided sufficient information about applicable individuals in connection with an investigation, as well as increased costs in responding to Department of Justice investigations. It is possible that other governmental authorities will adopt similar policies.



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***The growth of electronic trading and the introduction of new trading technology may adversely affect our business and may increase competition.***

Technology is fundamental to our business and our industry. The growth of electronic trading and the introduction of new technologies is changing our businesses and presenting us with new challenges. Securities, futures and options transactions are increasingly occurring electronically, both on our own systems and through other alternative trading systems, and it appears that the trend toward alternative trading systems will continue. Some of these alternative trading systems compete with us, particularly our exchange-based market-making activities, and we may experience continued competitive pressures in these and other areas. In addition, the increased use by our clients of low-cost electronic trading systems and direct electronic access to trading markets could cause a reduction in commissions and spreads. As our clients increasingly use our systems to trade directly in the markets, we may incur liabilities as a result of their use of our order routing and execution infrastructure. We have invested significant resources into the development of electronic trading systems and expect to continue to do so, but there is no assurance that the revenues generated by these systems will yield an adequate return on our investment, particularly given the generally lower commissions arising from electronic trades.

***Our commodities activities, particularly our physical commodities activities, subject us to extensive regulation and involve certain potential risks, including environmental, reputational and other risks that may expose us to significant liabilities and costs.***

As part of our commodities business, we purchase and sell certain physical commodities, arrange for their storage and transport, and engage in market making of commodities. The commodities involved in these activities may include crude oil, oil refined products, natural gas, liquefied natural gas, electric power, agricultural products, metals (base and precious), minerals (including unenriched uranium), emission credits, coal, freight and related products and indices.

In our investing and lending businesses, we make investments in and finance entities that engage in the production, storage and transportation of numerous commodities, including many of the commodities referenced above.

These activities subject us and/or the entities in which we invest to extensive and evolving federal, state and local energy, environmental, antitrust and other governmental laws and regulations worldwide, including environmental laws and regulations relating to, among others, air quality, water quality, waste management, transportation of hazardous substances, natural resources, site remediation and health and safety. Additionally, rising climate change concerns may lead to additional regulation that could increase the operating costs and profitability of our investments.

There may be substantial costs in complying with current or future laws and regulations relating to our commodities-related activities and investments. Compliance with these laws and regulations could require significant commitments of capital toward environmental monitoring, renovation of storage facilities or transport vessels, payment of emission fees and carbon or other taxes, and application for, and holding of, permits and licenses.

Commodities involved in our intermediation activities and investments are also subject to the risk of unforeseen or catastrophic events, which are likely to be outside of our control, including those arising from the breakdown or failure of transport vessels, storage facilities or other equipment or processes or other mechanical malfunctions, fires, leaks, spills or release of hazardous substances, performance below expected levels of output or efficiency, terrorist attacks, extreme weather events or other natural disasters or other hostile or catastrophic events. In addition, we rely

on third-party suppliers or service providers to perform their contractual obligations and any failure on their part, including the failure to obtain raw materials at reasonable prices or to safely transport or store commodities, could expose us to costs or losses. Also, while we seek to insure against potential risks, we may not be able to obtain insurance to cover some of these risks and the insurance that we have may be inadequate to cover our losses.

The occurrence of any of such events may prevent us from performing under our agreements with clients, may impair our operations or financial results and may result in litigation, regulatory action, negative publicity or other reputational harm.

We may also be required to divest or discontinue certain of these activities for regulatory or legal reasons. If that occurs, the firm may receive a value that is less than the then carrying value, as the firm may be unable to exit these activities in an orderly transaction.

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***In conducting our businesses around the world, we are subject to political, economic, legal, operational and other risks that are inherent in operating in many countries.***

In conducting our businesses and maintaining and supporting our global operations, we are subject to risks of possible nationalization, expropriation, price controls, capital controls, exchange controls and other restrictive governmental actions, as well as the outbreak of hostilities or acts of terrorism. For example, there has been significant conflict between Russia and Ukraine in recent years, and sanctions have been imposed by the U.S. and EU on certain individuals and companies in Russia. In many countries, the laws and regulations applicable to the securities and financial services industries and many of the transactions in which we are involved are uncertain and evolving, and it may be difficult for us to determine the exact requirements of local laws in every market. Any determination by local regulators that we have not acted in compliance with the application of local laws in a particular market or our failure to develop effective working relationships with local regulators could have a significant and negative effect not only on our businesses in that market but also on our reputation generally. We are also subject to the enhanced risk that transactions we structure might not be legally enforceable in all cases.

A determination by the United Kingdom to exit or otherwise significantly change its relationship with the European Union could affect the manner in which we conduct our businesses.

Our businesses and operations are increasingly expanding throughout the world, including in emerging and growth markets, and we expect this trend to continue. Various emerging and growth market countries have experienced severe economic and financial disruptions, including significant devaluations of their currencies, defaults or threatened defaults on sovereign debt, capital and currency exchange controls, and low or negative growth rates in their economies, as well as military activity, civil unrest or acts of terrorism. The possible effects of any of these conditions include an adverse impact on our businesses and increased volatility in financial markets generally.

While business and other practices throughout the world differ, our principal legal entities are subject in their operations worldwide to rules and regulations relating to corrupt and illegal payments, hiring practices and money laundering, as well as laws relating to doing business with certain individuals, groups and countries, such as the U.S. Foreign Corrupt Practices Act, the USA PATRIOT Act and U.K. Bribery Act. While we have invested and continue to invest significant resources in training and in compliance monitoring, the geographical diversity of our operations, employees, clients and customers, as well as the vendors and other third parties that we deal with, greatly increases the risk that we may be found in violation of such rules or regulations and any such violation could subject us to significant penalties or adversely affect our reputation.

In addition, there have been a number of highly publicized cases around the world, involving actual or alleged fraud or other misconduct by employees in the financial services industry in recent years, and we run the risk that employee misconduct could occur. This misconduct has included and may include in the future the theft of proprietary information, including proprietary software. It is not always possible to deter or prevent employee misconduct and the precautions we take to prevent and detect this activity have not been and may not be effective in all cases.

***We may incur losses as a result of unforeseen or catastrophic events, including the emergence of a pandemic, terrorist attacks, extreme weather events or other natural disasters.***



The occurrence of unforeseen or catastrophic events, including the emergence of a pandemic, such as the Ebola or Zika viruses, or other widespread health emergency (or concerns over the possibility of such an emergency), terrorist attacks, extreme terrestrial or solar weather events or other natural disasters, could create economic and financial disruptions, and could lead to operational difficulties (including travel limitations) that could impair our ability to manage our businesses.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Item 1B. Unresolved Staff Comments**

There are no material unresolved written comments that were received from the SEC staff 180 days or more before the end of our fiscal year relating to our periodic or current reports under the Exchange Act.

**Item 2. Properties**

Our principal executive offices are located at 200 West Street, New York, New York and comprise approximately 2.1 million gross square feet. The building is located on a parcel leased from Battery Park City Authority pursuant to a ground lease. Under the lease, Battery Park City Authority holds title to all improvements, including the office building, subject to Goldman Sachs' right of exclusive possession and use until June 2069, the expiration date of the lease. Under the terms of the ground lease, we made a lump sum ground rent payment in June 2007 of \$161 million for rent through the term of the lease.

We have offices at 30 Hudson Street in Jersey City, New Jersey, which we own and which include approximately 1.6 million gross square feet of office space.

We have additional offices and commercial space in the United States and elsewhere in the Americas, which together comprise approximately 2.5 million square feet of leased and owned space.

In Europe, the Middle East and Africa, we have offices that total approximately 1.5 million square feet of leased and owned space. Our European headquarters is located in London at Peterborough Court, pursuant to a lease expiring in 2026. In total, we have offices with approximately 1.2 million square feet in London, relating to various properties.

In Asia (including India), Australia and New Zealand, we have offices with approximately 1.9 million square feet. Our headquarters in this region are in Tokyo, at the Roppongi Hills Mori Tower, and in Hong Kong, at the Cheung Kong Center. In Japan, we currently have offices with approximately 219,000 square feet, the majority of which have leases that will expire in 2018. In Hong Kong, we currently have offices with approximately 315,000 square feet, the majority of which have leases that will expire in 2017.

In the preceding paragraphs, square footage figures are provided only for properties that are used in the operation of our businesses.

See Management's Discussion and Analysis of Financial Condition and Results of Operations—Off-Balance-Sheet Arrangements and Contractual Obligations—Contractual Obligations in Part II, Item 7 of the 2015 Form 10-K for information about exit costs we may incur in the future to the extent we reduce our space capacity or commit to, or occupy, new properties in the locations in which we operate and, consequently, dispose of existing space that had been held for potential growth.

**Item 3. Legal Proceedings**

We are involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of our businesses. Many of these proceedings are in early stages, and many of these cases seek an indeterminate amount of damages. However, we believe, based on currently available information, that the

results of such proceedings, in the aggregate, will not have a material adverse effect on our financial condition, but may be material to our operating results for any particular period, depending, in part, upon the operating results for such period. Given the range of litigation and investigations presently under way, our litigation expenses can be expected to remain high. See Management's Discussion and Analysis of Financial Condition and Results of Operations Use of Estimates in Part II, Item 7 of the 2015 Form 10-K. See Note 27 to the consolidated financial statements in Part II, Item 8 of the 2015 Form 10-K for information about certain judicial, regulatory and legal proceedings.

**Item 4. Mine Safety Disclosures**

Not applicable.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Executive Officers of The Goldman Sachs Group, Inc.**

Set forth below are the name, age, present title, principal occupation and certain biographical information for our executive officers. All of our executive officers have been appointed by and serve at the pleasure of our board of directors.

**Lloyd C. Blankfein, 61**

Mr. Blankfein has been our Chairman and Chief Executive Officer since June 2006, and a director since April 2003.

**Alan M. Cohen, 65**

Mr. Cohen has been an Executive Vice President of Goldman Sachs and our Global Head of Compliance since February 2004.

**Gary D. Cohn, 55**

Mr. Cohn has been our President and Chief Operating Officer (or Co-Chief Operating Officer) and a director since June 2006.

**Edith W. Cooper, 54**

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, 67**

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, 59**

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, 51**

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, 61**

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.

**Michael S. Sherwood, 50**

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.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

The principal market on which our common stock is traded is the NYSE. Information relating to the high and low sales prices per share of our common stock, as reported by the Consolidated Tape Association, for each full quarterly period during 2013, 2014 and 2015 is set forth under the heading "Supplemental Financial Information - Common Stock Price Range" in Part II, Item 8 of the 2015 Form 10-K. As of February 5, 2016, there were 9,307 holders of record of our common stock.

The table below presents dividends declared by Group Inc. during 2014 and 2015.

	<b>Date of Declaration</b>	<b>Dividend Declared Per Common Share</b>
<b>2014</b>		
First Quarter	January 15, 2014	\$0.55
Second Quarter	April 16, 2014	0.55
Third Quarter	July 14, 2014	0.55
Fourth Quarter	October 15, 2014	0.60
<b>2015</b>		
First Quarter	January 15, 2015	0.60
Second Quarter	April 15, 2015	0.65
Third Quarter	July 15, 2015	0.65
Fourth Quarter	October 14, 2015	0.65

The declaration of dividends by Group Inc. is subject to the discretion of our Board. Our Board will take into account such matters as general business conditions, our financial results, capital requirements, contractual, legal and regulatory restrictions on the payment of dividends by us to our shareholders or by our subsidiaries to us, the effect on our debt ratings and such other factors as our Board may deem relevant. The holders of our common stock share proportionately on a per share basis in all dividends and other distributions on common stock declared by the Board of Directors of Group Inc. (Board). See "Business Regulation" in Part I, Item 1 of the 2015 Form 10-K for information about potential regulatory limitations on our receipt of funds from our regulated subsidiaries and our payment of dividends to shareholders of Group Inc.

The table below presents purchases made by or on behalf of Group Inc. or any affiliated purchaser (as defined in Rule 10b-18(a)(3) under the Exchange Act), of our common stock during the fourth quarter of 2015. Information relating to compensation plans under which our equity securities are authorized for issuance is presented in Part III, Item 12 of the 2015 Form 10-K.

	<b>Total Number of Shares Purchased</b>	<b>Average Price Paid Per Share</b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</b>	<b>Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs</b>
Month #1				
(October 1, 2015 to October 31, 2015)	<b>2,901,624</b>	<b>\$183.27</b>	<b>2,901,624</b>	<b>69,164,345</b>
Month #2				
(November 1, 2015 to November 30, 2015)	<b>2,915,027</b>	<b>192.22</b>	<b>2,915,027</b>	<b>66,249,318</b>
Month #3				
(December 1, 2015 to December 31, 2015)	<b>3,047,435</b>	<b>183.07</b>	<b>3,047,435</b>	<b>63,201,883</b>
<b>Total</b>	<b>8,864,086</b>		<b>8,864,086</b>	

On March 21, 2000, we announced that our Board had approved a repurchase program authorizing repurchases of up to 15 million shares of our common stock, which was increased by an aggregate of 490 million shares by resolutions of our Board adopted from June 2001 through October 2015. The repurchase program is effected primarily through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), the amounts and timing of which are determined primarily by the firm's current and projected capital position, but which may also be influenced by general market conditions and the prevailing price and trading volumes of our common stock. The repurchase program has no set expiration or termination date. Prior to repurchasing common stock, we must receive confirmation that the Board of Governors of the Federal Reserve System does not object to such capital actions.

#### **Item 6. Selected Financial Data**

The Selected Financial Data table is set forth under Part II, Item 8 of the 2015 Form 10-K.





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**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Introduction**

The Goldman Sachs Group, Inc. (Group Inc. or parent company), a Delaware corporation, together with its consolidated subsidiaries (collectively, the firm), 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. Founded in 1869, the firm is headquartered in New York and maintains offices in all major financial centers around the world.

We report our activities in four business segments: Investment Banking, Institutional Client Services, Investing & Lending and Investment Management. See Results of Operations below for further information about our business segments.

When we use the terms Goldman Sachs, the firm, we, us and our, we mean Group Inc. and its consolidated subsidiaries.

References to the 2015 Form 10-K are to our Annual Report on Form 10-K for the year ended December 31, 2015. All references to the consolidated financial statements or Supplemental Financial Information are to Part II, Item 8 of the 2015 Form 10-K. 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. Any reference to a future year refers to a year ending on December 31 of that year. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

In this discussion and analysis of our financial condition and results of operations, we have included information that may constitute forward-looking statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. This information includes statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, among other things, and may also include statements about the effect of changes to the capital, leverage, liquidity, long-term debt and total loss-absorbing capacity rules applicable to banks and bank holding companies, the impact of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) on our businesses and operations, and various legal proceedings or mortgage-related contingencies as set forth under Legal Proceedings and Certain Mortgage-Related Contingencies in Notes 27 and 18, respectively, to the consolidated financial statements, as well as statements about the results of our Dodd-Frank Act and firm stress tests, statements about the objectives and effectiveness of our business continuity plan, information security program, risk management and liquidity policies, statements about trends in or growth opportunities for our businesses, statements about our future status, activities or reporting under U.S. or non-U.S. banking and financial regulation, and statements about our investment banking transaction backlog.

By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in

these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in these forward-looking statements include, among others, those described in Risk Factors in Part I, Item 1A of the 2015 Form 10-K and Cautionary Statement Pursuant to the U.S. Private Securities Litigation Reform Act of 1995 in Part I, Item 1 of the 2015 Form 10-K.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## Management's Discussion and Analysis

### Executive Overview

**2015 versus 2014.** The firm generated net earnings of \$6.08 billion and diluted earnings per common share of \$12.14 for 2015, a decrease of 28% and 29%, respectively, compared with \$8.48 billion and \$17.07 per share for 2014. Return on average common shareholders' equity (ROE) was 7.4% for 2015, compared with 11.2% for 2014. During 2015, the firm recorded provisions for the agreement in principle with the RMBS Working Group<sup>1</sup> of \$3.37 billion (\$2.99 billion after-tax), which reduced diluted earnings per common share by \$6.53 and ROE by 3.8 percentage points.

Book value per common share was \$171.03 as of December 2015, 5% higher compared with the end of 2014. During the year, the firm repurchased 22.1 million shares of its common stock for a total cost of \$4.20 billion.

Net revenues were \$33.82 billion for 2015, 2% lower than 2014, as significantly lower net revenues in Investing & Lending were largely offset by higher net revenues in Investment Banking and slightly higher net revenues in Investment Management. Net revenues in Institutional Client Services were essentially unchanged compared with 2014.

Operating expenses were \$25.04 billion for 2015, 13% higher than 2014, due to significantly higher non-compensation expenses, primarily reflecting significantly higher net provisions for mortgage-related litigation and regulatory matters. Compensation and benefits expenses were essentially unchanged compared with the prior year.

We continued to maintain strong capital ratios and liquidity. As of December 2015, our Common Equity Tier 1 ratio<sup>2</sup> as computed in accordance with the Standardized approach and the Basel III Advanced approach, in each case reflecting the applicable transitional provisions, was 13.6% and 12.4%, respectively. In addition, our global core liquid assets<sup>3</sup> were \$199 billion as of December 2015.

**2014 versus 2013.** The firm generated net earnings of \$8.48 billion and diluted earnings per common share of \$17.07 for 2014, an increase of 5% and 10%, respectively, compared with \$8.04 billion and \$15.46 per share for 2013. ROE was 11.2% for 2014, compared with 11.0% for 2013. Book value per common share was \$163.01 as of December 2014, 7% higher compared with the end of 2013.

Net revenues were \$34.53 billion for 2014, essentially unchanged compared with 2013, as higher net revenues in both Investment Management and Investment Banking, reflecting strong performances in these businesses, were largely offset by slightly lower net revenues in both Institutional Client Services and Investing & Lending.

Operating expenses were \$22.17 billion for 2014, essentially unchanged compared with 2013. Non-compensation expenses were slightly lower compared with the prior year, primarily reflecting lower net provisions for litigation and regulatory proceedings, while compensation and benefits expenses were essentially unchanged.

During 2014, as part of a firmwide initiative to reduce activities with lower returns, total assets were reduced by \$55 billion to \$856 billion as of December 2014, while pre-tax margin improved approximately 150 basis points to 35.8%.

We also maintained strong capital ratios and liquidity, while returning \$6.52 billion of capital to shareholders during 2014. During 2014, the firm repurchased 31.8 million shares of its common stock for a total cost of \$5.47 billion and paid common dividends of \$1.05 billion. Our Common Equity Tier 1 ratio <sup>2</sup> was 12.2% as of December 2014, under the Basel III Advanced approach reflecting the applicable transitional provisions. In addition, our global core liquid assets <sup>3</sup> were \$183 billion as of December 2014.

See Results of Operations Segment Operating Results below for information about net revenues and pre-tax earnings for each of our business segments.

1. On January 14, 2016, the firm announced an agreement in principle, subject to the negotiation of definitive documentation, to resolve the ongoing investigation of the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force (RMBS Working Group). See Note 27 to the consolidated financial statements for further information about this agreement in principle.

2. See Note 20 to the consolidated financial statements for further information about our capital ratios.

3. See Risk Management Liquidity Risk Management below for further information about our global core liquid assets.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

Our businesses, by their nature, do not produce predictable earnings. Our results in any given period can be materially affected by conditions in global financial markets, economic conditions generally and other factors. For further information about the factors that may affect our future operating results, see "Risk Factors" in Part I, Item 1A of the 2015 Form 10-K.

## **Business Environment**

### **Global**

During 2015, real gross domestic product (GDP) growth appeared stable but subdued in most advanced economies and weaker in emerging market economies compared with 2014. In developed markets, growth was higher in the Euro area and Japan, while growth in the United Kingdom was lower and growth in the United States remained stable. In emerging markets, many economies suffered from lower commodity prices, and Latin America was particularly weak with negative aggregate growth in 2015. Monetary policy diverged in 2015, as the U.S. Federal Reserve increased its target interest rate, while policy remained accommodative in the Euro area and Japan. In addition, oil prices declined by 30%, and there were concerns about the debt situation in Greece earlier in the year and China's growth outlook later in the year. In investment banking, industry-wide mergers and acquisitions activity remained strong, while industry-wide activity in both debt and equity underwriting declined compared with 2014.

### **United States**

In the United States, real GDP increased by 2.4% in both 2015 and 2014. Residential fixed investment growth and consumer expenditures growth both improved, while business fixed investment growth declined. Measures of consumer confidence improved on average compared with the prior year, while the unemployment rate declined. Housing starts and house sales increased in 2015, but house prices declined compared with the end of 2014. Measures of inflation were mixed, with headline measures lower alongside declining commodity prices, and core inflation metrics stable during 2015. The U.S. Federal Reserve raised its target rate for the federal funds rate at the December meeting to a range of 0.25% to 0.50%, ending a seven-year period at a range of zero to 0.25%. The yield on the 10-year U.S. Treasury note increased by 10 basis points during 2015 to 2.27%. In equity markets, the NASDAQ Composite Index increased by 6%, while the Dow Jones Industrial Average and the S&P 500 Index declined by 2% and 1%, respectively, during 2015.

### **Europe**

In the Euro area, real GDP increased by 1.5% in 2015, compared to an increase of 0.9% in 2014, as fixed investment, consumer spending and government consumption all grew. Measures of inflation remained subdued, prompting the European Central Bank (ECB) to announce quantitative easing in the form of an expanded asset purchase program in January 2015. The central bank continued its asset purchase program through the second and third quarters and announced further easing measures in the fourth quarter, cutting the deposit rate by 10 basis points to (0.30)% and extending purchases to March 2017. The ECB maintained its main refinancing operations rate at 0.05% during 2015. The Euro depreciated by 10% against the U.S. dollar. In the United Kingdom, real GDP increased by 2.2% in 2015, compared with an increase of 2.9% in 2014. The Bank of England maintained its official bank rate at 0.50% and the

British pound depreciated by 5% against the U.S. dollar. Yields on 10-year government bonds in the region generally increased slightly during the year. In equity markets, the DAX Index, CAC 40 Index and the Euro Stoxx 50 Index increased by 10%, 9%, and 4%, respectively, while the FTSE 100 Index decreased by 5% during 2015.

## Asia

In Japan, real GDP increased by 0.4% in 2015, compared with no growth in 2014. Measures of inflation were lower compared with 2014 and remained well below the Bank of Japan's (BOJ) 2% inflation target. In 2015, the BOJ extended the timing to achieve 2% inflation, continued its program of monetary easing and introduced measures to supplement and facilitate the quantitative and qualitative easing program. During the year, the yield on 10-year Japanese government bonds declined, the U.S. dollar was essentially unchanged against the Japanese yen and, in equity markets, the Nikkei 225 Index increased by 9%. In China, real GDP increased by 6.9% in 2015 compared with 7.3% in 2014. During 2015, the People's Bank of China announced multiple cuts in the reserve requirement ratio and took policy actions that led to a depreciation of the Chinese yuan. Measures of inflation were slightly lower and the U.S. dollar appreciated by 5% against the Chinese yuan. In equity markets, the Shanghai Composite Index increased by 9% after large mid-year swings, while the Hang Seng Index decreased by 7%. In India, real GDP increased by 7.5% in 2015 compared with 7.3% in 2014, and the rate of inflation declined compared with 2014. The U.S. dollar appreciated by 5% against the Indian rupee and, in equity markets, the BSE Sensex Index declined by 5% during 2015.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Other Markets**

In Brazil, real GDP appeared to contract by 3.8% in 2015 compared with an increase of 0.1% in 2014, reflecting sharp contractions in fixed investment and private consumption. The U.S. dollar appreciated by 49% against the Brazilian real and, in equity markets, the Bovespa Index decreased by 13%. In Russia, real GDP contracted by 3.7% in 2015 compared with an increase of 0.6% in 2014, reflecting contractions in private consumption and investment. The U.S. dollar appreciated by 26% against the Russian ruble and, in equity markets, the MICEX Index increased by 26% during 2015.

### **Critical Accounting Policies**

#### **Fair Value**

**Fair Value Hierarchy.** Financial instruments owned, at fair value and Financial instruments sold, but not yet purchased, at fair value (i.e., inventory), as well as certain other financial assets and financial liabilities, are reflected in our consolidated statements of financial condition at fair value (i.e., marked-to-market), with related gains or losses generally recognized in our consolidated statements of earnings. The use of fair value to measure financial instruments is fundamental to our risk management practices and is our most critical accounting policy.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We measure certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks). In determining fair value, the hierarchy under U.S. generally accepted accounting principles (U.S. GAAP) gives (i) the highest priority to unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities (level 1 inputs), (ii) the next priority to inputs other than level 1 inputs that are observable, either directly or indirectly (level 2 inputs), and (iii) the lowest priority to inputs that cannot be observed in market activity (level 3 inputs). Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to their fair value measurement.

The fair values for substantially all of our financial assets and financial liabilities are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Certain level 2 and level 3 financial assets and financial liabilities may require appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and the firm's credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads.

Instruments categorized within level 3 of the fair value hierarchy are those which require one or more significant inputs that are not observable. As of December 2015 and December 2014, level 3 financial assets represented 2.8% and 4.2%, respectively, of our total assets. See Notes 5 through 8 to the consolidated financial statements for further information about level 3 financial assets, including changes in level 3 financial assets and related fair value measurements. Absent evidence to the contrary, instruments classified within level 3 of the fair value hierarchy are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequent to the transaction date, we use other methodologies to determine fair value, which vary based on the type of instrument.



Estimating the fair value of level 3 financial instruments requires judgments to be made. These judgments include:

Determining the appropriate valuation methodology and/or model for each type of level 3 financial instrument;

Determining model inputs based on an evaluation of all relevant empirical market data, including prices evidenced by market transactions, interest rates, credit spreads, volatilities and correlations; and

Determining appropriate valuation adjustments, including those related to illiquidity or counterparty credit quality. Regardless of the methodology, valuation inputs and assumptions are only changed when corroborated by substantive evidence.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### Management's Discussion and Analysis

**Controls Over Valuation of Financial Instruments.** Market makers and investment professionals in our revenue-producing units are responsible for pricing our financial instruments. Our control infrastructure is independent of the revenue-producing units and is fundamental to ensuring that all of our financial instruments are appropriately valued at market-clearing levels. In the event that there is a difference of opinion in situations where estimating the fair value of financial instruments requires judgment (e.g., calibration to market comparables or trade comparison, as described below), the final valuation decision is made by senior managers in control and support functions. This independent price verification is critical to ensuring that our financial instruments are properly valued.

**Price Verification.** All financial instruments at fair value in levels 1, 2 and 3 of the fair value hierarchy are subject to our independent price verification process. The objective of price verification is to have an informed and independent opinion with regard to the valuation of financial instruments under review. Instruments that have one or more significant inputs which cannot be corroborated by external market data are classified within level 3 of the fair value hierarchy. Price verification strategies utilized by our independent control and support functions include:

**Trade Comparison.** Analysis of trade data (both internal and external where available) is used to determine the most relevant pricing inputs and valuations.

**External Price Comparison.** Valuations and prices are compared to pricing data obtained from third parties (e.g., brokers or dealers, MarkIt, Bloomberg, IDC, TRACE). Data obtained from various sources is compared to ensure consistency and validity. When broker or dealer quotations or third-party pricing vendors are used for valuation or price verification, greater priority is generally given to executable quotations.

**Calibration to Market Comparables.** Market-based transactions are used to corroborate the valuation of positions with similar characteristics, risks and components.

**Relative Value Analyses.** Market-based transactions are analyzed to determine the similarity, measured in terms of risk, liquidity and return, of one instrument relative to another or, for a given instrument, of one maturity relative to another.

**Collateral Analyses.** Margin calls on derivatives are analyzed to determine implied values which are used to corroborate our valuations.

**Execution of Trades.** Where appropriate, trading desks are instructed to execute trades in order to provide evidence of market-clearing levels.

**Backtesting.** Valuations are corroborated by comparison to values realized upon sales.

See Notes 5 through 8 to the consolidated financial statements for further information about fair value measurements.

**Review of Net Revenues.** Independent control and support functions ensure adherence to our pricing policy through a combination of daily procedures, including the explanation and attribution of net revenues based on the underlying factors. Through this process we independently validate net revenues, identify and resolve potential fair value or trade booking issues on a timely basis and seek to ensure that risks are being properly categorized and quantified.

**Review of Valuation Models.** Our independent model risk management group (Model Risk Management), consisting of quantitative professionals who are separate from model developers, performs an independent model review and validation process of our valuation models. New or changed models are reviewed and approved prior to being put into use. Models are evaluated and re-approved annually to assess the impact of any changes in the product or market and any market developments in pricing theories. See Risk Management Model Risk Management for further information about the review and validation of our valuation models.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**Goodwill and Identifiable Intangible Assets**

**Goodwill.** Goodwill is the cost of acquired companies in excess of the fair value of net assets, including identifiable intangible assets, at the acquisition date. Goodwill is assessed for impairment annually in the fourth quarter or more frequently if events occur or circumstances change that indicate an impairment may exist, by first assessing qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the results of the qualitative assessment are not conclusive, a quantitative goodwill test is performed by comparing the estimated fair value of each reporting unit with its estimated net book value.

Estimating the fair value of our reporting units requires management to make judgments. Critical inputs to the fair value estimates include projected earnings and attributed equity. There is inherent uncertainty in the projected earnings. The net book value of each reporting unit reflects an allocation of total shareholders' equity and represents the estimated amount of total shareholders' equity required to support the activities of the reporting unit under currently applicable regulatory capital requirements. See *Equity Capital Management and Regulatory Capital* for further information about our capital requirements.

We last performed a quantitative goodwill test in 2012 and, as we believe it is appropriate to periodically update it, we performed another quantitative goodwill test during the fourth quarter of 2015. We determined that goodwill was not impaired. The estimated fair value of our reporting units in which we hold substantially all of our goodwill significantly exceeded their estimated carrying values. However, the estimated fair value of the Fixed Income, Currency and Commodities Client Execution reporting unit, which represents approximately 7% of our goodwill, was not substantially in excess of its carrying value. This reporting unit and the industry more broadly have been adversely impacted by the currently challenging operating environment and increased capital requirements. We will continue to closely monitor it to determine whether an impairment is required in the future. As of December 2015, the goodwill related to the Fixed Income, Currency and Commodities Client Execution reporting unit was \$269 million, substantially all of which originated from the acquisition of Goldman Sachs Australia Pty Ltd in 2011.

If we experience a prolonged or severe period of weakness in the business environment or financial markets, or additional increases in capital requirements, our goodwill could be impaired in the future. In addition, significant changes to other inputs of the quantitative goodwill test could cause the estimated fair value of our reporting units to decline, which could result in an impairment of goodwill in the future.

See Note 13 to the consolidated financial statements for further information about our goodwill and our quantitative goodwill test.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

**Identifiable Intangible Assets.** We amortize our identifiable intangible assets over their estimated useful lives using the straight-line method or based on economic usage for certain commodities-related intangibles. Identifiable intangible assets are tested for impairment whenever events or changes in circumstances suggest that an asset's or asset group's carrying value may not be fully recoverable. See Note 13 to the consolidated financial statements for the carrying value and estimated remaining useful lives of our identifiable intangible assets by major asset class.

A prolonged or severe period of market weakness, or significant changes in regulation could adversely impact our businesses and impair the value of our identifiable intangible assets. In addition, certain events could indicate a potential impairment of our identifiable intangible assets, including weaker business performance resulting in a decrease in our customer base and decreases in revenues from commodities-related transportation rights, customer contracts and relationships. Management judgment is required to evaluate whether indications of potential impairment have occurred, and to test intangible assets for impairment if required.

An impairment, generally calculated as the difference between the estimated fair value and the carrying value of an asset or asset group, is recognized if the total of the estimated undiscounted cash flows relating to the asset or asset group is less than the corresponding carrying value.

See Note 13 to the consolidated financial statements for further information about our identifiable intangible assets.

#### **Recent Accounting Developments**

See Note 3 to the consolidated financial statements for information about Recent Accounting Developments.

#### **Use of Estimates**

The use of generally accepted accounting principles requires management to make certain estimates and assumptions. In addition to the estimates we make in connection with fair value measurements and the accounting for goodwill and identifiable intangible assets, the use of estimates and assumptions is also important in determining provisions for losses that may arise from litigation, regulatory proceedings and tax audits, and the allowance for losses on loans and lending commitments held for investment.

We estimate and provide for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be reasonably estimated. In addition, we estimate the upper end of the range of reasonably possible aggregate loss in excess of the related reserves for litigation proceedings where the firm believes the risk of loss is more than slight. See Notes 18 and 27 to the consolidated financial statements for information about certain judicial, regulatory and legal proceedings.

Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different. Our total estimated liability in respect of litigation and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case or proceeding, our experience and the experience of others in similar cases or proceedings, and the opinions and views of legal counsel.

In accounting for income taxes, we recognize tax positions in the financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. See Note 24 to the consolidated financial statements for further information about accounting for income taxes.

We also estimate and record an allowance for credit losses related to our loans receivable and lending commitments held for investment. Management's estimate of loan losses entails judgment about loan collectability at the reporting dates, and there are uncertainties inherent in those judgments. See Note 9 to the consolidated financial statements for further information about the allowance for losses on loans and lending commitments held for investment.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Results of Operations**

The composition of our net revenues has varied over time as financial markets and the scope of our operations have changed. The composition of net revenues can also vary over the shorter term due to fluctuations in U.S. and global economic and market conditions. See **Risk Factors** in Part I, Item 1A of the 2015 Form 10-K for further information about the impact of economic and market conditions on our results of operations.

**Financial Overview**

The table below presents an overview of our financial results.

<i>\$ in millions, except</i>	Year Ended December		
	2015	2014	2013
<i>per share amounts</i>			
Net revenues	<b>\$ 33,820</b>	\$34,528	\$34,206
Pre-tax earnings	<b>8,778</b>	12,357	11,737
Net earnings	<b>6,083</b>	8,477	8,040
Net earnings applicable to common shareholders	<b>5,568</b>	8,077	7,726
Diluted earnings per common share	<b>12.14</b>	17.07	15.46
Return on average common shareholders' equity <sup>1</sup>	<b>7.4%</b>	11.2%	11.0%

1. ROE is computed by dividing net earnings applicable to common shareholders by average monthly common shareholders' equity. The table below presents our average common shareholders' equity.

<i>\$ in millions</i>	Average for the		
	Year Ended December		
	2015	2014	2013
Total shareholders' equity	<b>\$ 86,314</b>	\$80,839	\$77,353
Preferred stock	<b>(10,585)</b>	(8,585)	(6,892)

<b>Common shareholders equity</b>	<b>\$ 75,729</b>	\$72,254	\$70,461
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The table below presents selected financial ratios.

	Year Ended December		
	2015	2014	2013
Net earnings to average assets	<b>0.7%</b>	0.9%	0.9%
Return on average total shareholders equity	<b>7.0%</b>	10.5%	10.4%
Total average equity to average assets	<b>9.9%</b>	9.0%	8.2%
Dividend payout ratio <sup>2</sup>	<b>21.0%</b>	13.2%	13.3%

1. Return on average total shareholders equity is computed by dividing net earnings by average monthly total shareholders equity.

2. Dividend payout ratio is computed by dividing dividends declared per common share by diluted earnings per common share.

### Net Revenues

The table below presents our net revenues by line item on the consolidated statements of earnings.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Investment banking	<b>\$ 7,027</b>	\$ 6,464	\$ 6,004
Investment management	<b>5,868</b>	5,748	5,194
Commissions and fees	<b>3,320</b>	3,316	3,255
Market making	<b>9,523</b>	8,365	9,368
Other principal transactions	<b>5,018</b>	6,588	6,993
Total non-interest revenues	<b>30,756</b>	30,481	30,814
Interest income	<b>8,452</b>	9,604	10,060
Interest expense	<b>5,388</b>	5,557	6,668
Net interest income	<b>3,064</b>	4,047	3,392
<b>Total net revenues</b>	<b>\$33,820</b>	\$34,528	\$34,206

In the table above:

Investment banking is comprised of revenues (excluding net interest) from financial advisory and underwriting assignments, as well as derivative transactions directly related to these assignments. These activities are included in



our Investment Banking segment.

Investment management is comprised of revenues (excluding net interest) from providing investment management services to a diverse set of clients, as well as wealth advisory services and certain transaction services to high-net-worth individuals and families. These activities are included in our Investment Management segment.

Commissions and fees is comprised of revenues from executing and clearing client transactions on major stock, options and futures exchanges worldwide, as well as over-the-counter (OTC) transactions. These activities are included in our Institutional Client Services and Investment Management segments.

Market making is comprised of revenues (excluding net interest) from client execution activities related to making markets in interest rate products, credit products, mortgages, currencies, commodities and equity products. These activities are included in our Institutional Client Services segment.

Other principal transactions is comprised of revenues (excluding net interest) from our investing activities and the origination of loans to provide financing to clients. In addition, Other principal transactions includes revenues related to our consolidated investments. These activities are included in our Investing & Lending segment.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

***2015 versus 2014***

Net revenues on the consolidated statements of earnings were \$33.82 billion for 2015, 2% lower than 2014, reflecting significantly lower other principal transactions revenues and net interest income, largely offset by higher market-making revenues and investment banking revenues, as well as slightly higher investment management revenues. Commissions and fees were essentially unchanged compared with 2014.

During 2015, the operating environment for market-making activities was positively impacted by diverging central bank monetary policies in the United States and the Euro area in the first quarter, as increased volatility levels contributed to strong client activity levels in currencies, interest rate products and equity products. However, during the remainder of the year, concerns about global growth and uncertainty about the U.S. Federal Reserve's interest rate policy, along with lower global equity prices, widening high-yield credit spreads and declining commodity prices, contributed to lower levels of client activity, particularly in mortgages and credit, and more difficult market-making conditions. The operating environment for investment banking activities for 2015 reflected strong industry-wide mergers and acquisitions activity. In addition, investment management reflected an environment generally characterized by strong client net inflows, which more than offset the declines in equity and fixed income asset prices. Although other principal transactions for 2015 benefited from favorable company-specific events, including sales, initial public offerings and financings, a decline in global equity prices and widening high-yield credit spreads during the second half of the year impacted results. If macroeconomic concerns continue over the long term, and market-making activity levels, investment banking activity levels or assets under supervision decline, or if asset prices continue to decline, net revenues would likely be negatively impacted. See Segment Operating Results below for further information about material trends and uncertainties that may impact our results of operations.

**Non-Interest Revenues.** Investment banking revenues on the consolidated statements of earnings were \$7.03 billion for 2015, 9% higher than 2014, due to significantly higher revenues in financial advisory, reflecting strong client activity, particularly in the United States. Industry-wide completed mergers and acquisitions increased significantly compared with the prior year. Revenues in underwriting were lower compared with a strong 2014. Revenues in debt underwriting were lower compared with 2014, reflecting significantly lower leveraged finance activity. Revenues in equity underwriting were also lower, reflecting significantly lower revenues from initial public offerings and convertible offerings, partially offset by significantly higher revenues from secondary offerings.

Investment management revenues on the consolidated statements of earnings were \$5.87 billion for 2015, 2% higher than 2014, due to slightly higher management and other fees, primarily reflecting higher average assets under supervision, and higher transaction revenues.

Commissions and fees on the consolidated statements of earnings were \$3.32 billion for 2015, essentially unchanged compared with 2014.

Market-making revenues on the consolidated statements of earnings were \$9.52 billion for 2015, 14% higher than 2014. Excluding a gain of \$289 million in 2014 related to the extinguishment of certain of our junior subordinated debt, market-making revenues were 18% higher than 2014, reflecting significantly higher revenues in interest rate products, currencies, equity cash products and equity derivatives. These increases were partially offset by significantly

lower revenues in mortgages, commodities and credit products.

Other principal transactions revenues on the consolidated statements of earnings were \$5.02 billion for 2015, 24% lower than 2014. This decrease was primarily due to lower revenues from investments in equities, principally reflecting the sale of Metro International Trade Services (Metro) in the fourth quarter of 2014 and lower net gains from investments in private equities, driven by corporate performance. In addition, revenues in debt securities and loans were significantly lower, reflecting lower net gains from investments.

**Net Interest Income.** Net interest income on the consolidated statements of earnings was \$3.06 billion for 2015, 24% lower than 2014. The decrease compared with 2014 was due to lower interest income resulting from a reduction in interest income related to financial instruments owned, at fair value, partially offset by the impact of an increase in total average loans receivable. The decrease in interest income was partially offset by a decrease in interest expense, which primarily reflected lower interest expense related to financial instruments sold, but not yet purchased, at fair value and other interest-bearing liabilities, partially offset by higher interest expense related to long-term borrowings. See Supplemental Financial Information Statistical Disclosures Distribution of Assets, Liabilities and Shareholders Equity for further information about our sources of net interest income.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

*2014 versus 2013*

Net revenues on the consolidated statements of earnings were \$34.53 billion for 2014, essentially unchanged compared with 2013, reflecting higher net interest income, investment management revenues and investment banking revenues, as well as slightly higher commissions and fees, largely offset by lower market-making revenues and other principal transactions revenues.

During 2014, the operating environment was favorable for investment banking activities, as industry-wide underwriting activity was strong and industry-wide mergers and acquisitions activity increased. Improved asset prices resulted in appreciation in the value of client assets in investment management. In addition, other principal transactions were impacted by favorable company-specific events and strong corporate performance. However, the operating environment remained challenging for market-making activities as economic uncertainty and low volatility levels contributed to generally low levels of activity, particularly in fixed income products. See Segment Operating Results below for further information about material trends and uncertainties that may impact our results of operations.

**Non-Interest Revenues.** Investment banking revenues on the consolidated statements of earnings were \$6.46 billion for 2014, 8% higher than 2013, due to significantly higher revenues in financial advisory, reflecting an increase in industry-wide completed mergers and acquisitions, primarily in the United States. Revenues in underwriting were essentially unchanged compared with a strong 2013, as industry-wide activity levels remained high. Revenues in debt underwriting were slightly lower compared with 2013, reflecting lower revenues from commercial mortgage-related activity, while revenues in equity underwriting were slightly higher, principally from initial public offerings.

Investment management revenues on the consolidated statements of earnings were \$5.75 billion for 2014, 11% higher than 2013, reflecting higher management and other fees, primarily due to higher average assets under supervision, as well as higher incentive fees and transaction revenues.

Commissions and fees on the consolidated statements of earnings were \$3.32 billion for 2014, 2% higher than 2013, due to higher commissions and fees in both Europe and the United States, reflecting generally higher client activity, consistent with increases in listed cash equity market volumes in these regions.

Market-making revenues on the consolidated statements of earnings were \$8.37 billion for 2014, 11% lower than 2013. Results for 2014 included a gain of \$289 million (\$270 million of which was recorded at extinguishment in the third quarter) related to the extinguishment of certain of our junior subordinated debt. Excluding this gain and a gain of \$211 million on the sale of a majority stake in our European insurance business in 2013, the decrease in market-making revenues compared with 2013 reflected significantly lower revenues in both credit products and equity derivatives, lower revenues in mortgages and the sale of our Americas reinsurance business in 2013. These decreases were partially offset by significantly higher revenues in commodities, as well as higher revenues in equity cash products, currencies and interest rate products.

Other principal transactions revenues on the consolidated statements of earnings were \$6.59 billion for 2014, 6% lower than 2013. Revenues from investments in equity securities were lower due to a significant decrease in net gains

from investments in public equities, as movements in global equity prices during 2014 were less favorable compared with 2013, as well as significantly lower revenues related to our consolidated investments, reflecting a decrease in operating revenues from commodities-related consolidated investments. These decreases were partially offset by an increase in net gains from investments in private equities, primarily driven by company-specific events. Revenues from debt securities and loans were slightly higher than 2013, primarily due to sales of certain investments during 2014.

**Net Interest Income.** Net interest income on the consolidated statements of earnings was \$4.05 billion for 2014, 19% higher than 2013. The increase compared with 2013 was primarily due to lower interest expense resulting from a reduction in our total liabilities, lower costs of long-term funding due to a decline in interest rates and the impact of rebates in the securities services business, partially offset by lower interest income due to a reduction in our total assets. See Supplemental Financial Information Statistical Disclosures Distribution of Assets, Liabilities and Shareholders Equity for further information about our sources of net interest income.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Operating Expenses**

Our operating expenses are primarily influenced by compensation, headcount and levels of business activity. Compensation and benefits includes salaries, discretionary compensation, amortization of equity awards and other items such as benefits. Discretionary compensation is significantly impacted by, among other factors, the level of net revenues, overall financial performance, prevailing labor markets, business mix, the structure of our share-based compensation programs and the external environment. In addition, see "Use of Estimates" for additional information about expenses that may arise from litigation and regulatory proceedings.

The table below presents our operating expenses and total staff (which includes employees, consultants and temporary staff).

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Compensation and benefits	<b>\$12,678</b>	\$12,691	\$12,613
Brokerage, clearing, exchange and distribution fees	<b>2,576</b>	2,501	2,341
Market development	<b>557</b>	549	541
Communications and technology	<b>806</b>	779	776
Depreciation and amortization	<b>991</b>	1,337	1,322
Occupancy	<b>772</b>	827	839
Professional fees	<b>963</b>	902	930
Insurance reserves <sup>1</sup>			176
Other expenses <sup>2</sup>	<b>5,699</b>	2,585	2,931
Total non-compensation expenses	<b>12,364</b>	9,480	9,856
<b>Total operating expenses</b>	<b>\$25,042</b>	\$22,171	\$22,469
Total staff at period-end	<b>36,800</b>	34,000	32,900

1. Consists of changes in reserves related to our Americas reinsurance business, including interest credited to policyholder account balances, and expenses related to property catastrophe reinsurance claims. In April 2013, we

completed the sale of a majority stake in our Americas reinsurance business and no longer consolidate this business.

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

**2015 versus 2014.** Operating expenses on the consolidated statements of earnings were \$25.04 billion for 2015, 13% higher than 2014. Compensation and benefits expenses on the consolidated statements of earnings were \$12.68 billion for 2015, essentially unchanged compared with 2014. The ratio of compensation and benefits to net revenues for 2015 was 37.5% compared with 36.8% for 2014. Total staff increased 8% during 2015, primarily due to activity levels in certain businesses and continued investment in regulatory compliance.

Non-compensation expenses on the consolidated statements of earnings were \$12.36 billion for 2015, 30% higher than 2014, due to significantly higher net provisions for mortgage-related litigation and regulatory matters, which are included in other expenses. This increase was partially offset by lower depreciation and amortization expenses, primarily reflecting lower impairment charges related to consolidated investments, and a reduction in expenses related to the sale of Metro in the fourth quarter of 2014. Net provisions for litigation and regulatory proceedings for 2015 were \$4.01 billion compared with \$754 million for 2014 (both primarily comprised of net provisions for mortgage-related matters). 2015 included a \$148 million charitable contribution to Goldman Sachs Gives, our donor-advised fund. Compensation was reduced to fund this charitable contribution to Goldman Sachs Gives. The firm asks its participating managing directors to make recommendations regarding potential charitable recipients for this contribution.

**2014 versus 2013.** Operating expenses on the consolidated statements of earnings were \$22.17 billion for 2014, essentially unchanged compared with 2013. Compensation and benefits expenses on the consolidated statements of earnings were \$12.69 billion for 2014, essentially unchanged compared with 2013. The ratio of compensation and benefits to net revenues for 2014 was 36.8% compared with 36.9% for 2013. Total staff increased 3% during 2014.

Non-compensation expenses on the consolidated statements of earnings were \$9.48 billion for 2014, 4% lower than 2013. The decrease compared with 2013 included a decrease in other expenses, due to lower net provisions for litigation and regulatory proceedings and lower operating expenses related to consolidated investments, as well as a decline in insurance reserves, reflecting the sale of our Americas reinsurance business in 2013. These decreases were partially offset by an increase in brokerage, clearing, exchange and distribution fees. Net provisions for litigation and regulatory proceedings for 2014 were \$754 million compared with \$962 million for 2013 (both primarily comprised of net provisions for mortgage-related matters). 2014 included a charitable contribution of \$137 million to Goldman Sachs Gives, our donor-advised fund. Compensation was reduced to fund this charitable contribution to Goldman Sachs Gives. The firm asks its participating managing directors to make recommendations regarding potential charitable recipients for this contribution.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Provision for Taxes**

The effective income tax rate for 2015 was 30.7%, down from 31.4% for 2014. The decline compared with 2014 reflected reductions related to a change in the mix of earnings, the impact of changes in tax law on deferred tax assets, settlements of tax audits and the determination that certain non-U.S. earnings would be permanently reinvested abroad, and an increase related to the impact of non-deductible provisions for mortgage-related litigation and regulatory matters.

The effective income tax rate for 2014 was 31.4%, essentially unchanged compared with 31.5% for 2013.

On December 18, 2015, U.S. federal legislation was enacted to permanently defer U.S. tax on certain non-repatriated active financing income. This legislation did not have a material impact on our effective tax rate for the year ended December 2015, and we do not expect it will have a material impact on our effective tax rate for 2016.

New York State enacted executive budget legislation for the 2015-2016 fiscal year which makes changes to the income taxation of corporations doing business in New York City. This change did not have a material impact on our effective tax rate for 2015, and we do not expect this legislation will have a material impact on our effective tax rate for 2016.

In November 2015, the United Kingdom government enacted a budget which contained several changes that impact our subsidiaries operating in the U.K., including: (i) an 8 percentage point surcharge on banking profits effective in 2016, (ii) a 1 percentage point reduction in corporate income tax rates effective in 2017, (iii) a further 1 percentage point reduction in corporate tax rates effective in 2020, and (iv) a phased-in reduction from 2016 through 2021 in the U.K. Bank Levy rate (for which the related expense is included in our non-compensation expenses). During the fourth quarter of 2015, we recognized a benefit related to the revaluation of deferred income tax assets. Beginning in 2016, the new legislation will increase our effective income tax rate and the impact will depend on the level and mix of our earnings.

**Segment Operating Results**

The table below presents the net revenues, operating expenses and pre-tax earnings of our segments.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
<b>Investment Banking</b>			
Net revenues	\$ 7,027	\$ 6,464	\$ 6,004
Operating expenses	3,713	3,688	3,479
<b>Pre-tax earnings</b>	\$ 3,314	\$ 2,776	\$ 2,525



<b>Institutional Client Services</b>			
Net revenues	<b>\$15,151</b>	\$15,197	\$15,721
Operating expenses <sup>1</sup>	<b>13,938</b>	10,880	11,792
<b>Pre-tax earnings</b>	<b>\$ 1,213</b>	\$ 4,317	\$ 3,929
<b>Investing &amp; Lending</b>			
Net revenues	<b>\$ 5,436</b>	\$ 6,825	\$ 7,018
Operating expenses	<b>2,402</b>	2,819	2,686
<b>Pre-tax earnings</b>	<b>\$ 3,034</b>	\$ 4,006	\$ 4,332
<b>Investment Management</b>			
Net revenues	<b>\$ 6,206</b>	\$ 6,042	\$ 5,463
Operating expenses	<b>4,841</b>	4,647	4,357
<b>Pre-tax earnings</b>	<b>\$ 1,365</b>	\$ 1,395	\$ 1,106
<b>Total net revenues</b>	<b>\$33,820</b>	\$34,528	\$34,206
<b>Total operating expenses <sup>2</sup></b>	<b>25,042</b>	22,171	22,469
<b>Total pre-tax earnings</b>	<b>\$ 8,778</b>	\$12,357	\$11,737

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

2. Includes charitable contributions that have not been allocated to our segments of \$148 million for 2015, \$137 million for 2014 and \$155 million for 2013.

Net revenues in our segments include allocations of interest income and interest expense to specific securities, commodities and other positions in relation to the cash generated by, or funding requirements of, such underlying positions. See Note 25 to the consolidated financial statements for further information about our business segments.

The cost drivers of Goldman Sachs taken as a whole – compensation, headcount and levels of business activity – are broadly similar in each of our business segments. Compensation and benefits expenses within our segments reflect, among other factors, the overall performance of Goldman Sachs as well as the performance of individual businesses. Consequently, pre-tax margins in one segment of our business may be significantly affected by the performance of our other business segments. A description of segment operating results follows.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Investment Banking**

Our Investment Banking segment is comprised of:

**Financial Advisory.** Includes strategic advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings, spin-offs, risk management and derivative transactions directly related to these client advisory assignments.

**Underwriting.** Includes public offerings and private placements, including local and cross-border transactions and acquisition financing, of a wide range of securities, loans and other financial instruments, and derivative transactions directly related to these client underwriting activities.

The table below presents the operating results of our Investment Banking segment.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Financial Advisory	<b>\$3,470</b>	\$2,474	\$1,978
Equity underwriting	<b>1,546</b>	1,750	1,659
Debt underwriting	<b>2,011</b>	2,240	2,367
Total Underwriting	<b>3,557</b>	3,990	4,026
Total net revenues	<b>7,027</b>	6,464	6,004
Operating expenses	<b>3,713</b>	3,688	3,479
<b>Pre-tax earnings</b>	<b>\$3,314</b>	\$2,776	\$2,525

The table below presents our financial advisory and underwriting transaction volumes.<sup>1</sup>

<i>\$ in billions</i>	Year Ended December		
	2015	2014	2013
Announced mergers and acquisitions	<b>\$1,774</b>	\$ 973	\$ 602
Completed mergers and acquisitions	<b>1,090</b>	661	634
Equity and equity-related offerings <sup>2</sup>	<b>72</b>	78	90
Debt offerings <sup>3</sup>	<b>251</b>	270	281

1. Source: Thomson Reuters. Announced and completed mergers and acquisitions volumes are based on full credit to each of the advisors in a transaction. Equity and equity-related offerings and debt offerings are based on full credit for single book managers and equal credit for joint book managers. Transaction volumes may not be indicative of net revenues in a given period. In addition, transaction volumes for prior periods may vary from amounts previously reported due to the subsequent withdrawal or a change in the value of a transaction.

2. Includes Rule 144A and public common stock offerings, convertible offerings and rights offerings.

3. Includes non-convertible preferred stock, mortgage-backed securities, asset-backed securities and taxable municipal debt. Includes publicly registered and Rule 144A issues. Excludes leveraged loans.

**2015 versus 2014.** Net revenues in Investment Banking were \$7.03 billion for 2015, 9% higher than 2014.

Net revenues in Financial Advisory were \$3.47 billion, 40% higher than 2014, reflecting strong client activity, particularly in the United States. Industry-wide completed mergers and acquisitions increased significantly compared with the prior year. Net revenues in Underwriting were \$3.56 billion, 11% lower compared with a strong 2014. Net revenues in debt underwriting were lower compared with 2014, reflecting significantly lower leveraged finance activity. Net revenues in equity underwriting were also lower, reflecting significantly lower net revenues from initial public offerings and convertible offerings, partially offset by significantly higher net revenues from secondary offerings.

During 2015, Investment Banking operated in an environment characterized by strong industry-wide mergers and acquisitions activity. Industry-wide activity in both debt and equity underwriting declined compared with 2014. In the future, if client activity levels in mergers and acquisitions decline, or client activity levels in underwriting continue to decline, net revenues in Investment Banking would likely be negatively impacted.

Operating expenses were \$3.71 billion for 2015, essentially unchanged compared with 2014. Pre-tax earnings were \$3.31 billion in 2015, 19% higher than 2014.

As of December 2015, our investment banking transaction backlog was higher compared with the end of 2014, primarily due to significantly higher estimated net revenues from potential debt underwriting transactions, principally related to leveraged finance transactions, and higher estimated net revenues from potential advisory transactions, reflecting the continued high level of mergers and acquisitions activity. Estimated net revenues from potential equity underwriting transactions were slightly higher compared with the end of 2014.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

Our investment banking transaction backlog represents an estimate of our future net revenues from investment banking transactions where we believe that future revenue realization is more likely than not. We believe changes in our investment banking transaction backlog may be a useful indicator of client activity levels which, over the long term, impact our net revenues. However, the time frame for completion and corresponding revenue recognition of transactions in our backlog varies based on the nature of the assignment, as certain transactions may remain in our backlog for longer periods of time and others may enter and leave within the same reporting period. In addition, our transaction backlog is subject to certain limitations, such as assumptions about the likelihood that individual client transactions will occur in the future. Transactions may be cancelled or modified, and transactions not included in the estimate may also occur.

**2014 versus 2013.** Net revenues in Investment Banking were \$6.46 billion for 2014, 8% higher than 2013.

Net revenues in Financial Advisory were \$2.47 billion, 25% higher than 2013, reflecting an increase in industry-wide completed mergers and acquisitions, primarily in the United States. Net revenues in Underwriting were \$3.99 billion, essentially unchanged compared with a strong 2013, as industry-wide activity levels remained high. Net revenues in debt underwriting were slightly lower compared with 2013, reflecting lower net revenues from commercial mortgage-related activity, while net revenues in equity underwriting were slightly higher, principally from initial public offerings.

During 2014, Investment Banking operated in an environment generally characterized by strong industry-wide underwriting activity in both equity and debt, and an increase in industry-wide completed mergers and acquisitions activity compared with 2013. Industry-wide announced mergers and acquisitions activity significantly increased compared with 2013.

Operating expenses were \$3.69 billion for 2014, 6% higher than 2013, primarily due to increased compensation and benefits expenses, reflecting higher net revenues. Pre-tax earnings were \$2.78 billion in 2014, 10% higher than 2013.

As of December 2014, our investment banking transaction backlog was significantly higher compared with the end of 2013, due to a significant increase in estimated net revenues from potential advisory transactions. Estimated net revenues from potential underwriting transactions were lower compared with the end of 2013, as a significant decrease in estimated net revenues from potential equity underwriting transactions, particularly in initial public offerings, was partially offset by an increase in estimated net revenues from potential debt underwriting transactions, reflecting increases across most products.

#### **Institutional Client Services**

Our Institutional Client Services segment is comprised of:

**Fixed Income, Currency and Commodities Client Execution.** Includes client execution activities related to making markets in interest rate products, credit products, mortgages, currencies and commodities.

**Interest Rate Products.** Government bonds, money market instruments, treasury bills, repurchase agreements and other highly liquid securities and instruments, as well as interest rate swaps, options and other derivatives.

**Credit Products.** Investment-grade corporate securities, high-yield securities, credit derivatives, 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, other prime, subprime and Alt-A securities and loans), and other asset-backed securities, loans and derivatives.

**Currencies.** Most currencies, including growth-market currencies.

**Commodities.** Crude oil and petroleum products, natural gas, base, precious and other metals, electricity, coal, agricultural and other commodity products.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**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.

The table below presents the operating results of our Institutional Client Services segment.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Fixed Income, Currency and Commodities Client Execution	<b>\$ 7,322</b>	\$ 8,461	\$ 8,651
Equities client execution <sup>1</sup>	<b>3,028</b>	2,079	2,594
Commissions and fees	<b>3,156</b>	3,153	3,103
Securities services	<b>1,645</b>	1,504	1,373
Total Equities	<b>7,829</b>	6,736	7,070
Total net revenues	<b>15,151</b>	15,197	15,721
Operating expenses	<b>13,938</b>	10,880	11,792
<b>Pre-tax earnings</b>	<b>\$ 1,213</b>	\$ 4,317	\$ 3,929

1. Net revenues related to the Americas reinsurance business were \$317 million for 2013. In April 2013, we completed the sale of a majority stake in our Americas reinsurance business and no longer consolidate this business.

**2015 versus 2014.** Net revenues in Institutional Client Services were \$15.15 billion for 2015, essentially unchanged compared with 2014.

Net revenues in Fixed Income, Currency and Commodities Client Execution were \$7.32 billion for 2015, 13% lower than 2014. Excluding a gain of \$168 million in 2014 related to the extinguishment of certain of our junior subordinated debt, net revenues in Fixed Income, Currency and Commodities Client Execution were 12% lower than 2014, reflecting significantly lower net revenues in mortgages, credit products and commodities. The decreases in mortgages and credit products reflected challenging market-making conditions and generally low levels of activity during 2015. The decline in commodities primarily reflected less favorable market-making conditions compared with 2014, which included a strong first quarter of 2014. These decreases were partially offset by significantly higher net revenues in interest rate products and currencies, reflecting higher volatility levels which contributed to higher client activity levels, particularly during the first quarter of 2015.

Net revenues in Equities were \$7.83 billion for 2015, 16% higher than 2014. Excluding a gain of \$121 million (\$30 million and \$91 million included in equities client execution and securities services, respectively) in 2014 related to the extinguishment of certain of our junior subordinated debt, net revenues in Equities were 18% higher than 2014, primarily due to significantly higher net revenues in equities client execution across the major regions, reflecting significantly higher results in both derivatives and cash products, and higher net revenues in securities services, reflecting the impact of higher average customer balances and improved securities lending spreads. Commissions and fees were essentially unchanged compared with 2014.

The firm elects the fair value option for certain unsecured borrowings. The fair value net gain attributable to the impact of changes in our credit spreads on these borrowings was \$255 million (\$214 million and \$41 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2015, compared with a net gain of \$144 million (\$108 million and \$36 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2014.

During 2015, the operating environment for Institutional Client Services was positively impacted by diverging central bank monetary policies in the United States and the Euro area in the first quarter, as increased volatility levels contributed to strong client activity levels in currencies, interest rate products and equity products, and market-making conditions improved. However, during the remainder of the year, concerns about global growth and uncertainty about the U.S. Federal Reserve's interest rate policy, along with lower global equity prices, widening high-yield credit spreads and declining commodity prices, contributed to lower levels of client activity, particularly in mortgages and credit, and more difficult market-making conditions. If macroeconomic concerns continue over the long term and activity levels decline, net revenues in Institutional Client Services would likely be negatively impacted.

Operating expenses were \$13.94 billion for 2015, 28% higher than 2014, due to significantly higher net provisions for mortgage-related litigation and regulatory matters, partially offset by decreased compensation and benefits expenses. Pre-tax earnings were \$1.21 billion in 2015, 72% lower than 2014.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**2014 versus 2013.** Net revenues in Institutional Client Services were \$15.20 billion for 2014, 3% lower than 2013. Results for 2014 included a gain of \$289 million (\$270 million of which was recorded at extinguishment in the third quarter) related to the extinguishment of certain of our junior subordinated debt, of which \$168 million was included in Fixed Income, Currency and Commodities Client Execution and \$121 million in Equities (\$30 million and \$91 million included in equities client execution and securities services, respectively).

Net revenues in Fixed Income, Currency and Commodities Client Execution were \$8.46 billion for 2014, 2% lower than 2013. Excluding the gain related to the extinguishment of debt in 2014 and a gain of \$211 million on the sale of a majority stake in our European insurance business in 2013, net revenues in Fixed Income, Currency and Commodities Client Execution were slightly lower compared with 2013. This decline reflected significantly lower net revenues in credit products and slightly lower net revenues in both interest rate products and mortgages. The decrease in credit products primarily reflected difficult market-making conditions, particularly during the second half of 2014, and generally low levels of activity. These results were largely offset by significantly higher net revenues in commodities and higher net revenues in currencies. The increase in commodities reflected more favorable market-making conditions in certain energy products, primarily during the first quarter of 2014. The increase in currencies reflected a stronger performance towards the end of 2014, as activity levels improved and volatility was higher.

Net revenues in Equities were \$6.74 billion for 2014, 5% lower than 2013. Excluding the gain related to the extinguishment of debt in 2014 and net revenues of \$317 million related to the sale of a majority stake in our Americas reinsurance business in 2013, net revenues in Equities were slightly lower compared with 2013. This decline reflected lower net revenues in derivatives, partially offset by slightly higher commissions and fees and slightly higher net revenues in securities services. The increase in securities services net revenues reflected the impact of higher average customer balances. The increase in commissions and fees was due to higher commissions and fees in both Europe and the United States, reflecting generally higher client activity, consistent with increases in listed cash equity market volumes in these regions.

The firm elects the fair value option for certain unsecured borrowings. The fair value net gain attributable to the impact of changes in our credit spreads on these borrowings was \$144 million (\$108 million and \$36 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2014, compared with a net loss of \$296 million (\$220 million and \$76 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2013.

During 2014, Institutional Client Services continued to operate in a challenging environment, as economic uncertainty contributed to subdued risk appetite for our clients and generally low levels of activity, particularly in credit products, interest rate products and mortgages. In addition, volatility levels remained low, although volatility increased in certain businesses towards the end of the year. Debt markets were also impacted by the widening of high-yield credit spreads and the decline in oil prices during the second half of the year, which contributed to low liquidity, particularly in credit. Equity markets, however, generally increased during the year.

Operating expenses were \$10.88 billion for 2014, 8% lower than 2013, due to decreased compensation and benefits expenses, reflecting lower net revenues, lower net provisions for litigation and regulatory proceedings, and lower expenses as a result of the sale of a majority stake in our Americas reinsurance business. Pre-tax earnings were



\$4.32 billion in 2014, 10% higher than 2013.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Investing & Lending**

Investing & Lending includes our investing activities and the origination of loans to provide financing to clients. These investments and loans are typically longer-term in nature. We make investments, some of which are consolidated, directly and indirectly through funds and separate accounts that we manage, in debt securities and loans, public and private equity securities, and real estate entities.

The table below presents the operating results of our Investing & Lending segment.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Equity securities	<b>\$3,781</b>	\$4,579	\$4,974
Debt securities and loans	<b>1,655</b>	2,246	2,044
Total net revenues <sup>1</sup>	<b>5,436</b>	6,825	7,018
Operating expenses	<b>2,402</b>	2,819	2,686
<b>Pre-tax earnings</b>	<b>\$3,034</b>	\$4,006	\$4,332

1. Net revenues related to our consolidated investments, previously reported in other net revenues within Investing & Lending, are now reported in equity securities and debt securities and loans, as results from these activities (\$391 million for 2015) are no longer significant principally due to the sale of Metro in the fourth quarter of 2014. Reclassifications have been made to previously reported amounts to conform to the current presentation.

**2015 versus 2014.** Net revenues in Investing & Lending were \$5.44 billion for 2015, 20% lower than 2014. This decrease was primarily due to lower net revenues from investments in equities, principally reflecting the sale of Metro in the fourth quarter of 2014 and lower net gains from investments in private equities, driven by corporate performance. In addition, net revenues in debt securities and loans were significantly lower, reflecting lower net gains from investments.

Although net revenues in Investing & Lending for 2015 benefited from favorable company-specific events, including sales, initial public offerings and financings, a decline in global equity prices and widening high-yield credit spreads during the second half of the year impacted results. Concern about the outlook for the global economy continues to be a meaningful consideration for the global marketplace. If equity markets continue to decline or credit spreads widen further, net revenues in Investing & Lending would likely continue to be negatively impacted.

Operating expenses were \$2.40 billion for 2015, 15% lower than 2014, due to lower depreciation and amortization expenses, primarily reflecting lower impairment charges related to consolidated investments, and a reduction in expenses related to the sale of Metro in the fourth quarter of 2014. Pre-tax earnings were \$3.03 billion in 2015, 24% lower than 2014.

**2014 versus 2013.** Net revenues in Investing & Lending were \$6.83 billion for 2014, 3% lower than 2013. Net revenues from investments in equity securities were lower due to a significant decrease in net gains from investments in public equities, as movements in global equity prices during 2014 were less favorable compared with 2013, as well as significantly lower net revenues related to our consolidated investments, reflecting a decrease in operating revenues from commodities-related consolidated investments. These decreases were partially offset by an increase in net gains from investments in private equities, primarily driven by company-specific events. Net revenues from debt securities and loans were higher than 2013, reflecting a significant increase in net interest income, primarily driven by increased lending, and a slight increase in net gains, primarily due to sales of certain investments during 2014.

During 2014, net revenues in Investing & Lending generally reflected favorable company-specific events, including initial public offerings and financings, and strong corporate performance, as well as net gains from sales of certain investments.

Operating expenses were \$2.82 billion for 2014, 5% higher than 2013, reflecting higher compensation and benefits expenses, partially offset by lower expenses related to consolidated investments. Pre-tax earnings were \$4.01 billion in 2014, 8% lower than 2013.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Investment Management**

Investment Management provides investment management services and offers investment products (primarily through separately managed accounts and commingled vehicles, such as mutual funds and private investment funds) across all major asset classes to a diverse set of institutional and individual clients. Investment Management also offers wealth advisory services, including portfolio management and financial counseling, and brokerage and other transaction services to high-net-worth individuals and families.

Assets under supervision include assets under management and other client assets. Assets under management include client assets where we earn a fee for managing assets on a discretionary basis. This includes net assets in our mutual funds, hedge funds, credit funds and private equity funds (including real estate funds), and separately managed accounts for institutional and individual investors. Other client assets include client assets invested with third-party managers, bank deposits and advisory relationships where we earn a fee for advisory and other services, but do not have investment discretion. Assets under supervision do not include the self-directed brokerage assets of our clients. Long-term assets under supervision represent assets under supervision excluding liquidity products. Liquidity products represent money market and bank deposit assets.

Assets under supervision typically generate fees as a percentage of net asset value, which vary by asset class and are affected by investment performance as well as asset inflows and redemptions. Asset classes such as alternative investment and equity assets typically generate higher fees relative to fixed income and liquidity product assets. The average effective management fee (which excludes non-asset-based fees) we earned on our assets under supervision was 39 basis points for 2015 and 40 basis points for both 2014 and 2013.

In certain circumstances, we are also entitled to receive incentive fees based on a percentage of a fund's or a separately managed account's return, or when the return exceeds a specified benchmark or other performance target. Incentive fees are recognized only when all material contingencies are resolved.

The table below presents the operating results of our Investment Management segment.

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Management and other fees	<b>\$4,887</b>	\$4,800	\$4,386
Incentive fees	<b>780</b>	776	662
Transaction revenues	<b>539</b>	466	415
Total net revenues	<b>6,206</b>	6,042	5,463
Operating expenses	<b>4,841</b>	4,647	4,357
<b>Pre-tax earnings</b>	<b>\$1,365</b>	\$1,395	\$1,106

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The tables below present our period-end assets under supervision (AUS) by asset class and by distribution channel.

<i>\$ in billions</i>	As of December		
	2015	2014	2013
Assets under management	<b>\$1,078</b>	\$1,027	\$ 919
Other client assets	<b>174</b>	151	123
<b>Total AUS</b>	<b>\$1,252</b>	\$1,178	\$1,042

**Asset Class**

Alternative investments <sup>1</sup>	<b>\$ 148</b>	\$ 143	\$ 142
Equity	<b>252</b>	236	208
Fixed income	<b>546</b>	516	446
Long-term AUS	<b>946</b>	895	796
Liquidity products	<b>306</b>	283	246
<b>Total AUS</b>	<b>\$1,252</b>	\$1,178	\$1,042

**Distribution Channel**

Institutional	<b>\$ 471</b>	\$ 412	\$ 363
High-net-worth individuals	<b>369</b>	363	330
Third-party distributed	<b>412</b>	403	349
<b>Total AUS</b>	<b>\$1,252</b>	\$1,178	\$1,042

1. Primarily includes hedge funds, credit funds, private equity, real estate, currencies, commodities and asset allocation strategies.

The table below presents our average monthly assets under supervision by asset class.

<i>\$ in billions</i>	Average for the		
	Year Ended December		
	2015	2014	2013
Alternative investments	<b>\$ 145</b>	\$ 145	\$ 145
Equity	<b>247</b>	225	180
Fixed income	<b>530</b>	499	425
Long-term AUS	<b>922</b>	869	750
Liquidity products	<b>272</b>	248	235

<b>Total AUS</b>	<b>\$1,194</b>	\$1,117	\$ 985
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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

The table below presents a summary of the changes in our assets under supervision.

<i>\$ in billions</i>	Year Ended December		
	2015	2014	2013
Balance, beginning of year	<b>\$1,178</b>	\$1,042	\$ 965
Net inflows/(outflows)			
Alternative investments	<b>7</b>	1	(13)
Equity	<b>23</b>	15	13
Fixed income	<b>41</b>	58	41 <sup>3</sup>
Long-term AUS net inflows/(outflows)	<b>71<sup>1</sup></b>	74	41
Liquidity products	<b>23</b>	37	(4)
Total AUS net inflows/(outflows)	<b>94</b>	111 <sup>2</sup>	37
Net market appreciation/(depreciation)	<b>(20)</b>	25	40
<b>Balance, end of year</b>	<b>\$1,252</b>	\$1,178	\$1,042

1. Includes \$18 billion of fixed income, equity and alternative investments asset inflows in connection with our acquisition of Pacific Global Advisors' solutions business.

2. Includes \$19 billion of fixed income asset inflows in connection with our acquisition of Deutsche Asset & Wealth Management's stable value business and \$6 billion of liquidity products inflows in connection with our acquisition of RBS Asset Management's money market funds.

3. Includes \$10 billion in assets managed by the firm related to our Americas reinsurance business, in which a majority stake was sold in April 2013, that were previously excluded from assets under supervision as they were assets of a consolidated subsidiary.

**2015 versus 2014.** Net revenues in Investment Management were \$6.21 billion for 2015, 3% higher than 2014, due to slightly higher management and other fees, primarily reflecting higher average assets under supervision, and higher transaction revenues. During 2015, total assets under supervision increased \$74 billion to \$1.25 trillion. Long-term assets under supervision increased \$51 billion, including net inflows of \$71 billion (which includes \$18 billion of asset inflows in connection with our acquisition of Pacific Global Advisors' solutions business), and net market depreciation of \$20 billion, both primarily in fixed income and equity assets. In addition, liquidity products increased \$23 billion.

During 2015, Investment Management operated in an environment generally characterized by strong client net inflows, which more than offset the declines in equity and fixed income asset prices, which resulted in depreciation in the value of client assets, particularly in the third quarter of 2015. The mix of average assets under supervision shifted slightly from long-term assets under supervision to liquidity products compared with 2014. In the future, if asset prices continue to decline, or investors continue to favor asset classes that typically generate lower fees or investors withdraw their assets, net revenues in Investment Management would likely be negatively impacted.

Operating expenses were \$4.84 billion for 2015, 4% higher than 2014, due to increased compensation and benefits expenses, reflecting higher net revenues. Pre-tax earnings were \$1.37 billion in 2015, 2% lower than 2014.

**2014 versus 2013.** Net revenues in Investment Management were \$6.04 billion for 2014, 11% higher than 2013, reflecting higher management and other fees, primarily due to higher average assets under supervision, as well as higher incentive fees and transaction revenues. During 2014, total assets under supervision increased \$136 billion to \$1.18 trillion. Long-term assets under supervision increased \$99 billion, including net inflows of \$74 billion (including \$19 billion of fixed income asset inflows in connection with our acquisition of Deutsche Asset & Wealth Management's stable value business) and net market appreciation of \$25 billion, both primarily in fixed income and equity assets. In addition, liquidity products increased \$37 billion (including \$6 billion of inflows in connection with our acquisition of RBS Asset Management's money market funds).

During 2014, Investment Management operated in an environment generally characterized by improved asset prices, primarily in equity and fixed income assets, resulting in appreciation in the value of client assets. In addition, the mix of average assets under supervision shifted slightly from liquidity products to long-term assets under supervision, due to growth in fixed income and equity assets, compared with 2013.

Operating expenses were \$4.65 billion for 2014, 7% higher than 2013, primarily due to increased compensation and benefits expenses, reflecting higher net revenues, and higher fund distribution fees. Pre-tax earnings were \$1.40 billion in 2014, 26% higher than 2013.

### **Geographic Data**

See Note 25 to the consolidated financial statements for a summary of our total net revenues, pre-tax earnings and net earnings by geographic region.



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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

#### **Balance Sheet and Funding Sources**

##### **Balance Sheet Management**

One of our most important risk management disciplines is our ability to manage the size and composition of our balance sheet. While our asset base changes due to client activity, market fluctuations and business opportunities, the size and composition of our balance sheet reflect (i) our overall risk tolerance, (ii) our ability to access stable funding sources and (iii) the amount of equity capital we hold. See [Equity Capital Management and Regulatory Capital](#) [Equity Capital Management](#) for information about our equity capital management process.

Although our balance sheet fluctuates on a day-to-day basis, our total assets at quarter-end and year-end dates are generally not materially different from those occurring within our reporting periods.

In order to ensure appropriate risk management, we seek to maintain a liquid balance sheet and have processes in place to dynamically manage our assets and liabilities which include (i) quarterly planning, (ii) business-specific limits, (iii) monitoring of key metrics and (iv) scenario analyses.

**Quarterly Planning.** We prepare a quarterly balance sheet plan that combines our projected total assets and composition of assets with our expected funding sources for the upcoming quarter. The objectives of this quarterly planning process are:

To develop our near-term balance sheet projections, taking into account the general state of the financial markets and expected business activity levels, as well as current regulatory requirements;

To determine the target amount, tenor and type of funding to raise, based on our projected assets and forecasted maturities; and

To allow business risk managers and managers from our independent control and support functions to objectively evaluate balance sheet limit requests from business managers in the context of the firm's overall balance sheet constraints, including the firm's liability profile and equity capital levels, and key metrics. Limits are typically set at levels that will be periodically exceeded, rather than at levels which reflect our maximum risk appetite.

To prepare our quarterly balance sheet plan, business risk managers and managers from our independent control and support functions meet with business managers to review current and prior period information and discuss expectations for the upcoming quarter. The specific information reviewed includes asset and liability size and composition, aged inventory, limit utilization, risk and performance measures, and capital usage.

Our consolidated quarterly plan, including our balance sheet plans by business, funding projections, and projected key metrics, is reviewed and approved by the Firmwide Finance Committee. See [Overview and Structure of Risk](#)

Management for an overview of our risk management structure.

**Business-Specific Limits.** The Firmwide Finance Committee sets asset and liability limits for each business and aged inventory limits for certain financial instruments as a disincentive to hold inventory over longer periods of time. These limits are set at levels which are close to actual operating levels in order to ensure prompt escalation and discussion among business managers and managers in our independent control and support functions on a routine basis. The Firmwide Finance Committee reviews and approves balance sheet limits on a quarterly basis and may also approve changes in limits on an ad hoc basis in response to changing business needs or market conditions. Requests for changes in limits are evaluated after giving consideration to their impact on key firm metrics. Compliance with limits is monitored on a daily basis by business risk managers, as well as managers in our independent control and support functions.

**Monitoring of Key Metrics.** We monitor key balance sheet metrics daily both by business and on a consolidated basis, including asset and liability size and composition, aged inventory, limit utilization and risk measures. We allocate assets to businesses and review and analyze movements resulting from new business activity as well as market fluctuations.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**Scenario Analyses.** We conduct various scenario analyses including as part of the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Tests (DFAST), as well as our resolution and recovery planning. See Equity Capital Management and Regulatory Capital Equity Capital Management below for further information. These scenarios cover short-term and long-term time horizons using various macroeconomic and firm-specific assumptions, based on a range of economic scenarios. We use these analyses to assist us in developing our longer-term balance sheet management strategy, including the level and composition of assets, funding and equity capital. Additionally, these analyses help us develop approaches for maintaining appropriate funding, liquidity and capital across a variety of situations, including a severely stressed environment.

**Balance Sheet Allocation**

In addition to preparing our consolidated statements of financial condition in accordance with U.S. GAAP, we prepare a balance sheet that generally allocates assets to our businesses, which is a non-GAAP presentation and may not be comparable to similar non-GAAP presentations used by other companies. We believe that presenting our assets on this basis is meaningful because it is consistent with the way management views and manages risks associated with the firm's assets and better enables investors to assess the liquidity of the firm's assets.

The table below presents our balance sheet allocation.

<i>\$ in millions</i>	As of December	
	2015	2014
Global Core Liquid Assets (GCLA)	\$199,120	\$182,947
Other cash	9,180	7,805
<b>GCLA and cash</b>	<b>208,300</b>	190,752
<b>Secured client financing</b>	<b>221,325</b>	210,641
Inventory	208,836	230,667
Secured financing agreements	63,495	74,767
Receivables	39,976	47,317
<b>Institutional Client Services</b>	<b>312,307</b>	352,751
	<b>3,991</b>	4,041

Public equity		
Private equity	16,985	17,979
Debt <sup>1</sup>	23,216	24,768
Loans receivable <sup>2</sup>	45,407	28,938
Other	4,646	3,771
<b>Investing &amp; Lending</b>	<b>94,245</b>	<b>79,497</b>
<b>Total inventory and related assets</b>	<b>406,552</b>	<b>432,248</b>
<b>Other assets</b>	<b>25,218</b>	<b>22,201</b>
<b>Total assets</b>	<b>\$861,395</b>	<b>\$855,842</b>

1. Includes \$17.29 billion and \$18.24 billion as of December 2015 and December 2014, respectively, of direct loans primarily extended to corporate and private wealth management clients that are accounted for at fair value.

2. See Note 9 to the consolidated financial statements for further information about loans receivable. The following is a description of the captions in the table above:

**Global Core Liquid Assets and Cash.** We maintain liquidity to meet a broad range of potential cash outflows and collateral needs in a stressed environment. See Liquidity Risk Management below for details on the composition and sizing of our Global Core Liquid Assets (GCLA). In addition to our GCLA, we maintain other operating cash balances, primarily for use in specific currencies, entities, or jurisdictions where we do not have immediate access to parent company liquidity.

**Secured Client Financing.** We provide collateralized financing for client positions, including margin loans secured by client collateral, securities borrowed, and resale agreements primarily collateralized by government obligations. As a result of client activities, we are required to segregate cash and securities to satisfy regulatory requirements. Our secured client financing arrangements, which are generally short-term, are accounted for at fair value or at amounts that approximate fair value, and include daily margin requirements to mitigate counterparty credit risk.

**Institutional Client Services.** In Institutional Client Services, we maintain inventory positions to facilitate market making in fixed income, equity, currency and commodity products. Additionally, as part of market-making activities, we enter into resale or securities borrowing arrangements to obtain securities which we can use to cover transactions in which we or our clients have sold securities that have not yet been purchased. The receivables in Institutional Client Services primarily relate to securities transactions.

**Investing & Lending.** In Investing & Lending, we make investments and originate loans to provide financing to clients. These investments and loans are typically longer-term in nature. We make investments, directly and indirectly through funds and separate accounts that we manage, in debt securities, loans, public and private equity securities, real estate entities and other investments.

**Other Assets.** Other assets are generally less liquid, non-financial assets, including property, leasehold improvements and equipment, goodwill and identifiable intangible assets, income tax-related receivables, equity-method investments, assets classified as held for sale and miscellaneous receivables.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

The tables below present the reconciliation of this balance sheet allocation to our U.S. GAAP balance sheet. In the tables below:

Total assets for Institutional Client Services and Investing & Lending represent inventory and related assets. These amounts differ from total assets by business segment disclosed in Note 25 to the consolidated financial statements because total assets disclosed in Note 25 include allocations of our GCLA and cash, secured client financing and other assets.

See [Balance Sheet Analysis and Metrics](#) for explanations on the changes in our balance sheet from December 2014 to December 2015.

<i>\$ in millions</i>	As of December 2015					
	GCLA and Cash	Secured Client Financing	Institutional Client Services	Investing & Lending	Other Assets	Total Assets
Cash and cash equivalents	\$ 75,105	\$	\$	\$	\$	\$ 75,105
Cash and securities segregated for regulatory and other purposes		56,838				56,838
Securities purchased under agreements to resell and federal funds sold	60,092	42,786	16,368	1,659		120,905
Securities borrowed	33,260	91,712	47,127			172,099
Receivables from brokers, dealers and clearing organizations		5,912	19,541			25,453
Receivables from customers and counterparties		24,077	20,435	1,918		46,430
Loans receivable				45,407		45,407
Financial instruments owned, at fair value	39,843		208,836	45,261		293,940

Other assets					25,218	25,218
<b>Total assets</b>	<b>\$208,300</b>	<b>\$221,325</b>	<b>\$ 312,307</b>	<b>\$94,245</b>	<b>\$25,218</b>	<b>\$861,395</b>

<i>\$ in millions</i>	As of December 2014					
	GCLA and Cash	Secured Client Financing	Institutional Client Services	Investing & Lending	Other Assets	Total Assets
Cash and cash equivalents	\$ 57,600	\$	\$	\$	\$	\$ 57,600
Cash and securities segregated for regulatory and other purposes		51,716				51,716
Securities purchased under agreements to resell and federal funds sold	66,928	34,506	24,940	1,564		127,938
Securities borrowed	32,311	78,584	49,827			160,722
Receivables from brokers, dealers and clearing organizations		8,908	21,656	107		30,671
Receivables from customers and counterparties		36,927	25,661	1,220		63,808
Loans receivable				28,938		28,938
Financial instruments owned, at fair value	33,913		230,667	47,668		312,248
Other assets					22,201	22,201
<b>Total assets</b>	<b>\$190,752</b>	<b>\$210,641</b>	<b>\$ 352,751</b>	<b>\$79,497</b>	<b>\$22,201</b>	<b>\$855,842</b>

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**Balance Sheet Analysis and Metrics**

As of December 2015, total assets on our consolidated statements of financial condition were \$861.40 billion, an increase of \$5.55 billion from December 2014, reflecting increases in cash and cash equivalents of \$17.51 billion, loans receivable of \$16.47 billion and securities borrowed of \$11.38 billion, partially offset by decreases in financial instruments owned, at fair value of \$18.31 billion, and receivables from customers and counterparties of \$17.38 billion. During 2015, cash and cash equivalents increased primarily due to an increase in GCLA, loans receivable increased, reflecting lending activity, and securities borrowed increased due to firm-related activity. Financial instruments owned, at fair value decreased primarily reflecting the impact of movements in interest rate and currency markets on derivative valuations and the impact of lower market-making activity related to non-U.S. government and agency obligations and corporate debt securities, partially offset by the impact of higher market-making activity related to equities and convertible debentures. Receivables from customers and counterparties decreased primarily due to lower client activity.

As of December 2015, total liabilities on our consolidated statements of financial condition were \$774.67 billion, an increase of \$1.62 billion from December 2014, reflecting increases in deposits of \$14.64 billion and unsecured long-term borrowings of \$8.12 billion, partially offset by a decrease in financial instruments sold, but not yet purchased, at fair value of \$16.84 billion. During 2015, deposits increased primarily in Goldman Sachs Bank USA (GS Bank USA) and unsecured long-term borrowings increased due to net new issuances. Financial instruments sold, but not yet purchased, at fair value decreased primarily reflecting the impact of movements in interest rate and currency markets on derivative valuations.

As of December 2015, our total securities sold under agreements to repurchase, accounted for as collateralized financings, were \$86.07 billion, which was 3% higher than the daily average amount of repurchase agreements during both the quarter ended and year ended December 2015. The increase in our repurchase agreements relative to the daily average during 2015 resulted from an increase in firm financing and client activity at the end of the year.

As of December 2014, our total securities sold under agreements to repurchase, accounted for as collateralized financings, were \$88.22 billion, which was 3% lower and 26% lower than the daily average amount of repurchase agreements during the quarter ended and year ended December 2014, respectively. The decrease in our repurchase agreements relative to the daily average during 2014 resulted from a decrease in client and firm financing activity during the second half of the year, including a reduction in our matched book, primarily resulting from a firmwide initiative to reduce activities with lower returns.

The level of our repurchase agreements fluctuates between and within periods, primarily due to providing clients with access to highly liquid collateral, such as U.S. government and federal agency, and investment-grade sovereign obligations through collateralized financing activities.

The table below presents information about our assets, unsecured long-term borrowings, shareholders' equity and leverage ratios.



<i>\$ in millions</i>	As of December	
	2015	2014
Total assets	<b>\$861,395</b>	\$855,842
Unsecured long-term borrowings	<b>\$175,422</b>	\$167,302
Total shareholders' equity	<b>\$ 86,728</b>	\$ 82,797
Leverage ratio	<b>9.9x</b>	10.3x
Debt to equity ratio	<b>2.0x</b>	2.0x

In the table above:

The leverage ratio equals total assets divided by total shareholders' equity and measures the proportion of equity and debt the firm is using to finance assets. This ratio is different from the Tier 1 leverage ratio included in Note 20 to the consolidated financial statements.

The debt to equity ratio equals unsecured long-term borrowings divided by total shareholders' equity. The table below presents information about our shareholders' equity and book value per common share, including the reconciliation of total shareholders' equity to tangible common shareholders' equity.

<i>\$ in millions, except per share amounts</i>	As of December	
	2015	2014
Total shareholders' equity	<b>\$ 86,728</b>	\$ 82,797
Less: Preferred stock	<b>(11,200)</b>	(9,200)
Common shareholders' equity	<b>75,528</b>	73,597
Less: Goodwill and identifiable intangible assets	<b>(4,148)</b>	(4,160)
<b>Tangible common shareholders' equity</b>	<b>\$ 71,380</b>	\$ 69,437
Book value per common share	<b>\$ 171.03</b>	\$ 163.01
Tangible book value per common share	<b>161.64</b>	153.79

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In the table above:

Tangible common shareholders' equity equals total shareholders' equity less preferred stock, goodwill and identifiable intangible assets. We believe that tangible common shareholders' equity is meaningful because it is a measure that we and investors use to assess capital adequacy. Tangible common shareholders' equity is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies.

Book value per common share and tangible book value per common share are based on common shares outstanding, including restricted stock units (RSUs) granted to employees with no future service requirements, of 441.6 million and 451.5 million as of December 2015 and December 2014, respectively. We believe that tangible book value per common share (tangible common shareholders' equity divided by common shares outstanding, including RSUs granted to employees with no future service requirements) is meaningful because it is a measure that we and investors use to assess capital adequacy. Tangible book value per common share is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies.

**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. See Notes 5 and 6 to the consolidated financial statements for further information about the classification of financial instruments in the fair value hierarchy and **Unsecured Long-Term Borrowings** below for further information about the use of unsecured long-term borrowings as a source of funding.

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.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

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.

**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.

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

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. See Note 16 to the consolidated financial statements for further information about our unsecured long-term borrowings.

**Deposits.** We raise deposits mainly through GS Bank USA and Goldman Sachs International Bank (GSIB). The tables below present the types and sources of our deposits.

As of December 2015

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

<i>\$ in millions</i>	As of December 2014		
	Savings and Demand <sup>1</sup>	Time <sup>2</sup>	Total
Private bank deposits <sup>3</sup>	\$33,590	\$ 1,609	\$35,199
Certificates of deposit		25,780	25,780
Deposit sweep programs <sup>4</sup>	15,691		15,691
Institutional	12	6,198	6,210
<b>Total<sup>5</sup></b>	<b>\$49,293</b>	<b>\$33,587</b>	<b>\$82,880</b>

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 August 2015, GS Bank USA entered into an agreement, subject to regulatory approval, to acquire GE Capital Bank's online deposit platform and to assume approximately \$16 billion of deposits, consisting of approximately \$8 billion in online deposit accounts and approximately \$8 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. See Note 15 to the consolidated financial statements for further information about our unsecured short-term borrowings.

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### **Management's Discussion and Analysis**

#### **Equity Capital Management and Regulatory Capital**

Capital adequacy is of critical importance to us. We have in place a comprehensive capital management policy that provides a framework, defines objectives and establishes guidelines to assist us in maintaining the appropriate level and composition of capital in both business-as-usual and stressed conditions.

#### **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 Board of Governors of the Federal Reserve System (Federal Reserve Board) does not object to such capital actions. See Notes 16 and 19 to the consolidated financial statements for further information about our preferred stock, junior subordinated debt issued to trusts and other subordinated debt.

**Capital Planning and Stress Testing Process.** As part of capital planning, we project sources and uses of capital given a range of business environments, including stressed conditions. Our stress testing process is designed to identify and measure material risks associated with our business activities including market risk, credit risk and operational risk, as well as our ability to generate revenues.

The following is a description of our capital planning and stress testing process:

**Capital Planning.** Our capital planning process incorporates an internal capital adequacy assessment with the objective of ensuring that we are appropriately capitalized relative to the risks in our business. We incorporate stress scenarios into our capital planning process with a goal of holding sufficient capital to ensure we remain adequately capitalized after experiencing a severe stress event. Our assessment of capital adequacy is viewed in tandem with our assessment of liquidity adequacy and is integrated into our overall risk management structure, governance and policy framework.

Our capital planning process also includes an internal risk-based capital assessment. This assessment incorporates market risk, credit risk and operational risk. Market risk is calculated by using Value-at-Risk (VaR) calculations supplemented by risk-based add-ons which include risks related to rare events (tail risks). Credit risk utilizes assumptions about our counterparties' probability of default and the size of our losses in the event of a default. Operational risk is calculated based on scenarios incorporating multiple types of operational failures as well as incorporating internal and external actual loss experience. Backtesting is used to gauge the effectiveness of models at capturing and measuring relevant risks.

**Stress Testing.** Our stress tests incorporate our internally designed stress scenarios, including our internally developed severely adverse scenario, and those required under CCAR and DFAST, and are designed to capture our specific vulnerabilities and risks. We provide additional information about our stress test processes and a summary of the results on our web site as described under [Business Available Information](#) in Part I, Item 1 of the 2015 Form 10-K.



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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

As required by the Federal Reserve Board's annual CCAR rules, we submit a capital plan for review by the Federal Reserve Board. The purpose of the Federal Reserve Board's review is to ensure that we have a robust, forward-looking capital planning process that accounts for our unique risks and that permits continued operation during times of economic and financial stress.

The Federal Reserve Board evaluates us based, in part, on whether we have the capital necessary to continue operating under the baseline and stress scenarios provided by the Federal Reserve Board and those developed internally. This evaluation also takes into account our process for identifying risk, our controls and governance for capital planning, and our guidelines for making capital planning decisions. In addition, the Federal Reserve Board evaluates our plan to make capital distributions (i.e., dividend payments and repurchases or redemptions of stock, subordinated debt or other capital securities) and issue capital, across a range of macroeconomic scenarios and firm-specific assumptions.

In addition, the DFAST rules require us to conduct stress tests on a semi-annual basis and publish a summary of certain results. The Federal Reserve Board also conducts its own annual stress tests and publishes a summary of certain results.

We submitted our initial 2015 CCAR to the Federal Reserve Board in January 2015 and, based on the Federal Reserve Board feedback, we submitted revised capital actions in March 2015. The Federal Reserve Board informed us that it did not object to our revised capital actions, including the repurchase of outstanding common stock, an increase in our quarterly common stock dividend and the possible issuance, redemption and modification of other capital securities from the second quarter of 2015 through the second quarter of 2016. We published a summary of our annual DFAST results in March 2015. See [Business Available Information](#) in Part I, Item 1 of the 2015 Form 10-K.

In July 2015, we submitted the results of our semi-annual DFAST to the Federal Reserve Board and published a summary of our internally developed severely adverse scenario results. See [Business Available Information](#) in Part I, Item 1 of the 2015 Form 10-K.

In accordance with the Federal Reserve Board requirements, we plan to submit our 2016 CCAR in April 2016.

In addition, the rules adopted by the Federal Reserve Board under the Dodd-Frank Act require GS Bank USA to conduct stress tests on an annual basis and publish a summary of certain results. GS Bank USA submitted its 2015 annual DFAST stress results to the Federal Reserve Board in January 2015 and published a summary of its results in March 2015. See [Business Available Information](#) in Part I, Item 1 of the 2015 Form 10-K.

Goldman Sachs International (GSI) also has its own capital planning and stress testing process, which incorporates internally designed stress tests and those required under the Prudential Regulation Authority's (PRA) Internal Capital Adequacy Assessment Process.

**Contingency Capital Plan.** As part of our comprehensive capital management policy, we maintain a contingency capital plan. Our contingency capital plan provides a framework for analyzing and responding to a perceived or actual capital deficiency, including, but not limited to, identification of drivers of a capital deficiency, as well as mitigants and potential actions. It outlines the appropriate communication procedures to follow during a crisis period, including

internal dissemination of information as well as timely communication with external stakeholders.

**Capital Attribution.** We assess each of our businesses' capital usage based upon our internal assessment of risks, which incorporates an attribution of all of our relevant regulatory capital requirements. These regulatory capital requirements are allocated using our attributed equity framework, which takes into consideration our binding capital constraints. We also attribute risk-weighted assets (RWAs) to our business segments. As of December 2015, approximately two-thirds of RWAs calculated in accordance with the Standardized Capital Rules and the Basel III Advanced Rules, subject to transitional provisions, were attributed to our Institutional Client Services segment and substantially all of the remaining RWAs were attributed to our Investing & Lending segment. We manage the levels of our capital usage based upon balance sheet and risk limits, as well as capital return analyses of our businesses based on our capital attribution.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

**Share Repurchase Program.** We use our share repurchase program to help maintain the appropriate level of common equity. The repurchase program is effected primarily through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), the amounts and timing of which are determined primarily by our current and projected capital position and our capital plan submitted to the Federal Reserve Board as part of CCAR. The amounts and timing of the repurchases may also be influenced by general market conditions and the prevailing price and trading volumes of our common stock.

On October 14, 2015, the Board of Directors of Group Inc. (Board) authorized the repurchase of an additional 60.0 million shares of common stock pursuant to our existing share repurchase program. As of December 2015, the remaining share authorization under our existing repurchase program was 63.2 million shares; however, we are only permitted to make repurchases to the extent that such repurchases have not been objected to by the Federal Reserve Board. See *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities* in Part II, Item 5 of the 2015 Form 10-K and Note 19 to the consolidated financial statements for additional information about our share repurchase program and see above for information about our capital planning and stress testing process.

#### **Resolution and Recovery Plans**

We are required by the Federal Reserve Board and the FDIC to submit an annual plan that describes our strategy for a rapid and orderly resolution in the event of material financial distress or failure (resolution plan). We are also required by the Federal Reserve Board to submit and have submitted, on an annual basis, a global recovery plan that outlines the steps that management could take to reduce risk, maintain sufficient liquidity, and conserve capital in times of prolonged stress. In August 2014, the Federal Reserve Board and the FDIC indicated that we and other large industry participants had certain shortcomings in the 2013 resolution plans that must be addressed in the 2015 resolution plans. We submitted our 2015 resolution plan on June 30, 2015. See *Risk Factors* in Part 1, Item 1A of the 2015 Form 10-K for information about the potential consequences to us if we failed to address the identified shortcomings in our 2015 resolution plan.

In addition, GS Bank USA is required by the FDIC to submit a resolution plan. As required, GS Bank USA's 2015 resolution plan was submitted on September 1, 2015.

#### **Rating Agency Guidelines**

The credit rating agencies assign credit ratings to the obligations of Group Inc., which directly issues or guarantees substantially all of the firm's senior unsecured obligations. Goldman, Sachs & Co. (GS&Co.) and GSI have been assigned long- and short-term issuer ratings by certain credit rating agencies. GS Bank USA and GSIB have also been assigned long- and short-term issuer ratings, as well as ratings on their long-term and short-term bank deposits. In addition, credit rating agencies have assigned ratings to debt obligations of certain other subsidiaries of Group Inc.

The level and composition of our equity capital are among the many factors considered in determining our credit ratings. Each agency has its own definition of eligible capital and methodology for evaluating capital adequacy, and assessments are generally based on a combination of factors rather than a single calculation. See *Liquidity Risk*

Management Credit Ratings for further information about credit ratings of Group Inc., GS Bank USA, GSIB, GS&Co. and GSI.

### **Consolidated Regulatory Capital**

We are subject to the Federal Reserve Board's revised risk-based capital and leverage regulations, subject to certain transitional provisions (Revised Capital Framework). These regulations are largely based on the Basel Committee on Banking Supervision's (Basel Committee) 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, we are an Advanced approach banking organization.

As of December 2015, we calculated our 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) as described in Note 20 to the consolidated financial statements. The lower of each ratio calculated in (i) and (ii) is the ratio against which our compliance with 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 us as of December 2015.

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**Management's Discussion and Analysis**

As of December 2014, we calculated our 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 our compliance with 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 us as of December 2014.

See Note 20 to the consolidated financial statements for further information about our capital ratios as of December 2015 and December 2014, and for additional information about the Revised Capital Framework.

**Minimum Capital Ratios and Capital Buffers**

The table below presents our minimum required ratios as of December 2015, as well as the minimum ratios that we expect will apply at the end of the transitional provisions beginning January 2019.

	<b>December 2015</b>	<b>January 2019</b>
	<b>Minimum Ratio <sup>1</sup></b>	<b>Minimum Ratio</b>
CET1 ratio	<b>4.5%</b>	<b>10.0% <sup>4</sup></b>
Tier 1 capital ratio	<b>6.0%</b>	<b>11.5% <sup>4</sup></b>
Total capital ratio	<b>8.0% <sup>3</sup></b>	<b>13.5% <sup>4</sup></b>
Tier 1 leverage ratio <sup>2</sup>	<b>4.0%</b>	<b>4.0%</b>

1. Does not reflect the capital conservation buffer or Global Systemically Important Banks (G-SIBs) surcharge described below.

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).

3. In order to meet the quantitative requirements for being well-capitalized under the Federal Reserve Board's regulations, we must meet a higher required minimum Total capital ratio of 10.0%.

4. Includes the capital conservation buffer of 2.5% and a preliminary G-SIB surcharge of 3.0% estimated by the Federal Reserve Board under the methodology described below.

Under the Revised Capital Framework, the minimum CET1, Tier 1 capital, and Total capital ratios will be supplemented by a capital conservation buffer, consisting entirely of capital that qualifies as CET1, that phases in beginning on January 1, 2016, in increments of 0.625% per year until it reaches 2.5% of RWAs on January 1, 2019.

In July 2015, the Federal Reserve Board approved a final rule establishing a capital surcharge for U.S. G-SIBs (generally higher than that required by the Basel Committee) to be implemented as an extension of the U.S. capital conservation buffer. This surcharge will be phased-in ratably, beginning in 2016, becoming fully effective on January 1, 2019, and must consist entirely of capital that qualifies as CET1. The surcharge must be calculated using two methodologies, the higher of which will be reflected in our minimum risk-based capital ratios. The first calculation is based upon the Basel Committee's methodology which, among other factors, relies upon measures of the size, activity and complexity of each G-SIB (Method One). The second calculation uses similar inputs, but it includes a measure of each firm's reliance on short-term wholesale funding (Method Two). The Federal Reserve Board has indicated that its preliminary estimate of our G-SIB surcharge is 3.0%, based on the Method Two calculation using financial data as of December 2014. The surcharge becomes applicable to us beginning in 2016 on a phased-in basis, and will be updated annually based on financial data as of the end of the prior year. We currently estimate that, based on information as of December 2015, we are at or near the threshold for a lower G-SIB surcharge. However, the surcharge in the future may differ from the estimate above due to additional guidance from our regulators and/or positional changes.

The Revised Capital Framework also provides a counter-cyclical capital buffer of up to 2.5% (and also consisting entirely of CET1) in order to counteract excessive credit growth. The Federal Reserve Board has not finalized all of the regulations with respect to this buffer and the table above does not reflect this buffer.

Our regulators could change these buffers in the future. As a result, the minimum ratios we are subject to as of January 1, 2019 could be higher than the amounts presented in the table above.

Our minimum required supplementary leverage ratio will be 5.0% on January 1, 2018. See [Supplementary Leverage Ratio](#) below for further information.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Fully Phased-in Capital Ratios**

The table below presents our capital ratios calculated in accordance with the Standardized Capital Rules and the Basel III Advanced Rules on a fully phased-in basis.

<i>\$ in millions</i>	As of December	
	<b>2015</b>	2014
Common shareholders' equity	<b>\$ 75,528</b>	\$ 73,597
Deductions for goodwill and identifiable intangible assets, net of deferred tax liabilities	<b>(3,044)</b>	(3,196)
Deductions for investments in nonconsolidated financial institutions	<b>(2,274)</b>	(4,928)
Other adjustments	<b>(1,409)</b>	(1,213)
<b>Total Common Equity Tier 1</b>	<b>68,801</b>	64,260
Perpetual non-cumulative preferred stock	<b>11,200</b>	9,200
Deduction for investments in covered funds	<b>(413)</b>	
Other adjustments	<b>(128)</b>	(286)
<b>Tier 1 capital</b>	<b>\$ 79,460</b>	\$ 73,174
<b>Standardized Tier 2 and total capital</b>		
Tier 1 capital	<b>\$ 79,460</b>	\$ 73,174
Qualifying subordinated debt	<b>15,132</b>	11,894
Allowance for losses on loans and lending commitments	<b>602</b>	316
Other adjustments	<b>(19)</b>	(9)
Standardized Tier 2 capital	<b>15,715</b>	12,201
<b>Standardized total capital</b>	<b>\$ 95,175</b>	\$ 85,375
<b>Basel III Advanced Tier 2 and total capital</b>		
Tier 1 capital	<b>\$ 79,460</b>	\$ 73,174
Standardized Tier 2 capital	<b>15,715</b>	12,201

Allowance for losses on loans and lending commitments	(602)	(316)
Basel III Advanced Tier 2 capital	15,113	11,885
<b>Basel III Advanced total capital</b>	<b>\$ 94,573</b>	<b>\$ 85,059</b>

**RWAs**

Standardized	\$534,135	\$627,444
Basel III Advanced	587,319	577,869

**CET1 ratio**

Standardized	12.9%	10.2%
Basel III Advanced	11.7%	11.1%

**Tier 1 capital ratio**

Standardized	14.9%	11.7%
Basel III Advanced	13.5%	12.7%

**Total capital ratio**

Standardized	17.8%	13.6%
Basel III Advanced	16.1%	14.7%

Although the fully phased-in capital ratios are not applicable until 2019, we believe that the ratios in the table above are meaningful because they are measures that we, our regulators and investors use to assess our ability to meet future regulatory capital requirements. The fully phased-in Basel III Advanced and Standardized capital ratios are non-GAAP measures as of both December 2015 and December 2014 and may not be comparable to similar non-GAAP measures used by other companies as of those dates. These ratios are based on our current interpretation, expectations and understanding of the Revised Capital Framework and may evolve as we discuss its interpretation and application with our regulators.

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 \$491 million and \$515 million as of December 2015 and December 2014, respectively, net of associated deferred tax liabilities of \$1.10 billion and \$964 million as of December 2015 and December 2014, respectively.

The deductions for investments in nonconsolidated financial institutions represent the amount by which our investments in the capital of nonconsolidated financial institutions exceed certain prescribed thresholds. The decrease from December 2014 to December 2015 primarily reflects reductions in our fund investments.

The deduction for investments in covered funds represents our 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 our market-making activities. This deduction became effective in July 2015 and is not subject to a transition period. See [Regulatory Developments](#) below for further information



about the Volcker Rule.

Other adjustments within CET1 and Tier 1 capital primarily include the overfunded portion of our defined benefit pension plan obligation net of associated deferred tax liabilities, disallowed deferred tax assets, credit valuation adjustments on derivative liabilities, debt valuation adjustments and other required credit risk-based deductions.

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. See Note 16 to the consolidated financial statements for additional information about our subordinated debt.

See Note 20 to the consolidated financial statements for information about our transitional capital ratios, which represent the ratios that are applicable to us as of December 2015 and December 2014.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Supplementary Leverage Ratio**

The Revised Capital Framework includes a supplementary leverage ratio requirement for Advanced approach banking organizations. Under amendments to the Revised Capital Framework, the U.S. federal bank regulatory agencies approved a final rule that implements the supplementary leverage ratio aligned with the definition of leverage established by the Basel Committee. The supplementary leverage ratio compares Tier 1 capital to a measure of leverage exposure, defined as total daily average assets for the quarter less certain deductions plus certain off-balance-sheet exposures, including a measure of derivatives exposures and commitments. The Revised Capital Framework requires a minimum supplementary leverage ratio of 5.0% (comprised of the minimum requirement of 3.0% and a 2.0% buffer) for U.S. bank holding companies deemed to be G-SIBs, effective on January 1, 2018.

As of December 2015 and December 2014, our supplementary leverage ratio was 5.9% and 5.0%, respectively, based on Tier 1 capital on a fully phased-in basis of \$79.46 billion and \$73.17 billion, respectively, divided by total leverage exposure of \$1.34 trillion (total daily average assets for the quarter of \$878 billion plus adjustments of \$465 billion) and \$1.45 trillion (total daily average assets for the quarter of \$873 billion plus adjustments of \$579 billion), respectively. Within total leverage exposure, the adjustments to quarterly average assets in both periods were primarily comprised of off-balance-sheet exposures related to derivatives, secured financing transactions, commitments and guarantees.

The supplementary leverage ratio was not a required regulatory disclosure as of December 2014. Therefore, it was a non-GAAP measure as of December 2014 and may not be comparable to similar non-GAAP measures used by other companies as of that date.

This supplementary leverage ratio is based on our current interpretation and understanding of the U.S. federal bank regulatory agencies' final rule and may evolve as we discuss its interpretation and application with our regulators.

### **Subsidiary Capital Requirements**

Many of our subsidiaries, including GS Bank USA and our broker-dealer subsidiaries, are subject to separate regulation and capital requirements of the jurisdictions in which they operate.

**GS Bank USA.** GS Bank USA is subject to regulatory capital requirements that are calculated in substantially the same manner as those applicable to bank holding companies and calculates its capital ratios in accordance with the risk-based capital and leverage requirements applicable to state member banks, which are based on the Revised Capital Framework. See Note 20 to the consolidated financial statements for further information about the Revised Capital Framework as it relates to GS Bank USA, including GS Bank USA's capital ratios and required minimum ratios.

In addition, under Federal Reserve Board rules, commencing on January 1, 2018, in order to be considered a well-capitalized depository institution, GS Bank USA must have a supplementary leverage ratio of 6.0% or greater. The supplementary leverage ratio compares Tier 1 capital to a measure of leverage exposure, defined as total daily average assets for the quarter less certain deductions plus certain off-balance-sheet exposures, including a measure of

derivatives exposures and commitments. As of December 2015, GS Bank USA's supplementary leverage ratio was 7.1%, based on Tier 1 capital on a fully phased-in basis of \$23.02 billion, divided by total leverage exposure of \$324 billion (total daily average assets for the quarter of \$134 billion plus adjustments of \$190 billion). As of December 2014, GS Bank USA would also have met the well-capitalized minimum. This supplementary leverage ratio is based on our current interpretation and understanding of this rule and may evolve as we discuss their interpretation and application with our regulators.

**GSI.** Our regulated U.K. broker-dealer, GSI, is one of our principal non-U.S. regulated subsidiaries and is regulated by the PRA and the Financial Conduct Authority. GSI is subject to the revised capital framework for European Union (EU)-regulated financial institutions (the fourth EU Capital Requirements Directive and EU Capital Requirements Regulation, collectively known as CRD IV ). These capital regulations are largely based on Basel III.

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The table below presents GSI's minimum required ratios as of December 2015, as well as the minimum required ratios that became effective in January 2016.

	<b>December 2015 Minimum Ratio</b>	<b>January 2016 Minimum Ratio</b>
CET1 ratio	<b>6.1%</b>	<b>6.6%</b>
Tier 1 capital ratio	<b>8.2%</b>	<b>8.5%</b>
Total capital ratio	<b>10.9%</b>	<b>11.2%</b>

The minimum ratios in the table above incorporate capital guidance received from the PRA and could change in the future. GSI's future capital requirements may also be impacted by developments such as the introduction of capital buffers as described above in Minimum Capital Ratios and Capital Buffers.

As of December 2015, GSI had a CET1 ratio of 12.9%, a Tier 1 capital ratio of 12.9% and a Total capital ratio of 17.6%. Each of these ratios includes approximately 70 bps attributable to unaudited results for the year ended December 2015. These ratios will be finalized upon the completion of the 2015 GSI audit. As of December 2014, GSI had a CET1 ratio of 9.7%, a Tier 1 capital ratio of 9.7% and a Total capital ratio of 12.7%. The ratios for both December 2015 and December 2014 reflect the applicable transitional provisions.

CRD IV, as amended by the European Commission Delegated Act (the Delegated Act), introduced a new leverage ratio, which compares CRD IV's definition of Tier 1 capital to a measure of leverage exposure, defined as the sum of assets less Tier 1 capital deductions plus certain off-balance-sheet exposures, including a measure of derivatives exposures, securities financing transactions and commitments. The Delegated Act does not currently include a minimum leverage ratio requirement; however, the Basel Committee has proposed a minimum requirement of 3%. Any required minimum ratio is expected to become effective for GSI on January 1, 2018. As of December 2015, GSI had a leverage ratio of 3.6%. This leverage ratio is based on our current interpretation and understanding of this rule and may evolve as we discuss its interpretation and application with GSI's regulators.

**Other Subsidiaries.** We expect that the capital requirements of several of our subsidiaries are likely to increase in the future due to the various developments arising from the Basel Committee, the Dodd-Frank Act, and other governmental entities and regulators. See Note 20 to the consolidated financial statements for information about the capital requirements of our other regulated subsidiaries.

Subsidiaries not subject to separate regulatory capital requirements may hold capital to satisfy local tax and legal guidelines, rating agency requirements (for entities with assigned credit ratings) or internal policies, including policies concerning the minimum amount of capital a subsidiary should hold based on its underlying level of risk. In certain instances, Group Inc. may be limited in its ability to access capital held at certain subsidiaries as a result of regulatory, tax or other constraints. As of December 2015 and December 2014, Group Inc.'s equity investment in subsidiaries was \$85.52 billion and \$79.70 billion, respectively, compared with its total shareholders' equity of \$86.73 billion and

\$82.80 billion, respectively.

Our capital invested in non-U.S. subsidiaries is generally exposed to foreign exchange risk, substantially all of which is managed through a combination of derivatives and non-U.S. denominated debt. See Note 7 to the consolidated financial statements for information about our net investment hedges, which are used to hedge this risk.

**Guarantees of Subsidiaries.** Group Inc. has guaranteed the payment obligations of GS&Co., GS Bank USA, and Goldman Sachs Execution & Clearing, L.P. (GSEC), in each case subject to certain exceptions. In November 2008, Group Inc. contributed subsidiaries into GS Bank USA, and Group Inc. agreed to guarantee certain losses, including credit-related losses, relating to assets held by the contributed entities.

### **Regulatory Developments**

Our businesses are subject to significant and evolving regulation. The Dodd-Frank Act, enacted in July 2010, significantly altered the financial regulatory regime within which we operate. In addition, other reforms have been adopted or are being considered by regulators and policy makers worldwide. We expect that the principal areas of impact from regulatory reform for us will be increased regulatory capital requirements and increased regulation and restriction on certain activities. However, given that many of the new and proposed rules are highly complex, the full impact of regulatory reform will not be known until the rules are implemented and market practices develop under the final regulations.

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#### **Management's Discussion and Analysis**

There has been increased regulation of, and limitations on, our activities, including the Dodd-Frank Act prohibition on proprietary trading and the limitation on the sponsorship of, and investment in, covered funds (as defined in the Volcker Rule). In addition, there is increased regulation of, and restrictions on, OTC derivatives markets and transactions, particularly related to swaps and security-based swaps.

See Business Regulation in Part I, Item 1 of the 2015 Form 10-K for more information about the laws, rules and regulations and proposed laws, rules and regulations that apply to us and our operations. In addition, see Note 20 to the consolidated financial statements for information about regulatory developments as they relate to our regulatory capital and leverage ratios.

#### **Volcker Rule**

The provisions of the Dodd-Frank Act referred to as the Volcker Rule, became effective in July 2015 (subject to a conformance period, as applicable). The Volcker Rule prohibits proprietary trading, but permits activities such as underwriting, market making and risk-mitigation hedging, requires an extensive compliance program and includes additional reporting and record keeping requirements. The initial implementation of these rules did not have a material impact on our financial condition, results of operations or cash flows. However, the rule is highly complex, and its impact may change as market practices further develop.

In addition to the prohibition on proprietary trading, the Volcker Rule limits the sponsorship of, and investment in, covered funds by banking entities, including Group Inc. and its subsidiaries. It also limits certain types of transactions between us and our sponsored funds, similar to the limitations on transactions between depository institutions and their affiliates as described in Business Regulation in Part I, Item 1 of the 2015 Form 10-K. Covered funds include our private equity funds, certain of our credit and real estate funds, our hedge funds and certain other investment structures. The limitation on investments in covered funds requires us to reduce our investment in each such fund to 3% or less of the fund's net asset value, and to reduce our aggregate investment in all such funds to 3% or less of our Tier 1 capital.

Beginning in July 2015, our investments in applicable covered funds purchased after December 2013 are required to be deducted from Tier 1 capital. See Fully Phased-in Capital Ratios above for further information about our Tier 1 capital and the deduction for investments in covered funds.

We continue to manage our existing interests in such funds, taking into account the conformance period under the Volcker Rule. We plan to continue to conduct our investing and lending activities in ways that are permissible under the Volcker Rule.

Our current investment in funds that are measured at NAV is \$7.76 billion. In order to be compliant with the Volcker Rule, we will be required to reduce most of our interests in these funds by the end of the conformance period. See Note 6 to the consolidated financial statements for further information about our investment in funds measured at NAV and the conformance period for covered funds.

Although our net revenues from our interests in private equity, credit, real estate and hedge funds may vary from period to period, our aggregate net revenues from these investments were approximately 3% and 5% of our aggregate total net revenues over the last 10 years and 5 years, respectively.

### **Total Loss-Absorbing Capacity**

In October 2015, the Federal Reserve Board issued a proposed rule which would establish a new total loss-absorbing capacity (TLAC) requirement for U.S. bank holding companies designated as G-SIBs. The TLAC proposal has been designed so that, in the event of a G-SIB's failure, there will be sufficient external loss-absorbing capacity available in order for authorities to implement an orderly resolution of the G-SIB. The proposal would require G-SIBs to maintain an amount of regulatory capital and eligible long-term debt (i.e., debt that is unsecured, has a maturity greater than one year from issuance and satisfies certain additional criteria) to cover a percentage of RWAs and/or leverage exposure (the denominator in the supplementary leverage ratio).

Under the proposed rule, eligible long-term debt would exclude, among other instruments, debt securities that permit acceleration for reasons other than insolvency or payment default, as well as structured notes, as defined in the TLAC proposal, and debt securities not governed by U.S. law. The senior long-term debt of U.S. G-SIBs, including Group Inc., typically permits acceleration for reasons other than insolvency or payment default, and therefore would not qualify as eligible long-term debt under the proposed rule.

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The proposed rule would prohibit Group Inc., as a U.S. G-SIB, from (i) guaranteeing liabilities of subsidiaries that are subject to early termination provisions under certain conditions, (ii) incurring liabilities guaranteed by subsidiaries, (iii) issuing short-term debt, or (iv) entering into derivatives and certain other financial contracts with external counterparties. Additionally, the proposed rule would cap the amount of certain liabilities of a U.S. G-SIB that are not eligible long-term debt. Finally, the proposed rule would require U.S. G-SIBs and other large banking entities to deduct from their own Tier 2 capital certain holdings in unsecured debt of other U.S. G-SIBs, as well as holdings of their own unsecured debt securities.

Under the proposal, the TLAC requirements would phase in between 2019 and 2022. We are currently evaluating the impact of the proposed TLAC requirements. See Business Regulation in Part I, Item 1 of the 2015 Form 10-K for further information on the Federal Reserve Board's proposed TLAC rule.

**Other Developments**

In January 2016, the Basel Committee finalized a revised framework for calculating minimum capital requirements for market risk. The revisions constitute a fundamental change to the calculation of both model-based and non-model-based components of market risk capital. The Basel Committee has set an effective date for first reporting under the revised framework of December 31, 2019. The U.S. federal bank regulatory agencies have not yet proposed rules implementing these revisions for U.S. banking organizations. We are currently evaluating the potential impact of the Basel Committee's revised framework.

See Business Regulation in Part I, Item 1 of the 2015 Form 10-K for further information on regulations that may impact us in the future.

**Off-Balance-Sheet Arrangements**

**and Contractual Obligations**

**Off-Balance-Sheet Arrangements**

We have various types of off-balance-sheet arrangements that we enter into in the ordinary course of business. Our involvement in these arrangements can take many different forms, including:

Purchasing or retaining residual and other interests in special purpose entities such as mortgage-backed and other asset-backed securitization vehicles;

Holding senior and subordinated debt, interests in limited and general partnerships, and preferred and common stock in other nonconsolidated vehicles;



Entering into interest rate, foreign currency, equity, commodity and credit derivatives, including total return swaps;

Entering into operating leases; and

Providing guarantees, indemnifications, loan commitments, letters of credit and representations and warranties. We enter into these arrangements for a variety of business purposes, including securitizations. The securitization vehicles that purchase mortgages, corporate bonds, and other types of financial assets are critical to the functioning of several significant investor markets, including the mortgage-backed and other asset-backed securities markets, since they offer investors access to specific cash flows and risks created through the securitization process.

We also enter into these arrangements to underwrite client securitization transactions; provide secondary market liquidity; make investments in performing and nonperforming debt, equity, real estate and other assets; provide investors with credit-linked and asset-repackaged notes; and receive or provide letters of credit to satisfy margin requirements and to facilitate the clearance and settlement process.

Our financial interests in, and derivative transactions with, such nonconsolidated entities are generally accounted for at fair value, in the same manner as our other financial instruments, except in cases where we apply the equity method of accounting.

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The table below presents where information about our various off-balance-sheet arrangements may be found in the 2015 Form 10-K. In addition, see Note 3 to the consolidated financial statements for information about our consolidation policies.

<b>Type of Off-Balance-Sheet Arrangement</b>	<b>Disclosure in Form 10-K</b>
Variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated VIEs	See Note 12 to the consolidated financial statements.
Leases, letters of credit, and lending and other commitments	See Contractual Obligations below and Note 18 to the consolidated financial statements.
Guarantees	See Contractual Obligations below and Note 18 to the consolidated financial statements.
Derivatives	See Credit Risk Management Credit Exposures OTC Derivatives below and Notes 4, 5, 7 and 18 to the consolidated financial statements.

**Contractual Obligations**

We have certain contractual obligations which require us to make future cash payments. These contractual obligations include our unsecured long-term borrowings, secured long-term financings, time deposits and contractual interest payments, all of which are included in our consolidated statements of financial condition.

Our obligations to make future cash payments also include certain off-balance-sheet contractual obligations such as purchase obligations, minimum rental payments under noncancelable leases and commitments and guarantees.

The table below presents our contractual obligations, commitments and guarantees by type.

<i>\$ in millions</i>	As of December	
	2015	2014
<b>Amounts related to on-balance-sheet obligations</b>		
Time deposits	\$ 25,748	\$ 18,719
Secured long-term financings	10,520	7,249
Unsecured long-term borrowings	175,422	167,302

Contractual interest payments	59,327	61,416
Subordinated liabilities issued by consolidated VIEs	501	843
<b>Amounts related to off-balance-sheet arrangements</b>		
Commitments to extend credit	117,158	95,949
Contingent and forward starting resale and securities borrowing agreements	28,874	35,225
Forward starting repurchase and secured lending agreements	5,878	8,180
Letters of credit	249	308
Investment commitments	6,054	5,164
Other commitments	6,944	6,321
Minimum rental payments	2,575	2,173
Derivative guarantees	926,443	612,735
Securities lending indemnifications	31,902	27,567
Other financial guarantees	4,461	4,486

The table below presents our contractual obligations, commitments and guarantees by period of expiration.

### Contractual Obligations, Commitments and

#### Guarantees Amount by Period

#### of Expiration as of December 2015

<i>\$ in millions</i>	2016	2017 - 2018	2019 - 2020	2021 - Thereafter
<b>Amounts related to on-balance-sheet obligations</b>				
Time deposits	\$	\$ 10,314	\$ 7,122	\$ 8,312
Secured long-term financings		8,465	1,435	620
Unsecured long-term borrowings		50,493	33,990	90,939
Contractual interest payments	6,613	11,742	8,381	32,591
Subordinated liabilities issued by consolidated VIEs				501
<b>Amounts related to off-balance-sheet arrangements</b>				
Commitments to extend credit	28,404	24,956	53,822	9,976
Contingent and forward starting resale and securities borrowing agreements	28,839	35		

Forward starting repurchase and secured lending agreements	<b>5,878</b>			
Letters of credit	<b>217</b>	<b>25</b>	<b>3</b>	<b>4</b>
Investment commitments	<b>4,600</b>	<b>336</b>	<b>24</b>	<b>1,094</b>
Other commitments	<b>6,484</b>	<b>339</b>	<b>70</b>	<b>51</b>
Minimum rental payments	<b>317</b>	<b>614</b>	<b>484</b>	<b>1,160</b>
Derivative guarantees	<b>640,288</b>	<b>168,784</b>	<b>67,643</b>	<b>49,728</b>
Securities lending indemnifications	<b>31,902</b>			
Other financial guarantees	<b>611</b>	<b>1,402</b>	<b>1,772</b>	<b>676</b>

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In the table above:

The 2016 column includes \$2.53 billion of investment commitments to covered funds (as defined by the Volcker Rule). We expect that substantially all of these commitments will not be called.

Obligations maturing within one year of our financial statement date or redeemable within one year of our financial statement date at the option of the holders are excluded as they are treated as short-term obligations.

Obligations that are repayable prior to maturity at our option are reflected at their contractual maturity dates and obligations that are redeemable prior to maturity at the option of the holders are reflected at the earliest dates such options become exercisable.

Amounts included in the table do not necessarily reflect the actual future cash flow requirements for these arrangements because commitments and guarantees represent notional amounts and may expire unused or be reduced or cancelled at the counterparty's request.

Due to the uncertainty of the timing and amounts that will ultimately be paid, our liability for unrecognized tax benefits has been excluded. See Note 24 to the consolidated financial statements for further information about our unrecognized tax benefits.

Unsecured long-term borrowings includes \$8.34 billion of adjustments to the carrying value of certain unsecured long-term borrowings resulting from the application of hedge accounting.

The aggregate contractual principal amount of secured long-term financings and unsecured long-term borrowings for which the fair value option was elected exceeded the related fair value by \$362 million and \$1.12 billion, respectively.

Contractual interest payments represents estimated future interest payments related to unsecured long-term borrowings, secured long-term financings and time deposits based on applicable interest rates as of December 2015, and includes stated coupons, if any, on structured notes.

See Notes 15 and 18 to the consolidated financial statements for further information about our short-term borrowings and commitments and guarantees, respectively.

As of December 2015, our unsecured long-term borrowings were \$175.42 billion, with maturities extending to 2061, and consisted principally of senior borrowings. See Note 16 to the consolidated financial statements for further information about our unsecured long-term borrowings.

As of December 2015, our future minimum rental payments, net of minimum sublease rentals under noncancelable leases, were \$2.58 billion. These lease commitments for office space expire on various dates through 2069. Certain agreements are subject to periodic escalation provisions for increases in real estate taxes and other charges. See Note 18 to the consolidated financial statements for further information about our leases.

Our occupancy expenses include costs associated with office space held in excess of our current requirements. This excess space, the cost of which is charged to earnings as incurred, is being held for potential growth or to replace currently occupied space that we may exit in the future. We regularly evaluate our current and future space capacity in relation to current and projected staffing levels. For 2015, total occupancy expenses for space held in excess of our current requirements and exit costs related to our office space were not material. We may incur exit costs in the future to the extent we (i) reduce our space capacity or (ii) commit to, or occupy, new properties in the locations in which we operate and, consequently, dispose of existing space that had been held for potential growth. These exit costs may be material to our results of operations in a given period.

### **Risk Management**

Risks are inherent in our business and include liquidity, market, credit, operational, legal, regulatory and reputational risks. For further information about our risk management processes, see [Overview and Structure of Risk Management](#) below. Our risks include the risks across our risk categories, regions or global businesses, as well as those which have uncertain outcomes and have the potential to materially impact our financial results, our liquidity and our reputation. For further information about our areas of risk, see [Liquidity Risk Management](#), [Market Risk Management](#), [Credit Risk Management](#), [Operational Risk Management](#), [Model Risk Management](#) and [Risk Factors](#) in Part I, Item 1 of the 2015 Form 10-K.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## Management's Discussion and Analysis

### Overview and Structure of Risk

#### Management

##### Overview

We believe that effective risk management is of primary importance to the success of the firm. Accordingly, we have comprehensive risk management processes through which we monitor, evaluate and manage the risks we assume in conducting our activities. These include market, credit, liquidity, operational, model, legal, regulatory and reputational risk exposures. Our risk management framework is built around three core components: governance, processes and people.

**Governance.** Risk management governance starts with our Board, which plays an important role in reviewing and approving risk management policies and practices, both directly and through its committees, including its Risk Committee. The Board also receives regular briefings on firmwide risks, including market risk, liquidity risk, credit risk, operational risk and model risk from our independent control and support functions, including the chief risk officer, and on matters impacting our reputation from the chair of our Firmwide Client and Business Standards Committee. The chief risk officer, as part of the review of the firmwide risk portfolio, regularly advises the Risk Committee of the Board of relevant risk metrics and material exposures. Next, at the most senior levels of the firm, our leaders are experienced risk managers, with a sophisticated and detailed understanding of the risks we take. Our senior management, and senior managers in our revenue-producing units and independent control and support functions, lead and participate in risk-oriented committees. Independent control and support functions include Business Selection and Conflicts Resolution (Conflicts), Compliance, Controllers, Credit Risk Management and Advisory (Credit Risk Management), Human Capital Management, Legal, Liquidity Risk Management and Analysis (Liquidity Risk Management), Market Risk Management and Analysis (Market Risk Management), Model Risk Management, Operations, Operational Risk Management and Analysis (Operational Risk Management), Tax, Technology and Treasury.

Our governance structure provides the protocol and responsibility for decision-making on risk management issues and ensures implementation of those decisions. We make extensive use of risk-related committees that meet regularly and serve as an important means to facilitate and foster ongoing discussions to identify, manage and mitigate risks.

We maintain strong communication about risk and we have a culture of collaboration in decision-making among the revenue-producing units, independent control and support functions, committees and senior management. While we believe that the first line of defense in managing risk rests with the managers in our revenue-producing units, we dedicate extensive resources to independent control and support functions in order to ensure a strong oversight structure and an appropriate segregation of duties. We regularly reinforce our strong culture of escalation and accountability across all divisions and functions.

**Processes.** We maintain various processes and procedures that are critical components of our risk management. First and foremost is our daily discipline of marking substantially all of our inventory to current market levels. Goldman Sachs carries its inventory at fair value, with changes in valuation reflected immediately in our risk management

systems and in net revenues. We do so because we believe this discipline is one of the most effective tools for assessing and managing risk and that it provides transparent and realistic insight into our financial exposures.

We also apply a rigorous framework of limits to control risk across multiple transactions, products, businesses and markets. This includes approval of limits at both firmwide and business levels by the Risk Committee of the Board. In addition, the Firmwide Risk Committee is responsible for approving limits, subject to the overall limits approved by the Risk Committee of the Board, at a variety of levels and monitoring these limits on a daily basis. Divisional risk committees are responsible for setting sub-limits below the overall business-level limits approved by the Firmwide Risk Committee. Limits are typically set at levels that will be periodically exceeded, rather than at levels which reflect our maximum risk appetite. This fosters an ongoing dialogue on risk among revenue-producing units, independent control and support functions, committees and senior management, as well as rapid escalation of risk-related matters. See [Liquidity Risk Management](#), [Market Risk Management](#) and [Credit Risk Management](#) for further information about our risk limits.



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#### **Management's Discussion and Analysis**

Active management of our positions is another important process. Proactive mitigation of our market and credit exposures minimizes the risk that we will be required to take outsized actions during periods of stress.

We also focus on the rigor and effectiveness of our risk systems. The goal of our risk management technology is to get the right information to the right people at the right time, which requires systems that are comprehensive, reliable and timely. We devote significant time and resources to our risk management technology to ensure that it consistently provides us with complete, accurate and timely information.

**People.** Even the best technology serves only as a tool for helping to make informed decisions in real time about the risks we are taking. Ultimately, effective risk management requires our people to interpret our risk data on an ongoing and timely basis and adjust risk positions accordingly. In both our revenue-producing units and our independent control and support functions, the experience of our professionals, and their understanding of the nuances and limitations of each risk measure, guide us in assessing exposures and maintaining them within prudent levels.

We reinforce a culture of effective risk management in our training and development programs as well as the way we evaluate performance, and recognize and reward our people. Our training and development programs, including certain sessions led by our most senior leaders, are focused on the importance of risk management, client relationships and reputational excellence. As part of our annual performance review process, we assess reputational excellence including how an employee exercises good risk management and reputational judgment, and adheres to our code of conduct and compliance policies. Our review and reward processes are designed to communicate and reinforce to our professionals the link between behavior and how people are recognized, the need to focus on our clients and our reputation, and the need to always act in accordance with the highest standards of the firm.

#### **Structure**

Ultimate oversight of risk is the responsibility of our Board. The Board oversees risk both directly and through its committees, including its Risk Committee. Within the firm, a series of committees with specific risk management mandates have oversight or decision-making responsibilities for risk management activities. Committee membership generally consists of senior managers from both our revenue-producing units and our independent control and support functions. We have established procedures for these committees to ensure that appropriate information barriers are in place. Our primary risk committees, most of which also have additional sub-committees or working groups, are described below. In addition to these committees, we have other risk-oriented committees which provide oversight for different businesses, activities, products, regions and legal entities. All of our firmwide, regional and divisional committees have responsibility for considering the impact of transactions and activities which they oversee on our reputation.

Membership of our risk committees is reviewed regularly and updated to reflect changes in the responsibilities of the committee members. Accordingly, the length of time that members serve on the respective committees varies as determined by the committee chairs and based on the responsibilities of the members within the firm.

In addition, independent control and support functions, which report to the chief executive officer, the president and chief operating officer, the chief financial officer, the chief risk officer and the chief administrative officer, are

responsible for day-to-day oversight or monitoring of risk, as illustrated in the chart below and as described in greater detail in the following sections. Internal Audit, which reports to the Audit Committee of the Board and includes professionals with a broad range of audit and industry experience, including risk management expertise, is responsible for independently assessing and validating key controls within the risk management framework.

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The chart below presents an overview of our risk management governance structure, highlighting the oversight of our Board, our key risk-related committees and the independence of our key control and support functions.

**Management Committee.** The Management Committee oversees our global activities, including all of our independent control and support functions. It provides this oversight directly and through authority delegated to committees it has established. This committee is comprised of our most senior leaders, and is chaired by our chief executive officer. The Management Committee has established various committees with delegated authority and the chair of the Management Committee appoints the chairs of these committees. Most members of the Management Committee are also members of other firmwide, divisional and regional committees. The following are the committees that are principally involved in firmwide risk management.

**Firmwide Client and Business Standards Committee.** The Firmwide Client and Business Standards Committee assesses and makes determinations regarding business standards and practices, reputational risk management, client relationships and client service, is chaired by our president and chief operating officer, and reports to the Management Committee. This committee also has responsibility for overseeing recommendations of the Business Standards Committee. This committee periodically updates and receives guidance from the Public Responsibilities Committee of the Board. This committee has also established certain committees that report to it, including divisional Client and Business Standards Committees and risk-related committees. The following are the risk-related committees that report to the Firmwide Client and Business Standards Committee:

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**Firmwide New Activity Committee.** The Firmwide New Activity Committee is responsible for reviewing new activities and for establishing a process to identify and review previously approved activities that are significant and that have changed in complexity and/or structure or present different reputational and suitability concerns over time to consider whether these activities remain appropriate. This committee is co-chaired by our global treasurer and the chief administrative officer of our Investment Management Division, who are appointed as co-chairs by the chair of the Firmwide Client and Business Standards Committee.

**Firmwide Suitability Committee.** The Firmwide Suitability Committee is responsible for setting standards and policies for product, transaction and client suitability and providing a forum for consistency across divisions, regions and products on suitability assessments. This committee also reviews suitability matters escalated from other committees. This committee is co-chaired by the deputy head of Compliance and the co-head of Fixed Income, Currency and Commodities Sales, who are appointed as co-chairs by the chair of the Firmwide Client and Business Standards Committee.

**Firmwide Reputational Risk Committee.** The Firmwide Reputational Risk Committee is responsible for assessing reputational risks arising from transactions that have been identified as presenting heightened reputational risk, and other situations where the facts and circumstances warrant escalation. This committee is co-chaired by the head of Compliance and the head of Conflicts, who are appointed as co-chairs by the Firmwide Client and Business Standards Committee.

**Firmwide Risk Committee.** The Firmwide Risk Committee is globally responsible for the ongoing monitoring and management of our financial risks. Through both direct and delegated authority, the Firmwide Risk Committee approves firmwide and business-level limits for both market and credit risks, approves sovereign credit risk limits, reviews results of stress tests and scenario analyses, and provides oversight over model risk. This committee is co-chaired by our chief financial officer and our chief risk officer, and reports to the Management Committee. The following are the primary committees that report to the Firmwide Risk Committee:

**Credit Policy Committee.** The Credit Policy Committee establishes and reviews broad firmwide credit policies and parameters that are implemented by Credit Risk Management. This committee is co-chaired by a deputy chief risk officer and the head of Credit Risk Management for our Securities Division, who are appointed as co-chairs by our chief risk officer.

**Firmwide Operational Risk Committee.** The Firmwide Operational Risk Committee provides oversight of the ongoing development and implementation of our operational risk policies, framework and methodologies, and monitors the effectiveness of operational risk management. This committee is co-chaired by a managing director in Credit Risk Management and the head of Operational Risk Management, who are appointed as co-chairs by our chief risk officer.

**Firmwide Finance Committee.** The Firmwide Finance Committee has oversight responsibility for liquidity risk, the size and composition of our balance sheet and capital base, and credit ratings. This committee regularly reviews our liquidity, balance sheet, funding position and capitalization, approves related policies, and makes recommendations as to any adjustments to be made in light of current events, risks, exposures and regulatory requirements. As a part of such oversight, among other things, this committee reviews and approves balance sheet limits and the size of our GCLA. This committee is co-chaired by our chief financial officer and our global treasurer, who are appointed as co-chairs by the Firmwide Risk Committee.

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**Firmwide Technology Risk Committee.** The Firmwide Technology Risk Committee reviews matters related to the design, development, deployment and use of technology. This committee oversees cyber security matters, as well as technology risk management frameworks and methodologies, and monitors their effectiveness. This committee is co-chaired by our chief information officer and the head of Global Investment Research, who are appointed as co-chairs by the Firmwide Risk Committee.

**Firmwide Investment Policy Committee.** The Firmwide Investment Policy Committee reviews, approves, sets policies, and provides oversight for certain illiquid principal investments, including review of risk management and controls for these types of investments. This committee is co-chaired by the head of our Merchant Banking Division and a co-head of our Securities Division, who are appointed as co-chairs by our president and chief operating officer and our chief financial officer.

**Firmwide Model Risk Control Committee.** The Firmwide Model Risk Control Committee is responsible for oversight of the development and implementation of model risk controls, which includes governance, policies and procedures related to our reliance on financial models. This committee is chaired by a deputy chief risk officer, who is appointed as chair by the Firmwide Risk Committee.

**Global Business Resilience Committee.** The Global Business Resilience Committee is responsible for oversight of business resilience initiatives, promoting increased levels of security and resilience, and reviewing certain operating risks related to business resilience. This committee is chaired by our chief administrative officer, who is appointed as chair by the Firmwide Risk Committee.

**Firmwide Volcker Oversight Committee.** The Firmwide Volcker Oversight Committee is responsible for the oversight and periodic review of the implementation of our Volcker Rule compliance program, as approved by the Board, and other Volcker Rule-related matters. This committee is co-chaired by our chief risk officer and a deputy general counsel, who are appointed as co-chairs by the Firmwide Risk Committee.

**Securities Division Risk Committee.** The Securities Division Risk Committee sets market risk limits, subject to business-level risk limits approved by the Firmwide Risk Committee, for the Securities Division based on a number of risk measures, including but not limited to VaR, stress tests and scenario analyses. This committee is chaired by the Securities Division's chief risk officer, who is appointed as chair by the co-chairs of the Firmwide Risk Committee.

**Investment Banking Division Risk Committee.** The Investment Banking Division Risk Committee is responsible for the ongoing monitoring and control of financial risks for the Investment Banking Division, including setting risk limits, subject to business-level risk limits approved by the Firmwide Risk Committee, reviewing established risk limits and monitoring risk exposures. This committee is co-chaired by the co-head of the Global Financing Group in our Investment Banking Division and the head of Credit Risk Management for our Investment Banking Division

and our Merchant Banking Division. The co-chairs of the Investment Banking Division Risk Committee are appointed by the co-chairs of the Firmwide Risk Committee.

**Merchant Banking Division Risk Committee.** The Merchant Banking Division Risk Committee is responsible for the ongoing monitoring and control of financial risks for the Merchant Banking Division. This committee is chaired by a managing director in the Merchant Banking Division, who is appointed as chair by the co-chairs of the Firmwide Risk Committee.

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The following committees report jointly to the Firmwide Risk Committee and the Firmwide Client and Business Standards Committee:

**Firmwide Commitments Committee.** The Firmwide Commitments Committee reviews our underwriting and distribution activities with respect to equity and equity-related product offerings, and sets and maintains policies and procedures designed to ensure that legal, reputational, regulatory and business standards are maintained on a global basis. In addition to reviewing specific transactions, this committee periodically conducts general strategic reviews of sectors and products and establishes policies in connection with transaction practices. This committee is co-chaired by the co-head of the Financial Institutions Group in our Investment Banking Division and an advisory director to the firm, who are appointed as co-chairs by the chair of the Firmwide Client and Business Standards Committee.

**Firmwide Capital Committee.** The Firmwide Capital Committee provides approval and oversight of debt-related transactions, including principal commitments of our capital. This committee aims to ensure that business and reputational standards for underwritings and capital commitments are maintained on a global basis. This committee is co-chaired by the head of Credit Risk Management for our Investment Banking Division and our Merchant Banking Division and the head of credit finance for Europe, Middle East and Africa (EMEA). The co-chairs of the Firmwide Capital Committee are appointed by the co-chairs of the Firmwide Risk Committee.

**Investment Management Division Risk Committee.** The Investment Management Division Risk Committee is responsible for the ongoing monitoring and control of global market, counterparty credit and liquidity risks associated with the activities of our investment management businesses and reports to our chief risk officer. This committee is chaired by the Investment Management Division's chief risk officer, who is appointed as chair by our chief risk officer.

#### **Conflicts Management**

Conflicts of interest and our approach to dealing with them are fundamental to our client relationships, our reputation and our long-term success. The term "conflict of interest" does not have a universally accepted meaning, and conflicts can arise in many forms within a business or between businesses. The responsibility for identifying potential conflicts, as well as complying with our policies and procedures, is shared by the entire firm.

We have a multilayered approach to resolving conflicts and addressing reputational risk. Our senior management oversees policies related to conflicts resolution, and, in conjunction with Conflicts, Legal and Compliance, the Firmwide Client and Business Standards Committee, and other internal committees, formulates policies, standards and principles, and assists in making judgments regarding the appropriate resolution of particular conflicts. Resolving potential conflicts necessarily depends on the facts and circumstances of a particular situation and the application of experienced and informed judgment.

As a general matter, Conflicts reviews all financing and advisory assignments in Investment Banking and certain investing, lending and other activities of the firm. In addition, we have various transaction oversight committees, such



as the Firmwide Capital, Commitments and Suitability Committees and other committees across the firm that also review new underwritings, loans, investments and structured products. These groups and committees work with internal and external counsel and Compliance to evaluate and address any actual or potential conflicts.

We regularly assess our policies and procedures that address conflicts of interest in an effort to conduct our business in accordance with the highest ethical standards and in compliance with all applicable laws, rules, and regulations.

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### **Liquidity Risk Management**

#### **Overview**

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 Global Core Liquid Assets (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.

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**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. See [Balance Sheet and Funding Sources](#) and [Funding Sources](#) for additional details;

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. See [Balance Sheet and Funding Sources](#), [Balance Sheet Management](#) for more detail on our balance sheet management process and [Funding Sources](#), [Secured Funding](#) for more detail on asset classes that may be harder to fund on a secured basis; 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.

***Subsidiary Funding Policies***

The majority of our unsecured funding is raised by Group Inc. which lends the necessary funds to its subsidiaries, some of which are regulated, to meet their asset financing, liquidity and capital requirements. In addition, Group Inc. provides its regulated subsidiaries with the necessary capital to meet their regulatory requirements. The benefits of this

approach to subsidiary funding are enhanced control and greater flexibility to meet the funding requirements of our subsidiaries. Funding is also raised at the subsidiary level through a variety of products, including secured funding, unsecured borrowings and deposits.

Our intercompany funding policies assume that, unless legally provided for, a subsidiary's funds or securities are not freely available to its parent 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.

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Group Inc. has provided substantial amounts of equity and subordinated indebtedness, directly or indirectly, to its regulated subsidiaries. For example, as of December 2015, Group Inc. had \$28.39 billion of equity and subordinated indebtedness invested in GS&Co., its principal U.S. registered broker-dealer; \$32.88 billion invested in GSI, a regulated U.K. broker-dealer; \$2.30 billion invested in GSEC, a U.S. registered broker-dealer; \$2.58 billion invested in Goldman Sachs Japan Co., Ltd. (GSJCL), a regulated Japanese broker-dealer; \$25.20 billion invested in GS Bank USA, a regulated New York State-chartered bank; and \$3.64 billion invested in GSIB, a regulated U.K. bank. Group Inc. also provided, directly or indirectly, \$91.97 billion of unsubordinated loans and \$8.81 billion of collateral to these entities, substantially all of which was to GS&Co., GSI, GSJCL and GS Bank USA, as of December 2015. In addition, as of December 2015, Group Inc. had significant amounts of capital invested in and loans to its other regulated subsidiaries.

**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. 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.

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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.

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##### *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.

**Long-Term Stress Testing.** We utilize a longer-term stress test to take a forward view on our liquidity position through a prolonged stress period in which the firm experiences a severe liquidity stress and recovers in an environment that continues to be challenging. We are focused on ensuring conservative asset-liability management to prepare for a prolonged period of potential stress, seeking to maintain a long-dated and diversified funding profile, taking into consideration the characteristics and liquidity profile of our assets.

We also run stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc or product-specific basis in response to market developments.

#### **Model Review and Validation**

Treasury regularly refines our Modeled Liquidity Outflow, Intraday Liquidity Model and our stress testing models to reflect changes in market or economic conditions and our business mix. Any changes, including model assumptions, are assessed and approved by Liquidity Risk Management.

Model Risk Management is responsible for the independent review and validation of our liquidity models. See [Model Risk Management](#) for further information about the review and validation of these models.

### **Limits**

We use liquidity limits at various levels and across liquidity risk types to control the size of our liquidity exposures. Limits are measured relative to acceptable levels of risk given the liquidity risk tolerance of the firm. The purpose of the firmwide limits is to assist senior management in monitoring and controlling our overall liquidity profile.

The Risk Committee of the Board and the Firmwide Finance Committee approve liquidity risk limits at the firmwide level. Limits are reviewed frequently and amended, with required approvals, on a permanent and temporary basis, as appropriate, to reflect changing market or business conditions.

Our liquidity risk limits are monitored by Treasury and Liquidity Risk Management. Treasury is responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded.

### **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 both December 2015 and December 2014 was appropriate. As of December 2015 and December 2014, the fair value of the securities and certain overnight cash deposits included in our GCLA totaled \$199.12 billion and \$182.95 billion, respectively, and the fair value of these assets averaged \$187.75 billion for 2015 and \$179.63 billion for 2014.

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The table below presents the fair value of the securities and certain overnight cash deposits that are included in our GCLA.

<i>\$ in millions</i>	Average for the	
	Year Ended December <b>2015</b>	2014
U.S. dollar-denominated	<b>\$132,415</b>	\$134,223
Non-U.S. dollar-denominated	<b>55,333</b>	45,410
<b>Total</b>	<b>\$187,748</b>	\$179,633

The U.S. dollar-denominated GCLA is composed of (i) unencumbered U.S. government and federal agency obligations (including highly liquid U.S. federal agency mortgage-backed obligations), all of which are eligible as collateral in Federal Reserve open market operations and (ii) certain overnight U.S. dollar cash deposits. The non-U.S. dollar-denominated GCLA is composed of only unencumbered German, French, Japanese and United Kingdom government obligations and certain overnight cash deposits in highly liquid currencies. We strictly limit our GCLA to this narrowly defined list of securities and cash because they are highly liquid, even in a difficult funding environment. We do not include other potential sources of excess liquidity in our GCLA, such as less liquid unencumbered securities or committed credit facilities.

The table below presents the fair value of our GCLA by asset class.

<i>\$ in millions</i>	Average for the	
	Year Ended December <b>2015</b>	2014
Overnight cash deposits	<b>\$ 61,407</b>	\$ 57,177
U.S. government obligations	<b>69,562</b>	62,838
U.S. federal agency obligations, including highly liquid U.S. federal agency mortgage-backed obligations	<b>11,413</b>	16,722
German, French, Japanese and United Kingdom government obligations	<b>45,366</b>	42,896
<b>Total</b>	<b>\$187,748</b>	\$179,633

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
<b>Total</b>	<b>\$187,748</b>	<b>\$179,633</b>

**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 and \$94.52 billion for 2014. We do not consider these assets liquid enough to be eligible for our GCLA.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### Management's Discussion and Analysis

#### 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 high-quality liquid assets (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 our regulators.

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 stable funding profile in relation to the composition of their assets and off-balance-sheet activities and will be effective on January 1, 2018. The U.S. federal bank regulatory agencies have not yet proposed rules implementing the NSFR for U.S. banks and bank holding companies. We are currently evaluating the impact of the Basel Committee's NSFR framework.

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.

### **Credit Ratings**

We rely on the short-term and long-term debt capital markets to fund a significant portion of our day-to-day operations and the cost and availability of debt financing is influenced by our credit ratings. Credit ratings are also important when we are competing in certain markets, such as OTC derivatives, and when we seek to engage in longer-term transactions. See **Risk Factors** in Part I, Item 1A of the 2015 Form 10-K for information about the risks associated with a reduction in our credit ratings.

During the fourth quarter of 2015, Standard & Poor's Ratings Services (S&P) downgraded the long-term debt ratings of Group Inc. from A- to BBB+ and the subordinated debt ratings of Group Inc. from BBB+ to BBB-, and changed the outlook of Group Inc. from negative to stable and the outlook for GS Bank USA, GSIB, GS&Co. and GSI from positive to watch positive. Additionally, Rating and Investment Information, Inc. (R&I) downgraded the long-term debt ratings of Group Inc. from A+ to A and the subordinated debt ratings for Group Inc. from A to A-, and changed the outlook for Group Inc. from negative to stable.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

The table below presents the unsecured credit ratings and outlook of Group Inc. by DBRS, Inc. (DBRS), Fitch, Inc. (Fitch), Moody's Investors Service (Moody's), S&P, and R&I.

	As of December 2015				
	DBRS	Fitch	Moody's	S&P	R&I
Short-term Debt	<b>R-1 (middle)</b>	<b>F1</b>	<b>P-2</b>	<b>A-2</b>	<b>a-1</b>
Long-term Debt <sup>1</sup>	<b>A (high)</b>	<b>A</b>	<b>A3</b>	<b>BBB+</b>	<b>A</b>
Subordinated Debt	<b>A</b>	<b>A-</b>	<b>Baa2</b>	<b>BBB-</b>	<b>A-</b>
Trust Preferred <sup>2</sup>	<b>A</b>	<b>BBB-</b>	<b>Baa3</b>	<b>BB</b>	<b>N/A</b>
Preferred Stock <sup>3</sup>	<b>BBB (high)</b>	<b>BB+</b>	<b>Ba1</b>	<b>BB</b>	<b>N/A</b>
Ratings Outlook	<b>Stable</b>	<b>Stable</b>	<b>Stable</b>	<b>Stable</b>	<b>Stable</b>

1. Fitch, Moody's and S&P include the senior guaranteed trust securities issued by Murray Street Investment Trust I and Vesey Street Investment Trust I.

2. Trust preferred securities issued by Goldman Sachs Capital I.

3. DBRS, Fitch, Moody's and S&P include the APEX issued by Goldman Sachs Capital II and Goldman Sachs Capital III.

The table below presents the unsecured credit ratings and outlook of GS Bank USA, GSIB, GS&Co. and GSI, by Fitch, Moody's and S&P.

	As of December 2015		
	Fitch	Moody's	S&P
<b>GS Bank USA</b>			
Short-term Debt	<b>F1</b>	<b>P-1</b>	<b>A-1</b>
Long-term Debt	<b>A+</b>	<b>A1</b>	<b>A</b>
Short-term Bank Deposits	<b>F1+</b>	<b>P-1</b>	<b>N/A</b>



Long-term Bank Deposits	AA-	A1	N/A
Ratings Outlook	Stable	Stable	Watch Positive
<b>GSIB</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A	A1	A
Short-term Bank Deposits	F1	P-1	N/A
Long-term Bank Deposits	A	A1	N/A
Ratings Outlook	Positive	Stable	Watch Positive
<b>GS&amp;Co.</b>			
Short-term Debt	F1	N/A	A-1
Long-term Debt	A+	N/A	A
Ratings Outlook	Stable	N/A	Watch Positive
<b>GSI</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A	A1	A
Ratings Outlook	Positive	Stable	Watch Positive
We believe our credit ratings are primarily based on the credit rating agencies' assessment of:			

Our liquidity, market, credit and operational risk management practices;

The level and variability of our earnings;

Our capital base;

Our franchise, reputation and management;

Our corporate governance; and

The external operating environment, including, in some cases, the assumed level of government or other systemic support.

Certain of our derivatives have been transacted under bilateral agreements with counterparties who may require us to post collateral or terminate the transactions based on changes in our credit ratings. We assess the impact of these bilateral agreements by determining the collateral or termination payments that would occur assuming a downgrade by all rating agencies. A downgrade by any one rating agency, depending on the agency's relative ratings of us at the time

of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies. We allocate a portion of our GCLA to ensure we would be able to make the additional collateral or termination payments that may be required in the event of a two-notch reduction in our long-term credit ratings, as well as collateral that has not been called by counterparties, but is available to them. The table below presents the additional collateral or termination payments related to our net derivative liabilities under bilateral agreements that could have been called at the reporting date by counterparties in the event of a one-notch and two-notch downgrade in our credit ratings.

<i>\$ in millions</i>	As of December	
	2015	2014
Additional collateral or termination payments for a one-notch downgrade	<b>\$1,061</b>	\$1,072
Additional collateral or termination payments for a two-notch downgrade	<b>2,689</b>	2,815

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### Management's Discussion and Analysis

##### Cash Flows

As a global financial institution, our cash flows are complex and bear little relation to our net earnings and net assets. Consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity and asset-liability management policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends and strategic initiatives in our businesses.

**Year Ended December 2015.** Our cash and cash equivalents increased by \$17.51 billion to \$75.11 billion at the end of 2015. We used \$18.57 billion in net cash for investing activities, primarily due to funding of loans receivable. We generated \$36.08 billion in net cash from financing activities and operating activities primarily from net issuances of long-term borrowings and bank deposits, partially offset by repurchases of common stock.

**Year Ended December 2014.** Our cash and cash equivalents decreased by \$3.53 billion to \$57.60 billion at the end of 2014. We used \$22.53 billion in net cash for operating and investing activities, which reflects an initiative to reduce our balance sheet, and the funding of loans receivable. We generated \$19.00 billion in net cash from financing activities from an increase in bank deposits and net proceeds from issuances of unsecured long-term borrowings, partially offset by repurchases of common stock.

**Year Ended December 2013.** Our cash and cash equivalents decreased by \$11.54 billion to \$61.13 billion at the end of 2013. We generated \$4.54 billion in net cash from operating activities. We used net cash of \$16.08 billion for investing and financing activities, primarily to fund loans receivable and repurchases of common stock.

##### Market Risk Management

###### Overview

Market risk is the risk of loss in the value of our inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions. We employ a variety of risk measures, each described in the respective sections below, to monitor market risk. We hold inventory primarily for market making for our clients and for our investing and lending activities. Our inventory therefore changes based on client demands and our investment opportunities. Our inventory is accounted for at fair value and therefore fluctuates on a daily basis, with the related gains and losses included in Market making and Other principal transactions. Categories of market risk include the following:

Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, mortgage prepayment speeds and credit spreads;

Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices;

Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and

Commodity price risk: results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, electricity, and precious and base metals. Managers in revenue-producing units are accountable for managing risk within prescribed limits. These managers have in-depth knowledge of their positions, markets and the instruments available to hedge their exposures.

Market Risk Management, which is independent of the revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing market risk at the firm. We monitor and control risks through strong firmwide oversight and independent control and support functions across our global businesses.

Managers in revenue-producing units and Market Risk Management discuss market information, positions and estimated risk and loss scenarios on an ongoing basis.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**Market Risk Management Process**

We manage our market risk by diversifying exposures, controlling position sizes and establishing economic hedges in related securities or derivatives. This process includes:

Accurate and timely exposure information incorporating multiple risk metrics;

A dynamic limit setting framework; and

Constant communication among revenue-producing units, risk managers and senior management.

**Risk Measures.** Market Risk Management produces risk measures and monitors them against market risk limits set by our risk committees. These measures reflect an extensive range of scenarios and the results are aggregated at product, business and firmwide levels.

We use a variety of risk measures to estimate the size of potential losses for both moderate and more extreme market moves over both short-term and long-term time horizons. Our primary risk measures are VaR, which is used for shorter-term periods, and stress tests. Our risk reports detail key risks, drivers and changes for each desk and business, and are distributed daily to senior management of both our revenue-producing units and our independent control and support functions.

**Value-at-Risk.** VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. For assets and liabilities included in VaR, see Financial Statement Linkages to Market Risk Measures. We typically employ a one-day time horizon with a 95% confidence level. We use a single VaR model which captures risks including interest rates, equity prices, currency rates and commodity prices. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the firmwide level.

We are aware of the inherent limitations to VaR and therefore use a variety of risk measures in our market risk management process. Inherent limitations to VaR include:

VaR does not estimate potential losses over longer time horizons where moves may be extreme;

VaR does not take account of the relative liquidity of different risk positions; and

Previous moves in market risk factors may not produce accurate predictions of all future market moves. When calculating VaR, we use historical simulations with full valuation of approximately 70,000 market factors. VaR is calculated at a position level based on simultaneously shocking the relevant market risk factors for that position. We sample from five years of historical data to generate the scenarios for our VaR calculation. The historical data is weighted so that the relative importance of the data reduces over time. This gives greater importance to more recent observations and reflects current asset volatilities, which improves the accuracy of our estimates of potential loss. As a result, even if our positions included in VaR were unchanged, our VaR would increase with increasing market volatility and vice versa.

Given its reliance on historical data, VaR is most effective in estimating risk exposures in markets in which there are no sudden fundamental changes or shifts in market conditions.

Our VaR measure does not include:

Positions that are best measured and monitored using sensitivity measures; and

The impact of changes in counterparty and our own credit spreads on derivatives, as well as changes in our own credit spreads on unsecured borrowings for which the fair value option was elected. We perform daily backtesting of our VaR model (i.e., comparing daily trading net revenues to the VaR measure calculated as of the prior business day) at the firmwide level and for each of our businesses and major regulated subsidiaries.

**Stress Testing.** Stress testing is a method of determining the effect of various hypothetical stress scenarios on the firm. We use stress testing to examine risks of specific portfolios as well as the potential impact of significant risk exposures across the firm. We use a variety of stress testing techniques to calculate the potential loss from a wide range of market moves on our portfolios, including sensitivity analysis, scenario analysis and firmwide stress tests. The results of our various stress tests are analyzed together for risk management purposes.

Sensitivity analysis is used to quantify the impact of a market move in a single risk factor across all positions (e.g., equity prices or credit spreads) using a variety of defined market shocks, ranging from those that could be expected over a one-day time horizon up to those that could take many months to occur. We also use sensitivity analysis to quantify the impact of the default of any single entity, which captures the risk of large or concentrated exposures.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

Scenario analysis is used to quantify the impact of a specified event, including how the event impacts multiple risk factors simultaneously. For example, for sovereign stress testing we calculate potential direct exposure associated with our sovereign inventory as well as the corresponding debt, equity and currency exposures associated with our non-sovereign inventory that may be impacted by the sovereign distress. When conducting scenario analysis, we typically consider a number of possible outcomes for each scenario, ranging from moderate to severely adverse market impacts. In addition, these stress tests are constructed using both historical events and forward-looking hypothetical scenarios.

Firmwide stress testing combines market, credit, operational and liquidity risks into a single combined scenario. Firmwide stress tests are primarily used to assess capital adequacy as part of our capital planning and stress testing process; however, we also ensure that firmwide stress testing is integrated into our risk governance framework. This includes selecting appropriate scenarios to use for our capital planning and stress testing process. See [Equity Capital Management and Regulatory Capital](#) [Equity Capital Management](#) above for further information.

Unlike VaR measures, which have an implied probability because they are calculated at a specified confidence level, there is generally no implied probability that our stress test scenarios will occur. Instead, stress tests are used to model both moderate and more extreme moves in underlying market factors. When estimating potential loss, we generally assume that our positions cannot be reduced or hedged (although experience demonstrates that we are generally able to do so).

Stress test scenarios are conducted on a regular basis as part of our routine risk management process and on an ad hoc basis in response to market events or concerns. Stress testing is an important part of our risk management process because it allows us to quantify our exposure to tail risks, highlight potential loss concentrations, undertake risk/reward analysis, and assess and mitigate our risk positions.

**Limits.** We use risk limits at various levels in the firm (including firmwide, business and product) to govern risk appetite by controlling the size of our exposures to market risk. Limits are set based on VaR and on a range of stress tests relevant to our exposures. Limits are reviewed frequently and amended on a permanent or temporary basis to reflect changing market conditions, business conditions or tolerance for risk.

The Risk Committee of the Board and the Firmwide Risk Committee approve market risk limits at firmwide and business levels and our divisional risk committees set sub-limits below the approved business-level risk limits. The purpose of the firmwide limits is to assist senior management in controlling our overall risk profile. Sub-limits set the desired maximum amount of exposure that may be managed by any particular business on a day-to-day basis without additional levels of senior management approval, effectively leaving day-to-day decisions to individual desk managers and traders. Accordingly, sub-limits are a management tool designed to ensure appropriate escalation rather than to establish maximum risk tolerance. Sub-limits also distribute risk among various businesses in a manner that is consistent with their level of activity and client demand, taking into account the relative performance of each area.

Our market risk limits are monitored daily by Market Risk Management, which is responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded. The business-level limits that are set by the divisional risk committees are subject to the same scrutiny and limit escalation policy as the firmwide limits.

When a risk limit has been exceeded (e.g., due to changes in market conditions, such as increased volatilities or changes in correlations), it is escalated to the appropriate risk committee and remediated by an inventory reduction and/or a temporary or permanent increase to the risk limit.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

#### **Management's Discussion and Analysis**

#### **Model Review and Validation**

Our VaR and stress testing models are regularly reviewed by Market Risk Management and enhanced in order to incorporate changes in the composition of positions included in our market risk measures, as well as variations in market conditions. Prior to implementing significant changes to our assumptions and/or models, Model Risk Management performs model validations. Significant changes to our VaR and stress testing models are reviewed with our chief risk officer and chief financial officer, and approved by the Firmwide Risk Committee.

See Model Risk Management for further information about the review and validation of these models.

#### **Systems**

We have made a significant investment in technology to monitor market risk including:

An independent calculation of VaR and stress measures;

Risk measures calculated at individual position levels;

Attribution of risk measures to individual risk factors of each position;

The ability to report many different views of the risk measures (e.g., by desk, business, product type or legal entity); and

The ability to produce ad hoc analyses in a timely manner.

#### **Metrics**

We analyze VaR at the firmwide level and a variety of more detailed levels, including by risk category, business, and region. The tables below present, by risk category, average daily VaR and period-end VaR, as well as the high and low VaR for the period. Diversification effect in the tables below represents the difference between total VaR and the sum of the VaRs for the four risk categories. This effect arises because the four market risk categories are not perfectly correlated.

The table below presents average daily VaR.

\$ in millions

Year Ended December

<b>Risk Categories</b>	<b>2015</b>	2014	2013
Interest rates	<b>\$ 47</b>	\$ 51	\$ 63
Equity prices	<b>26</b>	26	32
Currency rates	<b>30</b>	19	17
Commodity prices	<b>20</b>	21	19
Diversification effect	<b>(47)</b>	(45)	(51)
<b>Total</b>	<b>\$ 76</b>	\$ 72	\$ 80

Our average daily VaR increased to \$76 million in 2015 from \$72 million in 2014, reflecting an increase in the currency rates category due to higher levels of volatility, partially offset by a decrease in the interest rates category due to decreased exposures.

Our average daily VaR decreased to \$72 million in 2014 from \$80 million in 2013, primarily reflecting a decrease in the interest rates category due to decreased exposures and lower levels of volatility, and a decrease in the equity prices category principally due to lower levels of volatility. These decreases were partially offset by a decrease in the diversification benefit across risk categories.

The table below presents period-end VaR, and high and low VaR.

\$ in millions

As of December

Year Ended  
December 2015

<b>Risk Categories</b>	<b>2015</b>	2014	<b>High</b>	<b>Low</b>
Interest rates	<b>\$ 43</b>	\$ 53	<b>\$62</b>	<b>\$38</b>
Equity prices	<b>24</b>	19	<b>52</b>	<b>18</b>
Currency rates	<b>31</b>	24	<b>47</b>	<b>18</b>
Commodity prices	<b>17</b>	23	<b>38</b>	<b>13</b>
Diversification effect	<b>(48)</b>	(42)		
<b>Total</b>	<b>\$ 67</b>	\$ 77	<b>\$94</b>	<b>\$57</b>

Our daily VaR decreased to \$67 million as of December 2015 from \$77 million as of December 2014, primarily reflecting decreases in the interest rates and commodity prices categories due to decreased exposures, and an increase in the diversification benefit across risk categories. In addition, the currency rates and equity prices categories increased due to higher levels of volatility.

During 2015, the firmwide VaR risk limit was temporarily raised on two occasions in order to facilitate client transactions. Separately, in March 2015, the firmwide VaR risk limit was reduced, reflecting lower risk utilization over the last year.

During 2014, the firmwide VaR risk limit was not exceeded, raised or reduced.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

The chart below reflects our daily VaR over the last four quarters.

The chart below presents the frequency distribution of our daily trading net revenues for substantially all positions included in VaR for 2015.

Daily trading net revenues are compared with VaR calculated as of the end of the prior business day. Trading losses incurred on a single day did not exceed our 95% one-day VaR during 2015 (i.e., a VaR exception). Trading losses incurred on a single day exceeded our 95% one-day VaR on one occasion during 2014.

During periods in which we have significantly more positive net revenue days than net revenue loss days, we expect to have fewer VaR exceptions because, under normal conditions, our business model generally produces positive net revenues. In periods in which our franchise revenues are adversely affected, we generally have more loss days, resulting in more VaR exceptions. The daily market-making revenues used to determine VaR exceptions reflect the impact of any intraday activity, including bid/offer net revenues, which are more likely than not to be positive by their nature.

**Sensitivity Measures**

Certain portfolios and individual positions are not included in VaR because VaR is not the most appropriate risk measure. Other sensitivity measures we use to analyze market risk are described below.

**10% Sensitivity Measures.** The table below presents market risk for inventory positions that are not included in VaR. The market risk of these positions is determined by estimating the potential reduction in net revenues of a 10% decline in the underlying asset value. Equity positions below relate to private and restricted public equity securities, including interests in funds that invest in corporate equities and real estate and interests in hedge funds, which are included in Financial instruments owned, at fair value. Debt positions include interests in funds that invest in corporate mezzanine and senior debt instruments, loans backed by commercial and residential real estate, corporate bank loans and other corporate debt, including acquired portfolios of distressed loans. These debt positions are included in Financial instruments owned, at fair value. See Note 6 to the consolidated financial statements for further information about cash instruments. These measures do not reflect diversification benefits across asset categories or across other market risk measures.

*\$ in millions*

As of December  
**2015**                      2014

**Asset Categories**

Equity	<b>\$2,157</b>	\$2,132
Debt	<b>1,479</b>	1,686
<b>Total</b>	<b>\$3,636</b>	\$3,818

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis**

**Credit Spread Sensitivity on Derivatives and Borrowings.** VaR excludes the impact of changes in counterparty and our own credit spreads on derivatives as well as changes in our own credit spreads on unsecured borrowings for which the fair value option was elected. The estimated sensitivity to a one basis point increase in credit spreads (counterparty and our own) on derivatives was a gain of \$3 million (including hedges) as of both December 2015 and December 2014. In addition, the estimated sensitivity to a one basis point increase in our own credit spreads on unsecured borrowings for which the fair value option was elected was a gain of \$17 million and \$10 million (including hedges) as of December 2015 and December 2014, respectively. However, the actual net impact of a change in our own credit spreads is also affected by the liquidity, duration and convexity (as the sensitivity is not linear to changes in yields) of those unsecured borrowings for which the fair value option was elected, as well as the relative performance of any hedges undertaken.

**Interest Rate Sensitivity.** Loans receivable as of December 2015 and December 2014 were \$45.41 billion and \$28.94 billion, respectively, substantially all of which had floating interest rates. As of December 2015 and December 2014, the estimated sensitivity to a 100 basis point increase in interest rates on such loans was \$396 million and \$254 million, respectively, of additional interest income over a twelve-month period, which does not take into account the potential impact of an increase in costs to fund such loans. See Note 9 to the consolidated financial statements for further information about loans receivable.

**Other Market Risk Considerations**

In addition, as of December 2015 and December 2014, we had commitments and held loans for which we have obtained credit loss protection from Sumitomo Mitsui Financial Group, Inc. See Note 18 to the consolidated financial statements for further information about such lending commitments.

Additionally, we make investments accounted for under the equity method and we also make direct investments in real estate, both of which are included in Other assets. Direct investments in real estate are accounted for at cost less accumulated depreciation. See Note 13 to the consolidated financial statements for information about Other assets.

**Financial Statement Linkages to Market Risk Measures**

We employ a variety of risk measures, each described in the respective sections above, to monitor market risk across the consolidated statements of financial condition and consolidated statements of earnings. The related gains and losses on these positions are included in Market making, Other principal transactions, Interest income and Interest expense.

The table below presents certain categories in our consolidated statements of financial condition and the market risk measures used to assess those assets and liabilities. Certain categories on the consolidated statements of financial condition are incorporated in more than one risk measure.

**Market Risk Measures**

**Categories on the Consolidated  
Statements of Financial  
Condition Included in Market  
Risk Measures**

Securities segregated for regulatory and other purposes,  
at fair value

VaR

Collateralized agreements

VaR

Securities purchased under agreements to resell, at fair  
value

Securities borrowed, at fair value

Receivables

Certain secured loans, at fair value

VaR

Loans receivable

Interest Rate Sensitivity

Financial instruments owned, at fair value

VaR

10% Sensitivity Measures

Credit Spread Sensitivity Derivatives

Collateralized financings

VaR

Securities sold under agreements to repurchase, at fair value

Securities loaned, at fair value

Other secured financings, at fair value

Financial instruments sold, but not yet purchased, at fair value

VaR

Credit Spread Sensitivity Derivatives

Unsecured short-term borrowings and unsecured long-term borrowings, at fair value

VaR

Credit Spread Sensitivity Borrowings



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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Credit Risk Management**

#### **Overview**

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold. Our exposure to credit risk comes mostly from client transactions in OTC derivatives and loans and lending commitments. Credit risk also comes from cash placed with banks, securities financing transactions (i.e., resale and repurchase agreements and securities borrowing and lending activities) and receivables from brokers, dealers, clearing organizations, customers and counterparties.

Credit Risk Management, which is independent of the revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing credit risk at the firm. The Credit Policy Committee and the Firmwide Risk Committee establish and review credit policies and parameters. In addition, we hold other positions that give rise to credit risk (e.g., bonds held in our inventory and secondary bank loans). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk Management, consistent with other inventory positions. We also enter into derivatives to manage market risk exposures. Such derivatives also give rise to credit risk, which is monitored and managed by Credit Risk Management.

#### **Credit Risk Management Process**

Effective management of credit risk requires accurate and timely information, a high level of communication and knowledge of customers, countries, industries and products. Our process for managing credit risk includes:

Approving transactions and setting and communicating credit exposure limits;

Monitoring compliance with established credit exposure limits;

Assessing the likelihood that a counterparty will default on its payment obligations;

Measuring our current and potential credit exposure and losses resulting from counterparty default;

Reporting of credit exposures to senior management, the Board and regulators;

Use of credit risk mitigants, including collateral and hedging; and

Communication and collaboration with other independent control and support functions such as operations, legal and compliance.

As part of the risk assessment process, Credit Risk Management performs credit reviews which include initial and ongoing analyses of our counterparties. For substantially all of our credit exposures, the core of our process is an annual counterparty credit review. A credit review is an independent analysis of the capacity and willingness of a counterparty to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the counterparty's industry, and the economic environment. Senior personnel within Credit Risk Management, with expertise in specific industries, inspect and approve credit reviews and internal credit ratings.

Our global credit risk management systems capture credit exposure to individual counterparties and on an aggregate basis to counterparties and their subsidiaries (economic groups). These systems also provide management with comprehensive information on our aggregate credit risk by product, internal credit rating, industry, country and region.

### **Risk Measures and Limits**

We measure our credit risk based on the potential loss in the event of non-payment by a counterparty using current and potential exposure. For derivatives and securities financing transactions, current exposure represents the amount presently owed to us after taking into account applicable netting and collateral arrangements while potential exposure represents our estimate of the future exposure that could arise over the life of a transaction based on market movements within a specified confidence level. Potential exposure also takes into account netting and collateral arrangements. For loans and lending commitments, the primary measure is a function of the notional amount of the position.

We use credit limits at various levels (counterparty, economic group, industry, country) to control the size of our credit exposures. Limits for counterparties and economic groups are reviewed regularly and revised to reflect changing risk appetites for a given counterparty or group of counterparties. Limits for industries and countries are based on our risk tolerance and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations. The Risk Committee of the Board and the Firmwide Risk Committee approve credit risk limits at the firmwide and business levels. Credit Risk Management sets credit limits for individual counterparties, economic groups, industries and countries. Policies authorized by the Firmwide Risk Committee and the Credit Policy Committee prescribe the level of formal approval required for us to assume credit exposure to a counterparty across all product areas, taking into account any applicable netting provisions, collateral or other credit risk mitigants.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Stress Tests**

We use regular stress tests to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors (e.g., currency rates, interest rates, equity prices). These shocks include a wide range of moderate and more extreme market movements. Some of our stress tests include shocks to multiple risk factors, consistent with the occurrence of a severe market or economic event. In the case of sovereign default, we estimate the direct impact of the default on our sovereign credit exposures, changes to our credit exposures arising from potential market moves in response to the default, and the impact of credit market deterioration on corporate borrowers and counterparties that may result from the sovereign default. Unlike potential exposure, which is calculated within a specified confidence level, with a stress test there is generally no assumed probability of these events occurring.

We run stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc basis in response to market developments. Stress tests are regularly conducted jointly with our market and liquidity risk functions.

### **Model Review and Validation**

Our potential credit exposure and stress testing models, and any changes to such models or assumptions, are reviewed by Model Risk Management. See [Model Risk Management](#) for further information about the review and validation of these models.

### **Risk Mitigants**

To reduce our credit exposures on derivatives and securities financing transactions, we may enter into netting agreements with counterparties that permit us to offset receivables and payables with such counterparties. We may also reduce credit risk with counterparties by entering into agreements that enable us to obtain collateral from them on an upfront or contingent basis and/or to terminate transactions if the counterparty's credit rating falls below a specified level. We monitor the fair value of the collateral on a daily basis to ensure that our credit exposures are appropriately collateralized. We seek to minimize exposures where there is a significant positive correlation between the creditworthiness of our counterparties and the market value of collateral we receive.

For loans and lending commitments, depending on the credit quality of the borrower and other characteristics of the transaction, we employ a variety of potential risk mitigants. Risk mitigants include: collateral provisions, guarantees, covenants, structural seniority of the bank loan claims and, for certain lending commitments, provisions in the legal documentation that allow us to adjust loan amounts, pricing, structure and other terms as market conditions change. The type and structure of risk mitigants employed can significantly influence the degree of credit risk involved in a loan or lending commitment.

When we do not have sufficient visibility into a counterparty's financial strength or when we believe a counterparty requires support from its parent, we may obtain third-party guarantees of the counterparty's obligations. We may also mitigate our credit risk using credit derivatives or participation agreements.

## Credit Exposures

As of December 2015, our credit exposures increased as compared with December 2014, primarily reflecting increases in loans and lending commitments. The percentage of our credit exposure arising from non-investment-grade counterparties (based on our internally determined public rating agency equivalents) increased as compared with December 2014, primarily reflecting an increase in loans and lending commitments. During 2015, the number of counterparty defaults decreased as compared with 2014, and such defaults primarily occurred within loans and lending commitments. The total number of counterparty defaults remained low, representing less than 0.5% of all counterparties. Estimated losses associated with counterparty defaults were lower compared with the prior year and were not material to the firm. Our credit exposures are described further below.

**Cash and Cash Equivalents.** Cash and cash equivalents include both interest-bearing and non-interest-bearing deposits. To mitigate the risk of credit loss, we place substantially all of our deposits with highly-rated banks and central banks.

**OTC Derivatives.** Our credit exposure on OTC derivatives arises primarily from our market-making activities. As a market maker, we enter into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. We also enter into derivatives to manage market risk exposures. We manage our credit exposure on OTC derivatives using the credit risk process, measures, limits and risk mitigants described above.

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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. Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements. We generally enter into OTC derivatives transactions under bilateral collateral arrangements with daily exchange of collateral. As credit risk is an essential component of fair value, we include a credit valuation adjustment (CVA) in the fair value of derivatives to reflect counterparty credit risk, as described in Note 7 to the consolidated financial statements. CVA is a function of the present value of expected exposure, the probability of counterparty default and the assumed recovery upon default.

The table below presents the distribution of our exposure to OTC derivatives by tenor, both before and after the effect of collateral and netting agreements. In the table below:

Tenor is based on expected duration for mortgage-related credit derivatives and generally on remaining contractual maturity for other derivatives.

Receivable and payable balances for the same counterparty across tenor categories are netted under enforceable netting agreements, and cash collateral received is netted under enforceable credit support agreements.

Receivable and payable balances with the same counterparty in the same tenor category are netted within such tenor category.

Net credit exposure represents OTC derivative assets, all of which are included in Financial instruments owned, at fair value, less cash collateral and the fair value of securities collateral, primarily U.S. government and federal agency obligations and non-U.S. government and agency obligations, received under credit support agreements, which management considers when determining credit risk, but such collateral is not eligible for netting under U.S. GAAP.

<i>\$ in millions</i>	Investment-Grade	Non-Investment-Grade / Unrated	Total
<b>As of December 2015</b>			
Less than 1 year	\$ 23,950	\$ 3,965	\$ 27,915
1 - 5 years	35,249	6,749	41,998
Greater than 5 years	85,394	4,713	90,107
Total	144,593	15,427	160,020

Netting	(103,087)	(6,507)	(109,594)
<b>OTC derivative assets</b>	<b>\$ 41,506</b>	<b>\$ 8,920</b>	<b>\$ 50,426</b>
<b>Net credit exposure</b>	<b>\$ 27,001</b>	<b>\$ 7,368</b>	<b>\$ 34,369</b>

As of December 2014

Less than 1 year	\$ 30,147	\$ 5,038	\$ 35,185
1 - 5 years	40,787	6,589	47,376
Greater than 5 years	96,679	5,820	102,499
<b>Total</b>	<b>167,613</b>	<b>17,447</b>	<b>185,060</b>

Netting	(117,144)	(7,179)	(124,323)
<b>OTC derivative assets</b>	<b>\$ 50,469</b>	<b>\$10,268</b>	<b>\$ 60,737</b>
<b>Net credit exposure</b>	<b>\$ 34,658</b>	<b>\$ 8,694</b>	<b>\$ 43,352</b>

The tables below present the distribution of our exposure to OTC derivatives by tenor and our internally determined public rating agency equivalents.

<i>\$ in millions</i>	Investment-Grade				Total
	AAA/ Aaa	AA/ Aa2	A/ A2	BBB/ Baa2	
<u><b>As of December 2015</b></u>					
Less than 1 year	\$ 411	\$ 6,059	\$ 10,051	\$ 7,429	\$ 23,950
1 - 5 years	1,214	10,374	16,995	6,666	35,249
Greater than 5 years	3,205	40,879	20,507	20,803	85,394
<b>Total</b>	<b>4,830</b>	<b>57,312</b>	<b>47,553</b>	<b>34,898</b>	<b>144,593</b>

Netting	(2,202)	(40,872)	(36,847)	(23,166)	(103,087)
<b>OTC derivative assets</b>	<b>\$ 2,628</b>	<b>\$ 16,440</b>	<b>\$ 10,706</b>	<b>\$ 11,732</b>	<b>\$ 41,506</b>
<b>Net credit exposure</b>	<b>\$ 2,427</b>	<b>\$ 10,269</b>	<b>\$ 6,652</b>	<b>\$ 7,653</b>	<b>\$ 27,001</b>

As of December 2014

Less than 1 year	\$ 1,119	\$ 8,260	\$ 13,719	\$ 7,049	\$ 30,147
1 - 5 years	898	12,182	18,949	8,758	40,787
Greater than 5 years	3,500	40,443	26,649	26,087	96,679
<b>Total</b>	<b>5,517</b>	<b>60,885</b>	<b>59,317</b>	<b>41,894</b>	<b>167,613</b>

Netting	(2,163)	(42,513)	(44,147)	(28,321)	(117,144)
<b>OTC derivative assets</b>	<b>\$ 3,354</b>	<b>\$ 18,372</b>	<b>\$ 15,170</b>	<b>\$ 13,573</b>	<b>\$ 50,469</b>
<b>Net credit exposure</b>	<b>\$ 3,135</b>	<b>\$ 12,453</b>	<b>\$ 9,493</b>	<b>\$ 9,577</b>	<b>\$ 34,658</b>

<i>\$ in millions</i>	Non-Investment-Grade / Unrated		
	BB/Ba2 or lower	Unrated	Total
<b><u>As of December 2015</u></b>			
Less than 1 year	\$ 3,657	\$ 308	\$ 3,965
1 - 5 years	6,505	244	6,749
Greater than 5 years	4,434	279	4,713
Total	14,596	831	15,427
Netting	(6,472)	(35)	(6,507)
<b>OTC derivative assets</b>	<b>\$ 8,124</b>	<b>\$ 796</b>	<b>\$ 8,920</b>
<b>Net credit exposure</b>	<b>\$ 6,769</b>	<b>\$ 599</b>	<b>\$ 7,368</b>
<b><u>As of December 2014</u></b>			
Less than 1 year	\$ 4,959	\$ 79	\$ 5,038
1 - 5 years	6,226	363	6,589
Greater than 5 years	5,660	160	5,820
Total	16,845	602	17,447
Netting	(7,062)	(117)	(7,179)
OTC derivative assets	\$ 9,783	\$ 485	\$10,268
Net credit exposure	\$ 8,506	\$ 188	\$ 8,694

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**Lending and Financing Activities.** We manage our lending and financing activities using the credit risk process, measures, limits and risk mitigants described above. Other lending positions, including secondary trading positions, are risk-managed as a component of market risk.

**Lending Activities.** Our lending activities include lending to investment-grade and non-investment-grade corporate borrowers. Loans and lending commitments associated with these activities are principally used for operating liquidity and general corporate purposes or in connection with contingent acquisitions. Our lending activities also include extending loans to borrowers that are secured by commercial and other real estate. See the tables below for further information about our credit exposures associated with these lending activities.

**Securities Financing Transactions.** We enter into securities financing transactions in order to, among other things, facilitate client activities, invest excess cash, acquire securities to cover short positions and finance certain firm activities. We bear credit risk related to resale agreements and securities borrowed only to the extent that cash advanced or the value of securities pledged or delivered to the counterparty exceeds the value of the collateral received. We also have credit exposure on repurchase agreements and securities loaned to the extent that the value of securities pledged or delivered to the counterparty for these transactions exceeds the amount of cash or collateral received. Securities collateral obtained for securities financing transactions primarily includes U.S. government and federal agency obligations and non-U.S. government and agency obligations. We had approximately \$27 billion and \$36 billion as of December 2015 and December 2014, respectively, of credit exposure related to securities financing transactions reflecting both netting agreements and collateral that management considers when determining credit risk. As of both December 2015 and December 2014, substantially all of our credit exposure related to securities financing transactions was with investment-grade financial institutions, funds and governments, primarily located in the Americas and EMEA.

**Other Credit Exposures.** We are exposed to credit risk from our receivables from brokers, dealers and clearing organizations and customers and counterparties. Receivables from brokers, dealers and clearing organizations are primarily comprised of initial margin placed with clearing organizations and receivables related to sales of securities which have traded, but not yet settled. These receivables generally have minimal credit risk due to the low probability of clearing organization default and the short-term nature of receivables related to securities settlements. Receivables from customers and counterparties are generally comprised of collateralized receivables related to customer securities transactions and generally have minimal credit risk due to both the value of the collateral received and the short-term nature of these receivables. Our net credit exposure related to these activities was approximately \$33 billion and \$26 billion as of December 2015 and December 2014, respectively, and was primarily comprised of initial margin (both cash and securities) placed with investment-grade clearing organizations. The regional breakdown of our net credit exposure related to these activities was approximately 44% and 48% in the Americas, approximately 45% and 39% in EMEA, and approximately 11% and 13% in Asia as of December 2015 and December 2014, respectively.



In addition, we extend other loans and lending commitments to our private wealth management clients that are primarily secured by residential real estate, securities or other assets. We also purchase performing and distressed loans backed by residential real estate and consumer loans. The gross exposure related to such loans and lending commitments was approximately \$28 billion and \$17 billion as of December 2015 and December 2014, respectively, and was substantially all concentrated in the Americas region. The fair value of the collateral received against such loans and lending commitments generally exceeded the gross exposure as of both December 2015 and December 2014.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Management's Discussion and Analysis****Credit Exposure by Industry, Region and Credit Quality**

The tables below present our credit exposure related to cash, OTC derivatives, and loans and lending commitments (excluding credit exposures described above in Securities Financing Transactions and Other Credit Exposures) broken down by industry, region and credit quality.

<i>\$ in millions</i>	Cash	
	as of December 2015	2014
<b>Credit Exposure by Industry</b>		
Funds	\$ 176	\$ 96
Financial Institutions	12,799	12,469
Sovereign	62,130	45,029
Real Estate		6
<b>Total</b>	<b>\$75,105</b>	<b>\$57,600</b>
<b>Credit Exposure by Region</b>		
Americas	\$54,846	\$45,599
EMEA	8,496	1,666
Asia	11,763	10,335
<b>Total</b>	<b>\$75,105</b>	<b>\$57,600</b>
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA/Aaa	\$55,626	\$38,778
AA/Aa2	4,286	4,598
A/A2	14,243	13,346
BBB/Baa2	855	730
BB/Ba2 or lower	95	148

<b>Total</b>	<b>\$75,105</b>	\$57,600
		OTC Derivatives
		as of December
<i>\$ in millions</i>	<b>2015</b>	2014
<b>Credit Exposure by Industry</b>		
Funds	<b>\$10,899</b>	\$13,114
Financial Institutions	<b>13,148</b>	15,051
Consumer, Retail & Healthcare	<b>1,553</b>	3,325
Sovereign	<b>7,566</b>	10,004
Municipalities & Nonprofit	<b>3,984</b>	4,303
Natural Resources & Utilities	<b>4,846</b>	5,741
Real Estate	<b>205</b>	407
Technology, Media & Telecommunications	<b>1,839</b>	2,995
Diversified Industrials	<b>5,008</b>	4,321
Other	<b>1,378</b>	1,476
<b>Total</b>	<b>\$50,426</b>	\$60,737
<b>Credit Exposure by Region</b>		
Americas	<b>\$17,724</b>	\$22,032
EMEA	<b>27,113</b>	31,295
Asia	<b>5,589</b>	7,410
<b>Total</b>	<b>\$50,426</b>	\$60,737
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA/Aaa	<b>\$ 2,628</b>	\$ 3,354
AA/Aa2	<b>16,440</b>	18,372
A/A2	<b>10,706</b>	15,170
BBB/Baa2	<b>11,732</b>	13,573
BB/Ba2 or lower	<b>8,124</b>	9,783
Unrated	<b>796</b>	485

<b>Total</b>	<b>\$50,426</b>	<b>\$60,737</b>
	Loans and Lending Commitments	
	as of December	
<i>\$ in millions</i>	<b>2015</b>	<b>2014</b>
<b>Credit Exposure by Industry</b>		
Funds	\$ 2,595	\$ 1,706
Financial Institutions	14,063	11,316
Consumer, Retail & Healthcare	31,944	30,216
Sovereign	419	450
Municipalities & Nonprofit	628	541
Natural Resources & Utilities	24,476	24,275
Real Estate	15,045	12,366
Technology, Media & Telecommunications	36,444	20,633
Diversified Industrials	20,047	16,392
Other	13,941	11,998
<b>Total</b>	<b>\$159,602</b>	<b>\$129,893</b>
<b>Credit Exposure by Region</b>		
Americas	\$121,271	\$ 91,378
EMEA	33,061	34,397
Asia	5,270	4,118
<b>Total</b>	<b>\$159,602</b>	<b>\$129,893</b>
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA/Aaa	\$ 4,148	\$ 3,969
AA/Aa2	7,716	8,097
A/A2	27,212	22,623
BBB/Baa2	43,937	35,706
BB/Ba2 or lower	76,049	58,670
Unrated	540	828
<b>Total</b>	<b>\$159,602</b>	<b>\$129,893</b>

## Selected Exposures

The section below provides information about our credit and market exposure to certain jurisdictions and industries that have had heightened focus due to recent events and broad market concerns. Credit exposure represents the potential for loss due to the default or deterioration in credit quality of a counterparty or borrower. Market exposure represents the potential for loss in value of our long and short inventory due to changes in market prices. There is no overlap between the credit and market exposures in the amounts below.

**Country Exposures.** The decline in oil prices continues to raise concerns about Venezuela and Nigeria, and their sovereign debt. The political situations in Iraq and Russia, as well as the decline in oil prices, have led to continued concerns about their economic and financial stability. In addition, Argentina's default on its sovereign debt coupled with its contracting economy has raised concerns about its long term financial stability. Separately, signs of slowing growth in China and deteriorating macroeconomic conditions in Brazil have led to heightened focus and broad market concerns relating to these countries.

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As of December 2015, our total credit exposure to Russia was \$292 million and primarily related to loans and lending commitments. Such exposure was substantially all with non-sovereign counterparties or borrowers. In addition, our total market exposure to Russia as of December 2015 was \$791 million, which was primarily with non-sovereign issuers or underliers and was primarily related to equities and credit derivatives.

As of December 2015, our total credit exposure to China was \$3.7 billion and primarily related to deposits with banks and loans and lending commitments. Such exposure was primarily with non-sovereign counterparties or borrowers. In addition, our total market exposure to China as of December 2015 was \$2.5 billion and was primarily related to equities.

As of December 2015, our total credit exposure to Brazil was \$3.2 billion and primarily related to secured receivables and initial margin placed with clearing organizations. Substantially all of such exposure was with non-sovereign counterparties or borrowers. In addition, our total market exposure to Brazil as of December 2015 was \$1.9 billion and was primarily related to sovereign debt.

Our total credit and market exposure to each of Argentina, Iraq, Venezuela and Nigeria as of December 2015 was not material.

We have a comprehensive framework to monitor, measure and assess our country exposures and to determine our risk appetite. We determine the country of risk by the location of the counterparty, issuer or underlier's assets, where they generate revenue, the country in which they are headquartered, the jurisdiction where a claim against them could be enforced, and/or the government whose policies affect their ability to repay their obligations. We monitor our credit exposure to a specific country both at the individual counterparty level as well as at the aggregate country level.

We use regular stress tests, described above, to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors. To supplement these regular stress tests, we also conduct tailored stress tests on an ad hoc basis in response to specific market events that we deem significant. These stress tests are designed to estimate the direct impact of the event on our credit and market exposures resulting from shocks to risk factors including, but not limited to, currency rates, interest rates, and equity prices. We also utilize these stress tests to estimate the indirect impact of certain hypothetical events on our country exposures, such as the impact of credit market deterioration on corporate borrowers and counterparties along with the shocks to the risk factors described above. The parameters of these shocks vary based on the scenario reflected in each stress test. We review estimated losses produced by the stress tests in order to understand their magnitude, highlight potential loss concentrations, and assess and mitigate our exposures where necessary.

See [Stress Tests](#) above, [Liquidity Risk Management - Liquidity Stress Tests](#) and [Market Risk Management - Stress Testing](#) for further information about stress tests.

**Industry Exposures.** Significant declines in the price of oil have led to market concerns regarding the creditworthiness of certain companies in the oil and gas industry. As of December 2015, our credit exposure to oil and gas companies related to loans and lending commitments was \$10.6 billion (\$1.8 billion of loans and \$8.8 billion of lending commitments). Such exposure included \$4.2 billion of exposure to non-investment-grade counterparties

(\$1.5 billion related to loans and \$2.7 billion related to lending commitments). In addition, we have exposure to our clients in the oil and gas industry arising from derivatives. As of December 2015, our credit exposure related to derivatives and receivables with oil and gas companies was \$1.9 billion, primarily with investment-grade counterparties. As of December 2015, our market exposure related to oil and gas companies was \$(677) million, which was primarily to investment-grade issuers or underliers.

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**Management's Discussion and Analysis**

**Operational Risk Management**

**Overview**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Our exposure to operational risk arises from routine processing errors as well as extraordinary incidents, such as major systems failures or legal and regulatory matters. Potential types of loss events related to internal and external operational risk include:

Clients, products and business practices;

Execution, delivery and process management;

Business disruption and system failures;

Employment practices and workplace safety;

Damage to physical assets;

Internal fraud; and

External fraud.

We maintain a comprehensive control framework designed to provide a well-controlled environment to minimize operational risks. The Firmwide Operational Risk Committee provides oversight of the ongoing development and implementation of our operational risk policies and framework. Operational Risk Management is a risk management function independent of our revenue-producing units, reports to our chief risk officer, and is responsible for developing and implementing policies, methodologies and a formalized framework for operational risk management with the goal of minimizing our exposure to operational risk.

**Operational Risk Management Process**



Managing operational risk requires timely and accurate information as well as a strong control culture. We seek to manage our operational risk through:

Training, supervision and development of our people;

Active participation of senior management in identifying and mitigating key operational risks across the firm;

Independent control and support functions that monitor operational risk on a daily basis, and implementation of extensive policies and procedures, and controls designed to prevent the occurrence of operational risk events;

Proactive communication between our revenue-producing units and our independent control and support functions;  
and

A network of systems throughout the firm to facilitate the collection of data used to analyze and assess our operational risk exposure.

We combine top-down and bottom-up approaches to manage and measure operational risk. From a top-down perspective, our senior management assesses firmwide and business-level operational risk profiles. From a bottom-up perspective, revenue-producing units and independent control and support functions are responsible for risk management on a day-to-day basis, including identifying, mitigating, and escalating operational risks to senior management.

Our operational risk framework is in part designed to comply with the operational risk measurement rules under the Revised Capital Framework and has evolved based on the changing needs of our businesses and regulatory guidance. Our framework comprises the following practices:

Risk identification and reporting;

Risk measurement; and

Risk monitoring.

Internal Audit performs an independent review of our operational risk framework, including our key controls, processes and applications, on an annual basis to assess the effectiveness of our framework.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Risk Identification and Reporting**

The core of our operational risk management framework is risk identification and reporting. We have a comprehensive data collection process, including firmwide policies and procedures, for operational risk events.

We have established policies that require managers in our revenue-producing units and our independent control and support functions to escalate operational risk events. When operational risk events are identified, our policies require that the events be documented and analyzed to determine whether changes are required in our systems and/or processes to further mitigate the risk of future events.

We have established thresholds to monitor the impact of an operational risk event, including single loss events and cumulative losses over a twelve-month period, as well as escalation protocols. We also provide periodic operational risk reports, which include incidents that breach escalation thresholds, to senior management, firmwide and divisional risk committees and the Risk Committee of the Board.

In addition, our firmwide systems capture internal operational risk event data, key metrics such as transaction volumes, and statistical information such as performance trends. We use an internally-developed operational risk management application to aggregate and organize this information. Managers from both revenue-producing units and independent control and support functions analyze the information to evaluate operational risk exposures and identify businesses, activities or products with heightened levels of operational risk. We also provide periodic operational risk reports to senior management, risk committees and the Board.

### **Risk Measurement**

We measure our operational risk exposure over a twelve-month time horizon using both statistical modeling and scenario analyses, which involve qualitative assessments of the potential frequency and extent of potential operational risk losses, for each of our businesses. Operational risk measurement incorporates qualitative and quantitative assessments of factors including:

Internal and external operational risk event data;

Assessments of our internal controls;

Evaluations of the complexity of our business activities;

The degree of and potential for automation in our processes;

New product information;

The legal and regulatory environment;

Changes in the markets for our products and services, including the diversity and sophistication of our customers and counterparties; and

Liquidity of the capital markets and the reliability of the infrastructure that supports the capital markets.

The results from these scenario analyses are used to monitor changes in operational risk and to determine business lines that may have heightened exposure to operational risk. These analyses ultimately are used in the determination of the appropriate level of operational risk capital to hold.

### **Risk Monitoring**

We evaluate changes in the operational risk profile of the firm and its businesses, including changes in business mix or jurisdictions in which we operate, by monitoring the factors noted above at a firmwide level. We have both detective and preventive internal controls, which are designed to reduce the frequency and severity of operational risk losses and the probability of operational risk events. We monitor the results of assessments and independent internal audits of these internal controls.

### **Model Review and Validation**

The statistical models utilized by Operational Risk Management are subject to independent review and validation by Model Risk Management. See [Model Risk Management](#) for further information about the review and validation of these models.

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### THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

## **Management's Discussion and Analysis**

### **Model Risk Management**

#### **Overview**

Model risk is the potential for adverse consequences from decisions made based on model outputs that may be incorrect or used inappropriately. We rely on quantitative models across our business activities primarily to value certain financial assets and liabilities, to monitor and manage our risk, and to measure and monitor our regulatory capital.

Our model risk management framework is managed through a governance structure and risk management controls, which encompass standards designed to ensure we maintain a comprehensive model inventory, including risk assessment and classification, sound model development practices, independent review and model-specific usage controls. The Firmwide Risk Committee and the Firmwide Model Risk Control Committee oversee our model risk management framework. Model Risk Management, which is independent of model developers, model owners and model users, reports to our chief risk officer, is responsible for identifying and reporting significant risks associated with models, and provides periodic updates to senior management, risk committees and the Risk Committee of the Board.

#### **Model Review and Validation**

Model Risk Management consists of quantitative professionals who perform an independent review, validation and approval of our models. This review includes an analysis of the model documentation, independent testing, an assessment of the appropriateness of the methodology used, and verification of compliance with model development and implementation standards. Model Risk Management reviews all existing models on an annual basis, as well as new models or significant changes to models.

The model validation process incorporates a review of models and trade and risk parameters across a broad range of scenarios (including extreme conditions) in order to critically evaluate and verify:

The model's conceptual soundness, including the reasonableness of model assumptions, and suitability for intended use;

The testing strategy utilized by the model developers to ensure that the models function as intended;

The suitability of the calculation techniques incorporated in the model;

The model's accuracy in reflecting the characteristics of the related product and its significant risks;

The model's consistency with models for similar products; and

The model's sensitivity to input parameters and assumptions.

See Critical Accounting Policies Fair Value Review of Valuation Models, Liquidity Risk Management, Market Risk Management, Credit Risk Management and Operational Risk Management for further information about our use of models within these areas.

#### **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Quantitative and qualitative disclosures about market risk are set forth under Management's Discussion and Analysis of Financial Condition and Results of Operations Overview and Structure of Risk Management in Part II, Item 7 of the 2015 Form 10-K.

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**Management's Report on Internal Control over Financial Reporting**

Management of The Goldman Sachs Group, Inc., together with its consolidated subsidiaries (the firm), is responsible for establishing and maintaining adequate internal control over financial reporting. The firm's internal control over financial reporting is a process designed under the supervision of the firm's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the firm's financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

As of December 31, 2015, management conducted an assessment of the firm's internal control over financial reporting based on the framework established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has determined that the firm's internal control over financial reporting as of December 31, 2015 was effective.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the firm; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the firm's assets that could have a material effect on our financial statements.

The firm's internal control over financial reporting as of December 31, 2015 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing on page 115, which expresses an unqualified opinion on the effectiveness of the firm's internal control over financial reporting as of December 31, 2015.



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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and the Shareholders of

The Goldman Sachs Group, Inc.:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of The Goldman Sachs Group, Inc. and its subsidiaries (the Company) at December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing on page 114. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PRICEWATERHOUSECOOPERS LLP

New York, New York

February 19, 2016

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Consolidated Statements of Earnings**

<i>in millions, except per share amounts</i>	Year Ended December		
	2015	2014	2013
<b>Revenues</b>			
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
<b>Operating expenses</b>			
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

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Other expenses	<b>5,699</b>	2,585	2,931
Total non-compensation expenses	<b>12,364</b>	9,480	9,856
Total operating expenses	<b>25,042</b>	22,171	22,469
Pre-tax earnings	<b>8,778</b>	12,357	11,737
Provision for taxes	<b>2,695</b>	3,880	3,697
Net earnings	<b>6,083</b>	8,477	8,040
Preferred stock dividends	<b>515</b>	400	314
<b>Net earnings applicable to common shareholders</b>	<b>\$ 5,568</b>	\$ 8,077	\$ 7,726
<b>Earnings per common share</b>			
Basic	<b>\$ 12.35</b>	\$ 17.55	\$ 16.34
Diluted	<b>12.14</b>	17.07	15.46
<b>Average common shares outstanding</b>			
Basic	<b>448.9</b>	458.9	471.3
Diluted	<b>458.6</b>	473.2	499.6

The accompanying notes are an integral part of these consolidated financial statements.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Consolidated Statements of Comprehensive Income**

<i>\$ in millions</i>	Year Ended December		
	2015	2014	2013
Net earnings	<b>\$6,083</b>	\$8,477	\$8,040
Other comprehensive income/(loss) adjustments, net of tax:			
Currency translation	<b>(114)</b>	(109)	(50)
Pension and postretirement liabilities	<b>139</b>	(102)	38
Available-for-sale securities			(327)
Cash flow hedges		(8)	8
Other comprehensive income/(loss)	<b>25</b>	(219)	(331)
<b>Comprehensive income</b>	<b>\$6,108</b>	\$8,258	\$7,709

The accompanying notes are an integral part of these consolidated financial statements.

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## THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Consolidated Statements of Financial Condition**

<i>\$ in millions, except per share amounts</i>	As of December	
	<b>2015</b>	2014
<b>Assets</b>		
Cash and cash equivalents	<b>\$ 75,105</b>	\$ 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)	<b>56,838</b>	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)	<b>120,905</b>	127,938
Securities borrowed (includes \$69,801 and \$66,769 at fair value as of December 2015 and December 2014, respectively)	<b>172,099</b>	160,722
Receivables:		
Brokers, dealers and clearing organizations	<b>25,453</b>	30,671
Customers and counterparties (includes \$4,992 and \$6,944 at fair value as of December 2015 and December 2014, respectively)	<b>46,430</b>	63,808
Loans receivable	<b>45,407</b>	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)	<b>293,940</b>	312,248
Other assets	<b>25,218</b>	22,201
<b>Total assets</b>	<b>\$861,395</b>	\$855,842
<b>Liabilities and shareholders' equity</b>		
Deposits (includes \$14,680 and \$13,523 at fair value as of December 2015 and December 2014, respectively)	<b>\$ 97,519</b>	\$ 82,880
Collateralized financings:		
Securities sold under agreements to repurchase, at fair value	<b>86,069</b>	88,215
Securities loaned (includes \$466 and \$765 at fair value as of December 2015 and December 2014, respectively)	<b>3,614</b>	5,570
Other secured financings (includes \$23,207 and \$21,450 at fair value as of December 2015 and December 2014, respectively)	<b>24,753</b>	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
<b>Total liabilities</b>	<b>774,667</b>	<b>773,045</b>

**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
<b>Total liabilities and shareholders equity</b>	<b>\$861,395</b>	<b>\$855,842</b>

The accompanying notes are an integral part of these consolidated financial statements.

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THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

**Consolidated Statements of Changes in Shareholders' Equity**

Year Ended  
December